

USAGE OF THE EXTENSION AGENTS' HANDBOOK  
OF INSECTS, PLANT DISEASES AND  
WEED CONTROL AS PERCEIVED BY  
OKLAHOMA CONTROY AGENTS  
AND CLIENTELE

By

JIMMY ALLEN AMES

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Thesis Approved:

*James P. Key*

Thesis Adviser

*Edy Finley*

*Harry Field*

*Norman N. Duchon*

Dean of Graduate College

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## CHAPTER I

### INTRODUCTION

The Cooperative Extension Service (CES) was established in 1914 by the enactment of the Smith-Lever Act to serve the public's needs and interests. CES maintains the same philosophy today as it did over three quarters of a century ago. Today CES is more technologically programmed to work with its clientele's interests and to provide solutions to their needs at a much higher rate.

CES has always tried to keep the public and its clientele up-to-date on the current events of agriculture, home economics, rural development and 4-H. To keep clientele abreast of new agricultural related issues, techniques, etc., CES uses material distribution such as fact sheets, manuals and handbooks. Many of these materials remain with the county extension personnel as supplemental information to assist them in their problem solving skills. Those materials that are used for problem solving assistance are, for instance, OSU Extension Agents' Handbook, OSU Fact Sheets, etc. These materials are full of information and are predictably useful. However, there comes a time when one finds it necessary to know if these materials are

providing adequate information for agents to serve their clientele.

This means evaluating programs or in the case of this study, evaluating the value of the OSU Extension Agents' Handbook of Insects, Plant Disease, and Weed Control.

This handbook is revised and published annually to provide extension, research, and other professional workers, dealers, applicators, distributors, formulators and manufacturers with the most up-to-date information available on the selection, application and safe use of agriculture chemicals. (OSU-CES Handbook, 1988, p. 1.).

The handbook contains information on safe handling of chemicals, equipment and calibration, animal insect and parasite controls, aquatic weed controls, as well as field crop, stored grains, fruit and nut, household pests, ornamentals, turfgrass, greenhouse and vegetable, pest, disease and weed constraints. In the past, only informal feedback from clientele has indicated the information within this handbook has been very useful. The publishers of this handbook would like more solid proof of the perceived value of the handbook; if it is adequate; sections referenced most frequently; and the frequency of use.

#### Statement of Problem

Various questions concerning the value of the OSU-CES Handbook have surfaced making it desirable to determine the perceived value and uses of the handbook by Oklahoma county extension agents, state extension staff and their clientele.

### Purpose

The purpose of this study was to determine the perceived value of the OSU-CES Handbook, who uses it and to what extent it is used. A secondary purpose was to identify which sections of the OSU-CES Handbook are referenced most frequently and to determine the value of each section.

### Objectives

To accomplish the purpose of the study, the research focused on:

(1) Identifying the frequency CES personnel and CES clientele reference the OSU-CES Handbook.

(2) Identifying the perceived value of the OSU-CES Handbook by CES personnel and CES clientele.

(3) Determining adequacy of the information received by CES personnel and CES clientele from each section.

(4) Identifying what pest categories are most frequently referenced by CES personnel and CES clientele in each section.

(5) Determining the perceived interest with regard to Integrated Pest Management (IPM) by CES personnel and CES clientele.

(6) Determining which season of the year the OSU-CES Handbook is most frequently used by CES personnel and CES clientele.

(7) Identifying the overall perception of the OSU-CES Handbook by CES personnel and CES clientele.

#### Assumptions of Study

The following basic assumptions were made in reference to this research study.

1. The agents and clientele represented in this study use the OSU-CES Handbook.
2. The responses made by the participants were accurate and sincere.

#### Definition of Terms

To better enhance the understanding of this study the following terms were defined as they apply to this study.  
Cooperative Extension Service - Organization created by the Smith-Lever Act of 1914. It serves as a Cooperative function between the United States Department of Agriculture, the land grant universities of each state and local county governments. The term CES will be used as an abbreviation and is to be thought of as a synonym of the defined term.

Clientele - The purchasers and users of the handbook.

Evaluation - To determine the significance, success and value of an inclusive publication provided to its user.

Fact Sheets - A publication provided by the OSU-CES, containing factual information, designed and written so any

layperson may easily interpret and comprehend the information.

Handbook - A publication designed for accessibility and utility containing current information on suggested chemical recommendations for pest controls on livestock, crops, horticulture and alternative agricultural products.

Cooperative Extension Agent - CES personnel placed in CES county offices across the state to provide information to clientele on topics of interest in the areas of agriculture, home economics, rural development and 4-H.

Area CES Specialist (Agents) - CES personnel specializing in specific areas of agriculture such as livestock, crops, fruit and nut, etc... located in area offices across the state, generally dealing with CES agents and clientele on specific questions concerning their area of expertise.

State CES Specialist (Agents) - CES personnel located in offices usually on or near a land grant institutions campus, specializing in their own specific area of agriculture, where research may be conducted and the results or solution of such research may be provided to CES area and county agents, and clientele.



## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction

The function of this chapter was to research directly related and indirectly related literature in order to provide facts upon which the basis of this study was conducted. This review contains supportive information with regard to the history and philosophy of the Cooperative Extension Service (CES), purpose and objectives of the CES, perceived value of the handbook, and an evaluation of the OSU-CES Handbook. Although, the information contained in this review was addressed only briefly, the emphasis of this study related directly to the evaluation of the OSU Extension Agents' Handbook of Insect, Plant Disease and Weed Control (OSU-CES Handbook). Evaluation was the primary aim of this research; however, it remained important to present additional information in order to better understand the program to be evaluated. Therefore, this additional information was included in the literature review.

## History and Philosophy of the CES

The roots of CES date back to the late 17th Century when the French conceded to help the new farmers through model farm demonstrations or experimental farms. They also recognized the capabilities of "old timers" teaching newcomers (Blackburn, 1984).

Much later, Land Grant Colleges were established by the Morrill Act of 1862, followed by the Hatch Act five years later creating the state experimental stations and established the relationships between Land Grant Colleges and the United States Department of Agriculture (USDA). Then the Smith-Lever Act of 1914 created the Cooperative Extension Service to work through the Land Grant Colleges to assist in education and developmental assistance for extension clientele (Blackburn, 1984) and Smith-Lever Public Law 360.

The Morrill Act, Hatch Act and Smith-Lever Act all brought educational reform to this country. Each of these acts had a purpose. The Morrill Act provided states funding to build educational institutions for the sole purpose of agriculture education. The Hatch Act insured funding for research to promote new technology through research stations. The Smith-Lever Act created the CES to educate and develop a means of communication to assist the CES clientele. This was all done to keep the clientele abreast

and up-to-date on new technology and information to assist in production practices.

The function and process of CES was to educate the people or help them to help themselves. Leagan, n.d. stated it best in this manner:

The process of extension education is one of working with people, not for them; help them become self-reliant, not dependent on others; of making people the central actors in drama, not stage hands or spectators; in short, helping people by means of education to put useful knowledge to work for them (as quoted by Blackburn, 1984, p. 1).

The writings of Blackburn, Leagan and the Smith-Lever Public Law share a common philosophy. It was one to educate the public or CES clientele through designated facilities for agriculture education, research for production enhancement, and a means of communication for producers to receive information to keep them updated as to what is new or current in agriculture. This information is delivered to the producer in many ways.

The CES has been very successful by providing newsletters to its clientele to keep them abreast of upcoming events or responding to commonly asked questions on a seasonal basis. They also use fact sheets that provide factual information on many topics of interest. This information is issued through the county CES office. The CES agent in this office has access to almost any of the information deemed necessary in response to clientele questions. Much of this information was developed into

booklets, guides, manuals or handbooks to assist the CES agent in finding a solution to many agriculture related problems based on factual or research based information. Therefore, it was important for the information to be precise, accurate, and easily accessible. In a personal interview held with Dr. Stan Coppock and Dr. Jim Criswell of the OSU Entomology Department, Coppock (1989) said:

"Utility and accessibility of the OSU-CES Handbook is very important in getting information to the producer."

The OSU-CES Handbook evolved from this criteria.

Criswell (1989) stated:

The original intent of the OSU-CES Handbook was directed to CES personnel only. The reason was to provide current information (state specialist recommendations) on pest control to the CES personnel in the counties so the CES personnel could then provide the information to the producer. The handbook was originally put together by entomology and agronomy for information on pesticide control of insects and weeds. Then plant pathology was included in the manual. After that an equipment/calibration section was added followed by a safety section. A "horticulture section" was added later. After a number of years the handbook was "upgraded" to include a table of contents and to standardize the format. Then after time it was supplied to distributors, commercial applicators, and is now bought by garden centers and producers (farmers/ranchers).

The development of this handbook gave the CES agents an edge on assisting their clientele with crop and field pests.

The CES is dedicated to educating and serving its clientele. Therefore, it is important to learn and understand the philosophies and goals of the CES because having these goals and philosophies in mind should provide a better understanding for evaluating published materials such

as the OSU-CES Handbook. Evaluating such publications are merely a way of retrieving data to assure that such published information remains useful to the CES agents and clientele who use them.

#### Purpose and Objectives of the CES

The CES has provided a service based on one particular goal, that is...

...to directly or indirectly help people learn how to use the newest findings in agriculture and home economics to bring about more abundant life for themselves and their communities. (Butz, 1973, p. 2).

This goal is attained by providing clientele with research backed materials and findings. Materials, like OSU Extension Fact Sheets, list facts on almost every agriculture or home related subject possible. Newsletters, published monthly, provide up-to-date information on new products, upcoming events, markets and research. More specific materials that exist are "Cattle Producers Handbook", "Swine Producers Handbook", "Sheep Producers Handbook", and the "OSU-CES Handbook". The CES also provides staff for county offices in the areas of agriculture, home economics, and 4-H.

One of the important sources of information within the CES is the OSU-CES Handbook (1988). The specific topics within this handbook include: Safety, Equipment, Livestock, and Crops.

The safety section deals primarily with the uses and application of pesticides. It also covers clothing and proper disposal of chemicals.

The EPA has established certain occupational safety and health standards for farm workers after pesticide application. (CES Handbook, 1988, p. 17).

For this reason, it was deemed important to be included in the handbook.

The equipment section included in the handbook assists clientele in calibrating, adjusting, and proper maintenance of equipment. With the high cost of replacing farm implements, it is therefore important for the clientele to know how to maintain equipment in order to maximize production and minimize costs.

Livestock and crops are also covered in the handbook. These sections provide information relating to insects, disease and other pests. The information provided assists the clientele in producing a product at the highest quality level possible with minimal risk.

The overall objective of the cooperative extension service is to provide new and sufficient information and assistance to enhance their production skills. This improvement idea makes the producers more efficient for their overall well being.

#### Perceived Value of the OSU-CES Handbook

Because the CES provides so many services it was necessary to provide published materials to assist the CES

agents in the technical areas of extension in which the CES agents were not familiar. The CES agents can use the handbook to answer questions in a short period of time.

Salwaechter (1974, p. 7) wrote, "Adults are not interested in theory; they want answers to their immediate problems." Most adults tend to learn in this manner. They are only interested in obtaining information pertinent to their own lifestyles, and they want that information to be easily accessible.

The purpose of CES handbooks, manuals, guides and the usage of these materials come to mind. The materials enhance the knowledge of the user. CES agents are only human, therefore, it remains practically impossible for an individual to know every solution to the problems of clientele. These materials contain information that is retrievable in a short period of time, which may be introduced as a solution for the clientele. In a publication by Doye (1987, p. 1), he commented that nearly 11% of the crop failures from 1981-86 were caused from insect or disease damage. Proper management techniques that are provided in the OSU-CES Handbook are designed to help the producer overcome these adversities before irreversible damage occurs. This handbook becomes a valuable source of preventing economic losses that are felt throughout entire communities that depend on the production of individual farms which make up the economic base structure for those

communities. Therefore, the OSU-CES Handbook is a valuable risk management tool when utilized properly.

CES agents are communicators. Blackburn (1984) stated communicating information is the extension worker's job. For instance, in the 1980's, Oklahoma producers began looking for cheaper means of production. They relied on CES personnel and others to report on advances made by researchers in this area. One of the new concepts discovered was low-till farming practices. This is an example of extension agents being able to relay information to the producer from the researcher.

These materials are used to produce solutions for the adults' questions. One would reason this to be an effective means of teaching adults. This makes such materials such as the handbook a valuable teaching aid. This information can be used to supplement knowledge of the user by producing valuable solutions to clientele questions.

#### Evaluation of the OSU-CES Handbook

Evaluation as defined by Webster (1979, p. 392) is: "To determine the significance or worth by careful appraisal and study." The intent of this study was to determine the significance or worth of the Extensions Agents' Handbook of Insect, Plant Disease, and Weed Control. The information contained in this publication is used across the state. However, the reliability, convenience, and application of this handbook have been questioned. Therefore, an



evaluation of this handbook should be conducted. Wilson tells us that, "Evaluation is the yardstick or thermometer we apply to a program. It determines if what is being done is what was intended" (Wilson, 1983, p. 87).

According to Worthen and Sanders (1973):

Evaluation is the determination of the worth of a thing. It included obtaining information for use in judging the worth of a program, product, procedure, or objective of the potential utility of alternative approaches designed to obtain specified objectives, (p. 18).

Through evaluation, we can collectively make decisions on information that has been gathered to determine the usefulness of that information. These decisions will be made objectively on criteria based data.

Rafie (1984), Stufflebeam (1971), and Byrn (1967) concur that evaluation is a process of collecting scientifically based data and judging it objectively, then making decisions based on that criteria.

Pidgeon (1972) wrote:

Good evaluations rest much more objectively collecting facts than on objective opinion. Evaluation, of course, must be concerned with all possible aims. It is as important to know what is not being achieved as to know what is, (p. 15).

The best evaluations are more interested in what needs to be corrected rather than dealing with information that is currently considered sufficient.

A final comment concerning the evaluation of material is best summed up by a comment from Hollenback (1975):

Knowledge is being so rapidly accumulated that by the time a new text book is written and published, it is on its way to being out-of-date. This very fact proves that most curriculum writers already know that curriculum revision is never finished. This matter of revision must be preceded by evaluation...The nature of evaluation and the kinds of evaluation design are influenced by when the evaluation information will be used, who will use it, and the purpose of the evaluation...If the evaluation is to be useful, it must reflect the interest and circumstances of the clientele for whom the curriculum is patterned, (pp. 9-11).

#### Summary

In summary, the CES was created in 1914 by the Smith-Lever Act to assist rural people and educate them in such a way they could learn to help themselves. The CES provides numerous resources which include materials, staff, and offices to distribute the information that is collected through research to the public or it's clientele. CES provides a local outlet for information that is gathered from other areas, research stations, and land grant institutions. This information is distributed by means of handbooks, manuals, fact sheets, newsletters and government reports, etc. These materials may be used by CES personnel to present information to it's clientele as a means of solutions for various problems. This material is used as teaching aids or supplemental information for CES staff, personnel and clientele.

## CHAPTER III

### DESIGN AND METHODOLOGY

#### Introduction

This chapter was developed to describe the methods and procedures used to conduct this study. The sections addressed in this chapter are as follows: (1) The Institutional Review Board (IRB), (2) The scope of the study, (3) Selection and development of the questionnaire, (4) Validating the questionnaire, (5) Collection of data, and (6) Analysis of data.

#### The Institutional Review Board (IRB)

Federal regulations and Oklahoma State University policy require review and approval of all research studies that involve human subjects before investigators can begin their research. The Oklahoma State University Office of University Research Services and the IRB conduct this review to protect the rights and welfare of human subjects involved in biomedical and behavioral research. In compliance with the aforementioned policy, this study received the proper surveillance and was granted permission to continue. The IRB office granted approval on February 2, 1989.

### Scope of the Study

The scope of the study included of 120 CES Agriculture Agents and 105 CES Clientele who had purchased a handbook. As shown in TABLE I, the persons surveyed were distributed as follows: 70 CES County Agents, 30 CES Area Specialists, 20 CES State Specialists and 105 CES Clientele. Of the 225 persons who were surveyed, 47 (20.89%) were CES Agricultural Agents, 20 (8.88%) were CES Area specialists, 8 (3.56%) were CES State Specialists, and 68 (30.22%) were CES Clientele who chose to respond to the mailed questionnaire. In sum, 144 (64%) of those surveyed chose to respond.

Only the CES Agricultural Agents were included in this study and did not include the CES Agents for Home Economics, 4-H and Rural Development. The clientele were selected from a list of those that purchased the OSU-CES Handbook and was limited to those with addresses within the state of Oklahoma.

### Development of the Questionnaire

The questionnaire was developed for the purpose of determining the perceived value of the OSU-CES Handbook, who uses it and to what extent it is used. In addition, the questionnaire was to identify which sections of the OSU-CES Handbook are referenced most frequently, and to determine the frequency of each sections use. Two forms of the questionnaire were developed (see Appendix A and B). The

TABLE I  
 DISTRIBUTION OF USERS SURVEYED  
 n = 225

|            | <u>Respondents</u> |       | <u>Non-Respondents</u> |       | <u>Total Surveyed</u> |        |
|------------|--------------------|-------|------------------------|-------|-----------------------|--------|
|            | n                  | %     | n                      | %     | n                     | %      |
| CES COUNTY | 47                 | 20.89 | 23                     | 10.22 | 70                    | 31.11  |
| AREA       | 20                 | 8.88  | 10                     | 4.45  | 30                    | 13.33  |
| STATE      | 8                  | 3.56  | 12                     | 5.33  | 20                    | 8.89   |
| SUB-TOTAL  | 75                 | 33.33 | 45                     | 20.00 | 120                   | 53.33  |
| CLIENTELE  | 68                 | 30.22 | 37                     | 16.45 | 105                   | 46.67  |
| TOTAL      | 143                | 64.00 | 82                     | 36.00 | 225                   | 100.00 |

questionnaire was constructed based on the twenty four sections of the OSU-CES Handbook. These sections included: Safety, Equipment, Beef Cattle, Dairy Cattle, Sheep and Goats, Horses, Poultry, Pets, Aquatic Plants, Roadside Weeds and Brush, Alfalfa, Corn, Cotton, Pasture and Range, Peanuts, Small Grains, Stored Grains, Fruits and Nuts, Household Pests, Ornamentals, Turfgrass, Greenhouse, Commercial Vegetables, and Home Vegetables. A decision of the researcher and committee advisor was to condense all of the objectives of the study and sections of the OSU-CES Handbook to a single collection format. A questionnaire was then constructed in a matrix, containing all of the information necessary to collect the data pertinent to this study.

The first questionnaire (Appendix A) was used to solicit data from CES personnel. The objectives contained in this questionnaire were: (1) The frequency of use of the sections of the OSU-CES Handbook by CES personnel, (2) The value of information in each section of the OSU-CES Handbook by CES personnel, (3) The adequacy of the information in the OSU-CES Handbook by CES personnel, (4) The clientele provided information from the OSU-CES Handbook by CES personnel, and (5) The pest most frequently referenced in each section by CES personnel. This survey also contained some general information questions about the OSU-CES Handbook, for instance, if the handbook should contain more information on Integrated Pest Management (IPM), what time

of year the handbook is referenced most frequently, the general overall appraisal of the OSU-CES Handbook, and the CES personnel's present position.

The second questionnaire (Appendix B) was used to solicit data from the clientele. The only differences in the two questionnaires of this study were: The clientele were not asked who they provided information for, and they were asked to provide information as to what their present job title was and the county of their residence.

Both questionnaires consisted of the same categories for each objective. The categories for frequency of use were: "Daily", "Weekly", "Monthly", "Annually" and "Never". The value of the information categories were as follows: "None", "Little", "Some" and "Much".

The third portion of the questionnaire pertaining to the adequacy of information contained categories of "Sufficient" and "Update". The next part of the CES personnel questionnaire (Appendix A) containing information in respect to the clientele provided information was categorized by "Commercial Applicators", "Dealers", "County Agents", "Producers", "Distributors" and "Gardeners". Finally, the pest referenced section of both questionnaires contained categories of "Insect", "Disease", "Weeds", "Parasites" and "Other".

### Validating the Questionnaire

In developing a questionnaire, there remains a problem of validity and reliability. Downie and Heath (1965, p. 227) stated "No test itself has validity or reliability." Therefore, it was important in this study to test the validity of the questionnaires to be used. The questionnaires were submitted to the committee advisor, two state CES specialists and the Agricultural Communication Publications editor for pre-testing and proofing. This group works closely with the population to be surveyed and was considered to be an effective group to give an opinion on the questionnaire. The questionnaire was reviewed and revised accordingly. The committee advisor accepted the changes and the questionnaire was considered valid and ready for use.

### Collection of Data

To achieve maximum response, the clientele were mailed a self-addressed stamped envelope with the questionnaire and a cover letter explaining the purpose of the study and questionnaire. The letters were mailed February 3, 1989 on CES Entomology letterhead (see Appendix C).

This first mailing resulted in 52 (49.52%) returns from the clientele. A follow-up letter (see Appendix D) was mailed to non-respondents on March 7, 1989. The follow-up letter increased the returns from clientele to 68 (64.76%).



To achieve maximum response from CES personnel, a survey was mailed with a cover letter (see Appendix E) from Dr. T. Roy Bogle, CES Associate Director, on March 2, 1989. This survey resulted in 75 (62.50%) response from CES personnel. After much discussion with Dr. Criswell (OSU-CES Pesticide Coordinator, OSU Entomology Department) and the research committee advisor, the first mail-out response was considered to be adequate and therefore further contacts with CES personnel was deemed not necessary.

#### Analysis of Data

The data for this study was collected and classified as either CES County Agent, CES Area Specialist, CES State Specialist or Clientele. The data was then tabulated and transferred to a micro computer software package labeled "Statistics with Finesse" by James Bolding, 1984.

The data was analyzed by using descriptive statistics. According to Reid (1987, p. 42), descriptive statistics are techniques that enable us to describe the characteristics of a sample or population. Furthermore, this technique uses numbers to describe the information or data (Key, 1974). Frequency distribution was used for each portion of the survey by identifying the frequency or number of responses and calculating a percentage response.

## CHAPTER IV

### PRESENTATION AND ANALYSIS OF DATA

#### Introduction

The focus of this chapter was to describe and analyze the data with respect to the purpose and objectives previously outlined in Chapter I. The investigator accomplished this task with the aid of Tables designed to complement and support the narrative to achieve the purpose and objectives of this study.

#### Scope of the Study

The respondents of this study were identified as CES agriculture agents, consisting of 47 county agents, 20 area agents, 8 state agents and 68 CES clientele. In sum, 143 of those surveyed chose to respond, although not all responded to all items.

#### Findings of the Study

##### The Safety Section of the

##### OSU-CES Handbook

Reported in TABLE II are the frequency distributions of the respondents' perceptions of the Safety Section of the

TABLE II  
 THE SAFETY SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
 DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| SAFETY                      | COUNTY<br>AGENTS<br>(n = 47) |              | AREA<br>AGENTS<br>(n = 20) |              | STATE<br>AGENTS<br>(n = 8) |              | SUB-TOTAL<br>(n = 75) |              | EXTENSION<br>CLIENTELE<br>(n = 68) |              | TOTAL<br>(n = 143) |              |
|-----------------------------|------------------------------|--------------|----------------------------|--------------|----------------------------|--------------|-----------------------|--------------|------------------------------------|--------------|--------------------|--------------|
|                             | n                            | %            | n                          | %            | n                          | %            | n                     | %            | n                                  | %            | n                  | %            |
| <u>FREQUENCY OF USE</u>     |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| DAILY                       | -                            | -            | -                          | -            | -                          | -            | -                     | -            | 1                                  | 1.64         | 1                  | 0.78         |
| WEEKLY                      | 3                            | 6.98         | 2                          | 10.53        | -                          | -            | 5                     | 7.46         | 6                                  | 9.84         | 11                 | 8.59         |
| MONTHLY                     | 15                           | 34.88        | 7                          | 36.84        | 2                          | 40.00        | 24                    | 35.82        | 12                                 | 19.67        | 36                 | 28.13        |
| ANNUALLY                    | 20                           | 46.51        | 8                          | 42.10        | 2                          | 40.00        | 30                    | 44.78        | 36                                 | 59.01        | 66                 | 51.56        |
| NEVER                       | <u>5</u>                     | <u>11.63</u> | <u>2</u>                   | <u>10.53</u> | <u>1</u>                   | <u>20.00</u> | <u>8</u>              | <u>11.94</u> | <u>6</u>                           | <u>9.84</u>  | <u>14</u>          | <u>10.94</u> |
| TOTAL*                      | 43                           | 100.00       | 19                         | 100.00       | 5                          | 100.00       | 67                    | 100.00       | 61                                 | 100.00       | 128                | 100.00       |
| <u>VALUE OF INFORMATION</u> |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| NONE                        | 1                            | 2.38         | 1                          | 5.26         | -                          | -            | 2                     | 3.08         | 1                                  | 1.72         | 3                  | 2.44         |
| LITTLE                      | 6                            | 14.29        | 1                          | 5.26         | -                          | -            | 7                     | 10.77        | 7                                  | 12.07        | 14                 | 11.38        |
| SOME                        | 13                           | 39.95        | 8                          | 42.11        | 1                          | 25.00        | 22                    | 33.84        | 24                                 | 41.38        | 46                 | 37.40        |
| MUCH                        | <u>22</u>                    | <u>52.38</u> | <u>9</u>                   | <u>47.37</u> | <u>3</u>                   | <u>75.00</u> | <u>34</u>             | <u>52.31</u> | <u>26</u>                          | <u>44.83</u> | <u>60</u>          | <u>48.78</u> |
| TOTAL*                      | 42                           | 100.00       | 19                         | 100.00       | 4                          | 100.00       | 65                    | 100.00       | 58                                 | 100.00       | 123                | 100.00       |
| <u>ADEQUACY</u>             |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| SUFFICIENT                  | 38                           | 95.00        | 18                         | 100.00       | 4                          | 100.00       | 60                    | 96.77        | 45                                 | 81.82        | 105                | 89.74        |
| UPDATE                      | <u>2</u>                     | <u>5.00</u>  | -                          | -            | -                          | -            | <u>2</u>              | <u>3.23</u>  | <u>10</u>                          | <u>18.18</u> | <u>12</u>          | <u>10.26</u> |
| TOTAL*                      | 40                           | 100.00       | 18                         | 100.00       | 4                          | 100.00       | 62                    | 100.00       | 55                                 | 100.00       | 117                | 100.00       |
| <u>PEST REFERENCED</u>      |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| INSECT                      | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| DISEASE                     | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| WEED                        | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| PARASITE                    | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| OTHER                       | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| <u>CLIENTELE SERVED</u>     |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| COMMERCIAL                  | 13                           | 56.52        | 7                          | 30.43        | 3                          | 13.05        | 23                    | 100.00       | -                                  | -            | 23                 | 100.00       |
| DEALER                      | 12                           | 57.14        | 6                          | 28.57        | 3                          | 14.29        | 21                    | 100.00       | -                                  | -            | 21                 | 100.00       |
| COUNTY AGENT                | -                            | -            | 8                          | 72.73        | 3                          | 27.27        | 11                    | 100.00       | -                                  | -            | 11                 | 100.00       |
| PRODUCER                    | 30                           | 63.83        | 17                         | 36.17        | -                          | -            | 47                    | 100.00       | -                                  | -            | 47                 | 100.00       |
| DISTRIBUTER                 | 4                            | 33.33        | 6                          | 50.00        | 2                          | 16.67        | 12                    | 100.00       | -                                  | -            | 12                 | 100.00       |
| GARDENER                    | 19                           | 67.86        | 8                          | 28.57        | 1                          | 3.67         | 28                    | 100.00       | -                                  | -            | 28                 | 100.00       |

\*Omitted responses were not counted nor used in averaging

OSU-CES Handbook. The greatest number (66) of the respondents indicated they used this section of the OSU-CES Handbook annually, followed by 36 using it monthly, 14 never, 11 weekly and 1 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 106 or 86.18 percent of the respondents checking much or some and an average value of 2.33). An overwhelming majority of the respondents (105 or 89.74%) believed this section was sufficient. There were no pests referenced in this section. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook, although they also indicated all other clientele were well served by this section too.

The Equipment Section of the  
OSU-CES Handbook

Reported in TABLE III are the frequency distributions of the respondents' perceptions of the Equipment Section of the OSU-CES Handbook. The greatest number (70) of the respondents indicated they used this section annually, followed by 30 using it monthly, 14 never, 7 weekly and 2 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 79 or 80.61 percent of the respondents checking some or much and an average value of 1.96). This was the lowest average value of any of the sections. An overwhelming

TABLE III

THE EQUIPMENT SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| EQUIPMENT                   | COUNTY<br>AGENTS<br>(n = 47) |              | AREA<br>AGENTS<br>(n = 20) |              | STATE<br>AGENTS<br>(n = 8) |              | SUB-TOTAL<br>(n = 75) |              | EXTENSION<br>CLIENTELE<br>(n = 68) |              | TOTAL<br>(n = 143) |              |
|-----------------------------|------------------------------|--------------|----------------------------|--------------|----------------------------|--------------|-----------------------|--------------|------------------------------------|--------------|--------------------|--------------|
|                             | n                            | %            | n                          | %            | n                          | %            | n                     | %            | n                                  | %            | n                  | %            |
| <u>FREQUENCY OF USE</u>     |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| DAILY                       | -                            | -            | -                          | -            | -                          | -            | -                     | -            | 2                                  | 3.45         | 2                  | 1.63         |
| WEEKLY                      | 2                            | 4.88         | 1                          | 5.26         | -                          | -            | 3                     | 4.62         | 4                                  | 6.89         | 7                  | 5.69         |
| MONTHLY                     | 14                           | 34.14        | 4                          | 21.05        | -                          | -            | 18                    | 27.69        | 12                                 | 20.69        | 30                 | 24.39        |
| ANNUALLY                    | 23                           | 56.10        | 12                         | 63.16        | 4                          | 80.00        | 39                    | 60.00        | 31                                 | 53.45        | 70                 | 56.91        |
| NEVER                       | <u>2</u>                     | <u>4.88</u>  | <u>2</u>                   | <u>10.53</u> | <u>1</u>                   | <u>20.00</u> | <u>5</u>              | <u>7.69</u>  | <u>9</u>                           | <u>15.52</u> | <u>14</u>          | <u>11.38</u> |
| TOTAL*                      | 41                           | 100.00       | 19                         | 100.00       | 5                          | 100.00       | 65                    | 100.00       | 58                                 | 100.00       | 123                | 100.00       |
| <u>VALUE OF INFORMATION</u> |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| NONE                        | 1                            | 2.50         | 2                          | 11.11        | -                          | -            | 3                     | 4.84         | 5                                  | 9.43         | 8                  | 8.16         |
| LITTLE                      | 5                            | 12.50        | 1                          | 5.56         | -                          | -            | 6                     | 9.68         | 5                                  | 9.43         | 11                 | 11.22        |
| SOME                        | 18                           | 45.00        | 9                          | 50.00        | 1                          | 25.00        | 28                    | 45.16        | 28                                 | 52.83        | 56                 | 57.14        |
| MUCH                        | <u>16</u>                    | <u>40.00</u> | <u>6</u>                   | <u>33.33</u> | <u>3</u>                   | <u>75.00</u> | <u>25</u>             | <u>40.32</u> | <u>15</u>                          | <u>28.30</u> | <u>23</u>          | <u>23.47</u> |
| TOTAL*                      | 40                           | 100.00       | 18                         | 100.00       | 4                          | 100.00       | 62                    | 100.00       | 53                                 | 100.00       | 98                 | 100.00       |
| <u>ADEQUACY</u>             |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| SUFFICIENT                  | 37                           | 97.37        | 16                         | 100.00       | 3                          | 75.00        | 56                    | 96.55        | 42                                 | 84.00        | 98                 | 90.74        |
| UPDATE                      | <u>1</u>                     | <u>2.63</u>  | -                          | -            | <u>1</u>                   | <u>25.00</u> | <u>2</u>              | <u>3.45</u>  | <u>8</u>                           | <u>16.00</u> | <u>10</u>          | <u>9.26</u>  |
| TOTAL*                      | 38                           | 100.00       | 16                         | 100.00       | 4                          | 100.00       | 58                    | 100.00       | 50                                 | 100.00       | 108                | 100.00       |
| <u>PEST REFERENCED</u>      |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| INSECT                      | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| DISEASE                     | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| WEED                        | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| PARASITE                    | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| OTHER                       | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| <u>CLIENTELE SERVED</u>     |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| COMMERCIAL                  | 9                            | 69.24        | 2                          | 15.38        | 2                          | 15.38        | 13                    | 100.00       | -                                  | -            | 13                 | 100.00       |
| DEALER                      | 12                           | 70.59        | 3                          | 17.65        | 2                          | 11.76        | 17                    | 100.00       | -                                  | -            | 17                 | 100.00       |
| COUNTY AGENT                | -                            | -            | 5                          | 71.43        | 2                          | 28.57        | 7                     | 100.00       | -                                  | -            | 7                  | 100.00       |
| PRODUCER                    | 27                           | 62.79        | 16                         | 37.21        | -                          | -            | 43                    | 100.00       | -                                  | -            | 43                 | 100.00       |
| DISTRIBUTER                 | 5                            | 50.00        | 4                          | 40.00        | 1                          | 10.00        | 10                    | 100.00       | -                                  | -            | 10                 | 100.00       |
| GARDENER                    | 13                           | 72.22        | 5                          | 27.78        | -                          | -            | 18                    | 100.00       | -                                  | -            | 18                 | 100.00       |

\*Omitted responses were not counted nor used in averaging

majority of the respondents (98 or 90.74%) believed this section was sufficient. No pests were referenced in this section. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook. Other clientele were all provided information about equally from this section.

The Beef Cattle Section of the  
OSU-CES Handbook

Reported in TABLE IV are the frequency distributions of the respondents' perceptions of the Beef Cattle Section of the OSU-CES Handbook. The greatest number (37) of the respondents indicated they used this section monthly followed by 34 never using it, 27 using it annually, 15 weekly and 2 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 77 or 83.70 percent of the respondents checking much or some and an average value of 2.36). An overwhelming majority of the respondents (79 or 96.34%) believed this section was sufficient. It is further reported in TABLE IV that the pest referenced most was insects. Finally, it was further perceived by the CES respondents that producers and county agents were the primary clientele served by this section of the OSU-CES Handbook.

TABLE IV

THE BEEF CATTLE SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| BEEF CATTLE                     | COUNTY<br>AGENTS<br>(n = 47) |        | AREA<br>AGENTS<br>(n = 20) |        | STATE<br>AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION<br>CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|---------------------------------|------------------------------|--------|----------------------------|--------|----------------------------|--------|-----------------------|--------|------------------------------------|--------|--------------------|--------|
|                                 | n                            | %      | n                          | %      | n                          | %      | n                     | %      | n                                  | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>         |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| DAILY                           | 2                            | 4.55   | -                          | -      | -                          | -      | 2                     | 3.08   | -                                  | -      | 2                  | 1.74   |
| WEEKLY                          | 12                           | 27.27  | 2                          | 11.76  | -                          | -      | 14                    | 21.54  | 1                                  | 2.00   | 15                 | 13.04  |
| MONTHLY                         | 22                           | 50.00  | 3                          | 17.65  | 1                          | 25.00  | 26                    | 40.00  | 11                                 | 22.00  | 37                 | 32.17  |
| ANNUALLY                        | 5                            | 11.36  | 6                          | 35.29  | 1                          | 25.00  | 11                    | 16.92  | 16                                 | 32.00  | 27                 | 23.48  |
| NEVER                           | 3                            | 6.82   | 6                          | 35.29  | 2                          | 50.00  | 12                    | 18.46  | 22                                 | 44.00  | 34                 | 29.57  |
| TOTAL*                          | 44                           | 100.00 | 17                         | 100.00 | 4                          | 100.00 | 65                    | 100.00 | 50                                 | 100.00 | 115                | 100.00 |
| <u>VALUE OF<br/>INFORMATION</u> |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| NONE                            | -                            | -      | 2                          | 15.38  | -                          | -      | 2                     | 3.70   | 4                                  | 10.53  | 6                  | 6.52   |
| LITTLE                          | 2                            | 5.13   | 1                          | 7.69   | -                          | -      | 3                     | 5.56   | 6                                  | 15.79  | 9                  | 9.78   |
| SOME                            | 8                            | 20.51  | 3                          | 23.08  | -                          | -      | 11                    | 20.37  | 12                                 | 31.58  | 23                 | 25.00  |
| MUCH                            | 29                           | 74.36  | 7                          | 53.85  | 2                          | 100.00 | 38                    | 70.37  | 16                                 | 42.10  | 54                 | 58.70  |
| TOTAL*                          | 39                           | 100.00 | 13                         | 100.00 | 2                          | 100.00 | 54                    | 100.00 | 38                                 | 100.00 | 92                 | 100.00 |
| <u>ADEQUACY</u>                 |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| SUFFICIENT                      | 37                           | 100.00 | 11                         | 91.67  | 1                          | 100.00 | 49                    | 98.00  | 30                                 | 93.75  | 79                 | 96.34  |
| UPDATE                          | -                            | -      | 1                          | 8.33   | -                          | -      | 1                     | 2.00   | 2                                  | 6.25   | 3                  | 3.66   |
| TOTAL*                          | 37                           | 100.00 | 12                         | 100.00 | 1                          | 100.00 | 50                    | 100.00 | 32                                 | 100.00 | 82                 | 100.00 |
| <u>PEST REFERENCED</u>          |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| INSECT                          | 30                           | 57.69  | 5                          | 9.62   | 2                          | 3.84   | 37                    | 71.15  | 15                                 | 28.85  | 52                 | 100.00 |
| DISEASE                         | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| WEED                            | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| PARASITE                        | 2                            | 9.53   | 6                          | 28.57  | -                          | -      | 8                     | 38.10  | 13                                 | 61.90  | 21                 | 100.00 |
| OTHER                           | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| <u>CLIENTELE SERVED</u>         |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| COMMERCIAL                      | -                            | -      | 1                          | 100.00 | -                          | -      | 1                     | 100.00 | -                                  | -      | 1                  | 100.00 |
| DEALER                          | 7                            | 77.78  | 2                          | 22.22  | -                          | -      | 9                     | 100.00 | -                                  | -      | 9                  | 100.00 |
| COUNTY AGENT                    | -                            | -      | 4                          | 66.67  | 2                          | 33.33  | 6                     | 100.00 | -                                  | -      | 6                  | 100.00 |
| PRODUCER                        | 35                           | 74.47  | 11                         | 23.40  | 1                          | 2.13   | 47                    | 100.00 | -                                  | -      | 47                 | 100.00 |
| DISTRIBUTER                     | 4                            | 66.67  | 2                          | 33.33  | -                          | -      | 6                     | 100.00 | -                                  | -      | 6                  | 100.00 |
| GARDENER                        | 1                            | 100.00 | -                          | -      | -                          | -      | 1                     | 100.00 | -                                  | -      | 1                  | 100.00 |

\*Omitted responses were not counted nor used in averaging

The Dairy Cattle Section of the  
OSU-CES Handbook

Reported in TABLE V are the frequency distributions of the respondents' perceptions of the Dairy Cattle Section of the OSU-CES Handbook. The greatest number (60) of the respondents indicated they never used this section of the OSU-CES Handbook. However, of the ones who used it, 22 used it annually, 20 monthly, 5 weekly and 1 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 56 or 75.68 percent of the respondents checking the much or some categories and an average value of 2.09). An overwhelming majority of the respondents (61 or 95.31%) believed this section was sufficient. It is further reported in TABLE V that the pests referenced most were insects and/or parasites. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Sheep and Goat Section of the  
OSU-CES Handbook

Reported in TABLE VI are the frequency distributions of the respondents' perceptions of the Sheep and Goat Section of the OSU-CES Handbook. The greatest number (54) of the respondents indicated they never used this section of the OSU-CES Handbook. However, of the ones who used it, 26 used



TABLE V

THE DAIRY CATTLE SECTION OF THE OSU-CES HANDBOOK -  
FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| DAIRY CATTLE                | COUNTY AGENTS<br>(n = 47) |        | AREA AGENTS<br>(n = 20) |        | STATE AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|---------------------------|--------|-------------------------|--------|-------------------------|--------|-----------------------|--------|---------------------------------|--------|--------------------|--------|
|                             | n                         | %      | n                       | %      | n                       | %      | n                     | %      | n                               | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| DAILY                       | 1                         | 2.33   | -                       | -      | -                       | -      | 1                     | 1.59   | -                               | -      | 1                  | 0.92   |
| WEEKLY                      | 3                         | 6.97   | 1                       | 6.25   | -                       | -      | 4                     | 6.35   | 1                               | 2.22   | 5                  | 4.63   |
| MONTHLY                     | 12                        | 27.11  | 2                       | 12.50  | -                       | -      | 14                    | 22.22  | 6                               | 13.33  | 20                 | 18.52  |
| ANNUALLY                    | 13                        | 30.23  | 5                       | 31.25  | 1                       | 25.00  | 19                    | 30.16  | 3                               | 6.67   | 22                 | 20.37  |
| NEVER                       | 14                        | 32.56  | 8                       | 50.00  | 3                       | 75.00  | 25                    | 39.68  | 35                              | 77.78  | 60                 | 55.56  |
| TOTAL*                      | 43                        | 100.00 | 16                      | 100.00 | 4                       | 100.00 | 63                    | 100.00 | 45                              | 100.00 | 108                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| NONE                        | 2                         | 6.06   | 2                       | 16.67  | -                       | -      | 4                     | 8.69   | 6                               | 21.43  | 10                 | 13.51  |
| LITTLE                      | 1                         | 3.03   | 1                       | 8.33   | -                       | -      | 2                     | 4.35   | 6                               | 21.43  | 8                  | 10.81  |
| SOME                        | 10                        | 30.30  | 3                       | 25.00  | -                       | -      | 13                    | 28.26  | 8                               | 28.57  | 21                 | 28.38  |
| MUCH                        | 20                        | 61.61  | 6                       | 50.00  | 1                       | 100.00 | 27                    | 58.70  | 8                               | 28.57  | 35                 | 47.30  |
| TOTAL*                      | 33                        | 100.00 | 12                      | 100.00 | 1                       | 100.00 | 46                    | 100.00 | 28                              | 100.00 | 74                 | 100.00 |
| <u>ADEQUACY</u>             |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| SUFFICIENT                  | 31                        | 96.38  | 10                      | 90.91  | -                       | -      | 41                    | 93.35  | 20                              | 95.24  | 61                 | 95.31  |
| UPDATE                      | 1                         | 3.12   | 1                       | 9.09   | -                       | -      | 2                     | 4.65   | 1                               | 4.76   | 3                  | 4.69   |
| TOTAL*                      | 32                        | 100.00 | 11                      | 100.00 | -                       | -      | 43                    | 100.00 | 21                              | 100.00 | 64                 | 100.00 |
| <u>PEST REFERENCED</u>      |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| INSECT                      | 24                        | 66.67  | 5                       | 13.89  | 1                       | 19.44  | 30                    | 83.33  | 6                               | 16.67  | 36                 | 100.00 |
| DISEASE                     | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| WEED                        | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| PARASITE                    | 12                        | 46.15  | 6                       | 23.08  | -                       | -      | 18                    | 69.23  | 8                               | 30.77  | 26                 | 100.00 |
| OTHER                       | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| <u>CLIENTELE SERVED</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| COMMERCIAL                  | -                         | -      | 1                       | 100.00 | -                       | -      | 1                     | 100.00 | -                               | -      | 1                  | 100.00 |
| DEALER                      | 3                         | 60.00  | 2                       | 40.00  | -                       | -      | 5                     | 100.00 | -                               | -      | 5                  | 100.00 |
| COUNTY AGENT                | -                         | -      | 5                       | 83.33  | 1                       | 16.67  | 6                     | 100.00 | -                               | -      | 6                  | 100.00 |
| PRODUCER                    | 28                        | 71.79  | 10                      | 25.64  | 1                       | 2.57   | 39                    | 100.00 | -                               | -      | 39                 | 100.00 |
| DISTRIBUTER                 | 3                         | 60.00  | 2                       | 40.00  | -                       | -      | 5                     | 100.00 | -                               | -      | 5                  | 100.00 |
| GARDENER                    | 1                         | 100.00 | -                       | -      | -                       | -      | 1                     | 100.00 | -                               | -      | 1                  | 100.00 |

\*Omitted responses were not counted nor used in averaging

TABLE VI

THE SHEEP AND GOAT SECTION OF THE OSU-CES HANDBOOK -  
 FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| SHEEP & GOAT                | COUNTY<br>AGENTS<br>(n = 47) |              | AREA<br>AGENTS<br>(n = 20) |              | STATE<br>AGENTS<br>(n = 8) |               | SUB-TOTAL<br>(n = 75) |              | EXTENSION<br>CLIENTELE<br>(n = 68) |              | TOTAL<br>(n = 143) |              |
|-----------------------------|------------------------------|--------------|----------------------------|--------------|----------------------------|---------------|-----------------------|--------------|------------------------------------|--------------|--------------------|--------------|
|                             | n                            | %            | n                          | %            | n                          | %             | n                     | %            | n                                  | %            | n                  | %            |
| <u>FREQUENCY OF USE</u>     |                              |              |                            |              |                            |               |                       |              |                                    |              |                    |              |
| DAILY                       | 2                            | 4.44         | -                          | -            | -                          | -             | 2                     | 3.08         | -                                  | -            | 2                  | 1.82         |
| WEEKLY                      | 3                            | 6.67         | -                          | -            | -                          | -             | 3                     | 4.61         | -                                  | -            | 3                  | 2.73         |
| MONTHLY                     | 19                           | 42.22        | 2                          | 12.50        | -                          | -             | 21                    | 32.31        | 5                                  | 11.11        | 26                 | 23.63        |
| ANNUALLY                    | 14                           | 31.11        | 4                          | 25.00        | 1                          | 25.00         | 19                    | 29.23        | 6                                  | 13.33        | 25                 | 22.73        |
| NEVER                       | <u>7</u>                     | <u>15.56</u> | <u>10</u>                  | <u>62.50</u> | <u>3</u>                   | <u>75.00</u>  | <u>20</u>             | <u>30.77</u> | <u>34</u>                          | <u>75.56</u> | <u>54</u>          | <u>49.09</u> |
| TOTAL*                      | 45                           | 100.00       | 16                         | 100.00       | 4                          | 100.00        | 65                    | 100.00       | 45                                 | 100.00       | 110                | 100.00       |
| <u>VALUE OF INFORMATION</u> |                              |              |                            |              |                            |               |                       |              |                                    |              |                    |              |
| NONE                        | -                            | -            | 2                          | 18.18        | -                          | -             | 2                     | 4.00         | 6                                  | 24.00        | 8                  | 10.67        |
| LITTLE                      | 3                            | 7.89         | 1                          | 9.09         | -                          | -             | 4                     | 8.00         | 6                                  | 24.00        | 10                 | 13.33        |
| SOME                        | 12                           | 31.58        | 2                          | 18.18        | -                          | -             | 14                    | 28.00        | 4                                  | 16.00        | 18                 | 24.00        |
| MUCH                        | <u>23</u>                    | <u>60.53</u> | <u>6</u>                   | <u>54.55</u> | <u>1</u>                   | <u>100.00</u> | <u>30</u>             | <u>60.00</u> | <u>9</u>                           | <u>36.00</u> | <u>39</u>          | <u>52.00</u> |
| TOTAL*                      | 38                           | 100.00       | 11                         | 100.00       | 1                          | 100.00        | 50                    | 100.00       | 25                                 | 100.00       | 75                 | 100.00       |
| <u>ADEQUACY</u>             |                              |              |                            |              |                            |               |                       |              |                                    |              |                    |              |
| SUFFICIENT                  | 36                           | 100.00       | 9                          | 90.00        | -                          | -             | 45                    | 97.83        | 19                                 | 90.48        | 64                 | 95.52        |
| UPDATE                      | -                            | -            | <u>1</u>                   | <u>10.00</u> | -                          | -             | <u>1</u>              | <u>2.17</u>  | <u>2</u>                           | <u>9.52</u>  | <u>3</u>           | <u>4.48</u>  |
| TOTAL*                      | 36                           | 100.00       | 10                         | 100.00       | -                          | -             | 46                    | 100.00       | 21                                 | 100.00       | 67                 | 100.00       |
| <u>PEST REFERENCED</u>      |                              |              |                            |              |                            |               |                       |              |                                    |              |                    |              |
| INSECT                      | 25                           | 73.53        | 4                          | 11.77        | 1                          | 2.94          | 30                    | 88.24        | 4                                  | 11.76        | 34                 | 100.00       |
| DISEASE                     | -                            | -            | -                          | -            | -                          | -             | -                     | -            | -                                  | -            | -                  | -            |
| WEED                        | -                            | -            | -                          | -            | -                          | -             | -                     | -            | -                                  | -            | -                  | -            |
| PARASITE                    | 18                           | 60.00        | 6                          | 20.00        | -                          | -             | 24                    | 80.00        | 6                                  | 20.00        | 30                 | 100.00       |
| OTHER                       | -                            | -            | -                          | -            | -                          | -             | -                     | -            | -                                  | -            | -                  | -            |
| <u>CLIENTELE SERVED</u>     |                              |              |                            |              |                            |               |                       |              |                                    |              |                    |              |
| COMMERCIAL                  | -                            | -            | 1                          | 100.00       | -                          | -             | 1                     | 100.00       | -                                  | -            | 1                  | 100.00       |
| DEALER                      | 4                            | 66.67        | 2                          | 33.33        | -                          | -             | 6                     | 100.00       | -                                  | -            | 6                  | 100.00       |
| COUNTY AGENT                | -                            | -            | 4                          | 80.00        | 1                          | 20.00         | 5                     | 100.00       | -                                  | -            | 5                  | 100.00       |
| PRODUCER                    | 33                           | 80.49        | 7                          | 17.07        | 1                          | 2.44          | 41                    | 100.00       | -                                  | -            | 41                 | 100.00       |
| DISTRIBUTER                 | 3                            | 75.00        | 1                          | 25.00        | -                          | -             | 4                     | 100.00       | -                                  | -            | 4                  | 100.00       |
| GARDENER                    | 1                            | 50.00        | 1                          | 50.00        | -                          | -             | 2                     | 100.00       | -                                  | -            | 2                  | 100.00       |

\*Omitted responses were not counted nor used in averaging

it monthly, 25 annually, 3 weekly and 2 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 57 or 76.0 percent of the respondents checking the much or some categories and an average value of 2.17). An overwhelming majority of the respondents (64 or 95.52%) believed this section was sufficient. It is further reported in TABLE VI that the pests referenced most were insects and/or parasites. Finally, it was further perceived by the CES respondents that producers and county agents were the primary clientele served by this section of the OSU-CES Handbook.

The Horse Section of the  
OSU-CES Handbook

Reported in TABLE VII are the frequency distributions of the respondents' perceptions of the Horse Section of the OSU-CES Handbook. The greatest number (51) of the respondents indicated they never used this section of the OSU-CES Handbook. However, of the ones who used it, 33 used it annually, 24 monthly, 3 weekly and 1 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 64 or 80.00 percent of the respondents checking the much or some categories and an average value of 2.23). An overwhelming majority of the respondents (67 or 94.37%) believed this section was sufficient. It is further reported in TABLE VII that the pests referenced most were insects and/or parasites.

TABLE VII

THE HORSES SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| HORSES                      | COUNTY<br>AGENTS<br>(n = 47) |        | AREA<br>AGENTS<br>(n = 20) |        | STATE<br>AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION<br>CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|------------------------------|--------|----------------------------|--------|----------------------------|--------|-----------------------|--------|------------------------------------|--------|--------------------|--------|
|                             | n                            | %      | n                          | %      | n                          | %      | n                     | %      | n                                  | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| DAILY                       | 1                            | 2.22   | -                          | -      | -                          | -      | 1                     | 1.52   | -                                  | -      | 1                  | 0.89   |
| WEEKLY                      | 2                            | 4.44   | -                          | -      | -                          | -      | 2                     | 3.03   | 1                                  | 2.17   | 3                  | 2.68   |
| MONTHLY                     | 18                           | 40.00  | 3                          | 17.65  | -                          | -      | 21                    | 31.82  | 3                                  | 6.52   | 24                 | 21.43  |
| ANNUALLY                    | 18                           | 40.00  | 4                          | 23.53  | 1                          | 25.00  | 22                    | 33.33  | 11                                 | 23.91  | 33                 | 29.46  |
| NEVER                       | 6                            | 13.33  | 10                         | 58.82  | 3                          | 75.00  | 20                    | 30.30  | 31                                 | 67.39  | 51                 | 45.54  |
| TOTAL*                      | 45                           | 100.00 | 17                         | 100.00 | 4                          | 100.00 | 66                    | 100.00 | 46                                 | 100.00 | 112                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| NONE                        | -                            | -      | 2                          | 16.67  | -                          | -      | 2                     | 3.92   | 6                                  | 20.69  | 8                  | 10.00  |
| LITTLE                      | 2                            | 5.26   | 1                          | 8.33   | -                          | -      | 3                     | 5.88   | 5                                  | 17.24  | 8                  | 10.00  |
| SOME                        | 12                           | 31.58  | 2                          | 16.67  | -                          | -      | 14                    | 27.45  | 8                                  | 27.59  | 22                 | 27.50  |
| MUCH                        | 24                           | 63.16  | 7                          | 58.33  | 1                          | 100.00 | 32                    | 62.75  | 10                                 | 34.48  | 42                 | 52.50  |
| TOTAL*                      | 40                           | 100.00 | 18                         | 100.00 | 4                          | 100.00 | 62                    | 100.00 | 53                                 | 100.00 | 80                 | 100.00 |
| <u>ADEQUACY</u>             |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| SUFFICIENT                  | 36                           | 100.00 | 10                         | 90.91  | -                          | -      | 46                    | 97.87  | 21                                 | 87.50  | 67                 | 94.37  |
| UPDATE                      | -                            | -      | 1                          | 9.09   | -                          | -      | 1                     | 2.13   | 3                                  | 12.50  | 4                  | 5.63   |
| TOTAL*                      | 36                           | 100.00 | 11                         | 100.00 | -                          | -      | 47                    | 100.00 | 24                                 | 100.00 | 71                 | 100.00 |
| <u>PEST REFERENCED</u>      |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| INSECT                      | 22                           | 64.71  | 4                          | 11.76  | 1                          | 2.94   | 27                    | 79.41  | 7                                  | 20.59  | 34                 | 100.00 |
| DISEASE                     | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| WEED                        | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| PARASITE                    | 19                           | 59.38  | 5                          | 15.62  | -                          | -      | 24                    | 75.00  | 8                                  | 25.00  | 32                 | 100.00 |
| OTHER                       | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| <u>CLIENTELE SERVED</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| COMMERCIAL                  | -                            | -      | 1                          | 100.00 | -                          | -      | 1                     | 100.00 | -                                  | -      | 1                  | 100.00 |
| DEALER                      | 5                            | 74.43  | 2                          | 28.57  | -                          | -      | 7                     | 100.00 | -                                  | -      | 7                  | 100.00 |
| COUNTY AGENT                | -                            | -      | 4                          | 80.00  | 1                          | 20.00  | 5                     | 100.00 | -                                  | -      | 5                  | 100.00 |
| PRODUCER                    | 31                           | 75.61  | 9                          | 21.95  | 1                          | 2.43   | 41                    | 100.00 | -                                  | -      | 41                 | 100.00 |
| DISTRIBUTER                 | 3                            | 60.00  | 2                          | 40.00  | -                          | -      | 5                     | 100.00 | -                                  | -      | 5                  | 100.00 |
| GARDENER                    | 1                            | 100.00 | -                          | -      | -                          | -      | 1                     | 100.00 | -                                  | -      | 1                  | 100.00 |

\*Omitted responses were not counted nor used in averaging

Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Poultry Section of the  
OSU-CES Handbook

Reported in TABLE VIII are the frequency distributions of the respondents' perceptions of the Poultry Section of the OSU-CES Handbook. The greatest number (70) of the respondents indicated they never used this section of the OSU-CES Handbook. However, of those who used it, 20 used it monthly, 17 weekly and 2 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some valuable (based on 46 or 67.65 percent of the respondents checking the much or some categories and an average value of 2.00). An overwhelming majority of the respondents (59 or 95.16%) believed this section was sufficient. It is further reported in TABLE VIII that the pests referenced most were insects and/or parasites. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Pets Section of the  
OSU-CES Handbook

Reported in TABLE IX are the frequency distributions of the respondents' perceptions of the Pets Section of the OSU-

TABLE VIII

THE POULTRY SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| POULTRY                     | COUNTY<br>AGENTS<br>(n = 47) |        | AREA<br>AGENTS<br>(n = 20) |        | STATE<br>AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION<br>CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|------------------------------|--------|----------------------------|--------|----------------------------|--------|-----------------------|--------|------------------------------------|--------|--------------------|--------|
|                             | n                            | %      | n                          | %      | n                          | %      | n                     | %      | n                                  | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| DAILY                       | 1                            | 2.27   | -                          | -      | -                          | -      | 1                     | 1.56   | 1                                  | 2.22   | 2                  | 1.83   |
| WEEKLY                      | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| MONTHLY                     | 15                           | 34.09  | 2                          | 12.50  | -                          | -      | 17                    | 26.56  | 3                                  | 6.67   | 20                 | 18.35  |
| ANNUALLY                    | 11                           | 25.00  | 2                          | 12.50  | 1                          | 25.00  | 13                    | 20.31  | 4                                  | 8.89   | 17                 | 15.60  |
| NEVER                       | 17                           | 38.64  | 12                         | 75.00  | 3                          | 75.00  | 33                    | 51.56  | 37                                 | 82.22  | 70                 | 64.22  |
| TOTAL*                      | 44                           | 100.00 | 16                         | 100.00 | 4                          | 100.00 | 64                    | 100.00 | 45                                 | 100.00 | 109                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| NONE                        | 1                            | 3.33   | 3                          | 27.27  | -                          | -      | 4                     | 9.52   | 6                                  | 23.08  | 10                 | 14.70  |
| LITTLE                      | 4                            | 13.33  | 1                          | 9.09   | -                          | -      | 5                     | 11.90  | 7                                  | 26.92  | 12                 | 17.65  |
| SOME                        | 6                            | 20.00  | 3                          | 27.27  | -                          | -      | 9                     | 21.43  | 5                                  | 19.23  | 14                 | 20.59  |
| MUCH                        | 19                           | 63.33  | 4                          | 36.36  | 1                          | 100.00 | 24                    | 57.14  | 8                                  | 30.77  | 32                 | 47.06  |
| TOTAL*                      | 30                           | 100.00 | 11                         | 100.00 | 1                          | 100.00 | 42                    | 100.00 | 26                                 | 100.00 | 68                 | 100.00 |
| <u>ADEQUACY</u>             |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| SUFFICIENT                  | 29                           | 96.67  | 9                          | 100.00 | -                          | -      | 38                    | 97.44  | 21                                 | 91.30  | 59                 | 95.16  |
| UPDATE                      | 1                            | 3.33   | -                          | -      | -                          | -      | 1                     | 2.56   | 2                                  | 8.70   | 3                  | 4.84   |
| TOTAL*                      | 30                           | 100.00 | 9                          | 100.00 | -                          | -      | 39                    | 100.00 | 23                                 | 100.00 | 62                 | 100.00 |
| <u>PEST REFERENCED</u>      |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| INSECT                      | 19                           | 67.87  | 3                          | 10.71  | 1                          | 3.57   | 23                    | 82.14  | 5                                  | 17.86  | 28                 | 100.00 |
| DISEASE                     | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| WEED                        | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| PARASITE                    | 11                           | 61.11  | 3                          | 16.67  | -                          | -      | 14                    | 77.78  | 4                                  | 22.22  | 18                 | 100.00 |
| OTHER                       | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| <u>CLIENTELE SERVED</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| COMMERCIAL                  | -                            | -      | 1                          | 100.00 | -                          | -      | 1                     | 100.00 | -                                  | -      | 1                  | 100.00 |
| DEALER                      | 2                            | 50.00  | 2                          | 50.00  | -                          | -      | 4                     | 100.00 | -                                  | -      | 4                  | 100.00 |
| COUNTY AGENT                | -                            | -      | 4                          | 80.00  | 1                          | 20.00  | 5                     | 100.00 | -                                  | -      | 5                  | 100.00 |
| PRODUCER                    | 24                           | 75.00  | 7                          | 21.88  | 1                          | 3.12   | 32                    | 100.00 | -                                  | -      | 32                 | 100.00 |
| DISTRIBUTER                 | 2                            | 50.00  | 2                          | 50.00  | -                          | -      | 4                     | 100.00 | -                                  | -      | 4                  | 100.00 |
| GARDENER                    | 1                            | 100.00 | -                          | -      | -                          | -      | 1                     | 100.00 | -                                  | -      | 1                  | 100.00 |

\*Omitted responses were not counted nor used in averaging

TABLE IX  
THE PETS SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| PETS                        | COUNTY AGENTS<br>(n = 47) |        | AREA AGENTS<br>(n = 20) |        | STATE AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|---------------------------|--------|-------------------------|--------|-------------------------|--------|-----------------------|--------|---------------------------------|--------|--------------------|--------|
|                             | n                         | %      | n                       | %      | n                       | %      | n                     | %      | n                               | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| DAILY                       | 1                         | 3.33   | -                       | -      | -                       | -      | 1                     | 2.08   | 1                               | 2.38   | 2                  | 2.22   |
| WEEKLY                      | 5                         | 16.67  | -                       | -      | -                       | -      | 5                     | 10.41  | 1                               | 2.38   | 6                  | 6.67   |
| MONTHLY                     | 15                        | 50.00  | 1                       | 7.14   | 1                       | 25.00  | 17                    | 35.42  | 5                               | 11.90  | 22                 | 24.44  |
| ANNUALLY                    | 4                         | 13.33  | 5                       | 35.71  | 2                       | 50.00  | 11                    | 22.92  | 13                              | 30.95  | 24                 | 26.67  |
| NEVER                       | 5                         | 16.67  | 8                       | 57.14  | 1                       | 25.00  | 14                    | 29.17  | 22                              | 52.38  | 36                 | 40.00  |
| TOTAL*                      | 30                        | 100.00 | 14                      | 100.00 | 4                       | 100.00 | 48                    | 100.00 | 42                              | 100.00 | 90                 | 100.00 |
| <u>VALUE OF INFORMATION</u> |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| NONE                        | 1                         | 2.70   | 2                       | 18.18  | -                       | -      | 3                     | 5.88   | 3                               | 12.00  | 6                  | 7.89   |
| LITTLE                      | 3                         | 8.11   | 2                       | 18.18  | -                       | -      | 5                     | 9.80   | 5                               | 20.00  | 10                 | 13.16  |
| SOME                        | 14                        | 37.34  | 3                       | 27.27  | -                       | -      | 17                    | 33.33  | 6                               | 24.00  | 23                 | 30.26  |
| MUCH                        | 19                        | 51.35  | 4                       | 36.36  | 3                       | 100.00 | 26                    | 50.98  | 11                              | 44.00  | 37                 | 48.68  |
| TOTAL*                      | 37                        | 100.00 | 11                      | 100.00 | 3                       | 100.00 | 51                    | 100.00 | 25                              | 100.00 | 76                 | 100.00 |
| <u>ADEQUACY</u>             |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| SUFFICIENT                  | 32                        | 88.89  | 10                      | 100.00 | 2                       | 100.00 | 44                    | 91.67  | 17                              | 80.95  | 61                 | 88.41  |
| UPDATE                      | 4                         | 11.11  | -                       | -      | -                       | -      | 4                     | 8.33   | 4                               | 19.05  | 8                  | 11.59  |
| TOTAL*                      | 36                        | 100.00 | 10                      | 100.00 | 2                       | 100.00 | 48                    | 100.00 | 21                              | 100.00 | 69                 | 100.00 |
| <u>PEST REFERENCED</u>      |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| INSECT                      | 23                        | 58.97  | 5                       | 12.82  | 2                       | 5.13   | 30                    | 76.92  | 9                               | 23.08  | 39                 | 100.00 |
| DISEASE                     | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| WEED                        | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| PARASITE                    | 16                        | 55.18  | 4                       | 13.79  | -                       | -      | 20                    | 68.97  | 9                               | 31.03  | 29                 | 100.00 |
| OTHER                       | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| <u>CLIENTELE SERVED</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| COMMERCIAL                  | 1                         | 50.00  | 1                       | 50.00  | -                       | -      | 2                     | 100.00 | -                               | -      | 2                  | 100.00 |
| DEALER                      | 6                         | 75.00  | 2                       | 25.00  | -                       | -      | 8                     | 100.00 | -                               | -      | 8                  | 100.00 |
| COUNTY AGENT                | -                         | -      | 4                       | 66.67  | 2                       | 33.33  | 6                     | 100.00 | -                               | -      | 6                  | 100.00 |
| PRODUCER                    | 28                        | 77.78  | 7                       | 19.44  | 1                       | 2.78   | 36                    | 100.00 | -                               | -      | 36                 | 100.00 |
| DISTRIBUTER                 | 2                         | 66.67  | 1                       | 33.33  | -                       | -      | 3                     | 100.00 | -                               | -      | 3                  | 100.00 |
| GARDENER                    | 4                         | 100.00 | -                       | -      | -                       | -      | 4                     | 100.00 | -                               | -      | 4                  | 100.00 |

\*Omitted responses were not counted nor used in averaging

CES Handbook. The greatest number (36) of the respondents indicated they never used this section of the OSU-CES Handbook. However, of those who used it, 24 used it annually, 22 monthly, 6 weekly and 2 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 60 or 78.94 percent of the respondents checking the much or some categories and an average value of 2.20). An overwhelming majority of the respondents (61 or 88.41%) believed this section was sufficient. It is further reported in TABLE IX that the pest referenced most were insects and/or parasites. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Aquatic Plants Section of the  
OSU-CES Handbook

Reported in TABLE X are the frequency distributions of the respondents' perceptions of the Aquatic Plant Section of the OSU-CES Handbook. The greatest number (42) of the respondents indicated they used this section annually, followed by 30 never using it, 29 using it monthly, 13 weekly and 2 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be valuable (based on 79 or 84.94 percent of the respondents checking the much or some categories and an average of 2.37). An overwhelming majority of the respondents (67 or 80.72%)



TABLE X

THE AQUATIC PLANTS SECTION OF THE OSU-CES HANDBOOK -  
 FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| AQUATIC PLANTS              | COUNTY AGENTS<br>(n = 47) |        | AREA AGENTS<br>(n = 20) |        | STATE AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|---------------------------|--------|-------------------------|--------|-------------------------|--------|-----------------------|--------|---------------------------------|--------|--------------------|--------|
|                             | n                         | %      | n                       | %      | n                       | %      | n                     | %      | n                               | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| DAILY                       | -                         | -      | -                       | -      | -                       | -      | -                     | -      | 2                               | 4.00   | 2                  | 1.72   |
| WEEKLY                      | 9                         | 20.00  | 2                       | 12.50  | -                       | -      | 11                    | 16.67  | 2                               | 4.00   | 13                 | 11.21  |
| MONTHLY                     | 18                        | 40.00  | 3                       | 18.75  | 1                       | 20.00  | 22                    | 33.33  | 7                               | 14.00  | 29                 | 25.00  |
| ANNUALLY                    | 15                        | 33.33  | 6                       | 37.50  | 1                       | 20.00  | 22                    | 33.33  | 20                              | 40.00  | 42                 | 36.21  |
| NEVER                       | 3                         | 6.67   | 5                       | 31.25  | 3                       | 60.00  | 11                    | 16.67  | 19                              | 38.00  | 30                 | 25.86  |
| TOTAL*                      | 45                        | 100.00 | 16                      | 100.00 | 4                       | 100.00 | 66                    | 100.00 | 50                              | 100.00 | 116                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| NONE                        | -                         | -      | 1                       | 7.69   | -                       | -      | 1                     | 1.82   | 6                               | 15.79  | 7                  | 7.53   |
| LITTLE                      | 1                         | 2.63   | 1                       | 7.69   | -                       | -      | 2                     | 3.63   | 5                               | 13.16  | 7                  | 7.53   |
| SOME                        | 10                        | 26.32  | 1                       | 7.69   | 1                       | 25.00  | 12                    | 21.82  | 12                              | 31.58  | 24                 | 25.80  |
| MUCH                        | 27                        | 71.05  | 10                      | 76.92  | 3                       | 75.00  | 40                    | 72.73  | 15                              | 39.47  | 55                 | 59.14  |
| TOTAL*                      | 38                        | 100.00 | 13                      | 100.00 | 4                       | 100.00 | 55                    | 100.00 | 38                              | 100.00 | 93                 | 100.00 |
| <u>ADEQUACY</u>             |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| SUFFICIENT                  | 29                        | 78.38  | 9                       | 81.82  | 3                       | 100.00 | 41                    | 80.39  | 26                              | 81.25  | 67                 | 80.72  |
| UPDATE                      | 8                         | 21.62  | 2                       | 18.18  | -                       | -      | 10                    | 19.61  | 6                               | 18.75  | 16                 | 19.28  |
| TOTAL*                      | 37                        | 100.00 | 11                      | 100.00 | 3                       | 100.00 | 51                    | 100.00 | 32                              | 100.00 | 83                 | 100.00 |
| <u>PEST REFERENCED</u>      |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| INSECT                      | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| DISEASE                     | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| WEED                        | 33                        | 47.14  | 12                      | 17.14  | 1                       | 1.43   | 46                    | 65.71  | 24                              | 34.29  | 70                 | 100.00 |
| PARASITE                    | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| OTHER                       | 2                         | 50.00  | -                       | -      | -                       | -      | 2                     | 50.00  | 2                               | 50.00  | 4                  | 100.00 |
| <u>CLIENTELE SERVED</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| COMMERCIAL                  | 4                         | 36.36  | 6                       | 54.55  | 1                       | 9.09   | 11                    | 100.00 | -                               | -      | 11                 | 100.00 |
| DEALER                      | 14                        | 70.00  | 5                       | 25.00  | 1                       | 5.00   | 20                    | 100.00 | -                               | -      | 20                 | 100.00 |
| COUNTY AGENT                | -                         | -      | 9                       | 90.00  | 1                       | 10.00  | 10                    | 100.00 | -                               | -      | 10                 | 100.00 |
| PRODUCER                    | 32                        | 71.11  | 13                      | 28.89  | -                       | -      | 45                    | 100.00 | -                               | -      | 45                 | 100.00 |
| DISTRIBUTER                 | 7                         | 58.33  | 5                       | 41.67  | -                       | -      | 12                    | 100.00 | -                               | -      | 12                 | 100.00 |
| GARDENER                    | 1                         | 20.00  | 4                       | 80.00  | -                       | -      | 5                     | 100.00 | -                               | -      | 5                  | 100.00 |

\*Omitted responses were not counted nor used in averaging

believed this section was sufficient. It is further reported in TABLE X that the pest referenced most was weeds. Finally, it was further perceived by the CES respondents that producers and dealers were the primary clientele served by this section of the OSU-CES Handbook.

The Roadside Weeds and Brush Section  
of the OSU-CES Handbook

Reported in TABLE XI are the frequency distributions of the respondents' perceptions of the Roadside Weeds and Brush Section of the OSU-CES Handbook. The greatest number (48) of the respondents indicated they used this section annually, followed by 35 using it monthly, 22 never using it, 13 using it weekly and 2 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 76 or 82.60 percent of the respondents checking the much or some categories and an average value of 2.22). An overwhelming majority of the respondents (79 or 85.87%) believed this section was sufficient. It is further reported in TABLE XI that the pest referenced most was weeds. Finally, it was further perceived by the CES respondents that producers and commercial applicators were the primary clientele served by this section of the OSU-CES Handbook.

TABLE XI  
 THE ROADSIDE WEEDS AND BRUSH SECTION OF THE  
OSU-CES HANDBOOK - FREQUENCY DISTRIBUTION  
 OF RESPONDENTS' PERCEPTIONS

| ROADSIDE WEEDS<br>& BRUSH   | COUNTY<br>AGENTS<br>(n = 47) |        | AREA<br>AGENTS<br>(n = 20) |        | STATE<br>AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION<br>CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|------------------------------|--------|----------------------------|--------|----------------------------|--------|-----------------------|--------|------------------------------------|--------|--------------------|--------|
|                             | n                            | %      | n                          | %      | n                          | %      | n                     | %      | n                                  | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| DAILY                       | -                            | -      | -                          | -      | -                          | -      | -                     | -      | 2                                  | 3.64   | 2                  | 1.67   |
| WEEKLY                      | 6                            | 13.64  | 1                          | 5.88   | -                          | -      | 7                     | 10.77  | 6                                  | 10.91  | 13                 | 10.83  |
| MONTHLY                     | 11                           | 25.00  | 4                          | 23.53  | -                          | -      | 15                    | 23.08  | 20                                 | 36.36  | 35                 | 29.17  |
| ANNUALLY                    | 23                           | 52.27  | 5                          | 29.41  | 1                          | 25.00  | 29                    | 44.61  | 19                                 | 34.54  | 48                 | 40.00  |
| NEVER                       | 4                            | 9.09   | 7                          | 41.18  | 3                          | 75.00  | 14                    | 21.54  | 8                                  | 14.55  | 22                 | 18.33  |
| TOTAL*                      | 44                           | 100.00 | 17                         | 100.00 | 4                          | 100.00 | 65                    | 100.00 | 55                                 | 100.00 | 120                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| NONE                        | -                            | -      | 2                          | 15.38  | -                          | -      | 2                     | 3.70   | 6                                  | 15.79  | 8                  | 8.70   |
| LITTLE                      | 3                            | 7.89   | -                          | -      | -                          | -      | 3                     | 5.56   | 5                                  | 13.16  | 8                  | 8.70   |
| SOME                        | 14                           | 36.84  | 3                          | 23.08  | 1                          | 33.33  | 18                    | 33.33  | 12                                 | 31.58  | 30                 | 32.60  |
| MUCH                        | 21                           | 55.26  | 8                          | 61.54  | 2                          | 66.67  | 31                    | 57.41  | 15                                 | 39.47  | 46                 | 50.00  |
| TOTAL*                      | 38                           | 100.00 | 13                         | 100.00 | 4                          | 100.00 | 55                    | 100.00 | 38                                 | 100.00 | 93                 | 100.00 |
| <u>ADEQUACY</u>             |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| SUFFICIENT                  | 33                           | 91.67  | 10                         | 90.91  | 2                          | 100.00 | 45                    | 91.84  | 34                                 | 79.07  | 79                 | 85.87  |
| UPDATE                      | 3                            | 8.33   | 1                          | 9.09   | -                          | -      | 4                     | 8.16   | 9                                  | 20.93  | 13                 | 14.13  |
| TOTAL*                      | 36                           | 100.00 | 11                         | 100.00 | 2                          | 100.00 | 49                    | 100.00 | 43                                 | 100.00 | 92                 | 100.00 |
| <u>PEST REFERENCED</u>      |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| INSECT                      | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| DISEASE                     | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| WEED                        | 32                           | 37.65  | 11                         | 12.94  | 1                          | 1.17   | 44                    | 51.76  | 41                                 | 48.24  | 85                 | 100.00 |
| PARASITE                    | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| OTHER                       | -                            | -      | 1                          | 50.00  | -                          | -      | 1                     | 50.00  | 1                                  | 50.00  | 2                  | 100.00 |
| <u>CLIENTELE SERVED</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| COMMERCIAL                  | 12                           | 60.00  | 7                          | 35.00  | 1                          | 5.00   | 20                    | 100.00 | -                                  | -      | 20                 | 100.00 |
| DEALER                      | 8                            | 61.54  | 5                          | 38.46  | -                          | -      | 13                    | 100.00 | -                                  | -      | 13                 | 100.00 |
| COUNTY AGENT                | -                            | -      | 6                          | 85.71  | 1                          | 14.29  | 7                     | 100.00 | -                                  | -      | 7                  | 100.00 |
| PRODUCER                    | 25                           | 71.43  | 10                         | 28.57  | -                          | -      | 35                    | 100.00 | -                                  | -      | 35                 | 100.00 |
| DISTRIBUTER                 | 4                            | 50.00  | 4                          | 50.00  | -                          | -      | 8                     | 100.00 | -                                  | -      | 8                  | 100.00 |
| GARDENER                    | 1                            | 20.00  | 4                          | 80.00  | -                          | -      | 5                     | 100.00 | -                                  | -      | 5                  | 100.00 |

\*Omitted responses were not counted nor used in averaging

The Alfalfa Section of the  
OSU-CES Handbook

Reported in TABLE XII are the frequency distributions of the respondents' perceptions of the Alfalfa Section of the OSU-CES Handbook. The greatest number (48) of the respondents indicated they used this section monthly, followed by 31 using it annually, 28 weekly, 9 daily and 9 never using it. Furthermore, the CES respondents and Extension Clientele considered this section to be of much value (based on 110 or 97.35 percent of the respondents checking the much or some categories and an average value of 2.67). An overwhelming majority of the respondents (93 or 86.92%) believed this section was sufficient. It is further reported in TABLE XII that the pests referenced most were insects and/or weeds. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Corn Section of the  
OSU-CES Handbook

Reported in TABLE XIII are the frequency distributions of the respondents' perceptions of the Corn Section of the OSU-CES Handbook. The greatest number (38) of the respondents indicated they used this section of the OSU-CES Handbook annually, followed by 32 never using it, 26 monthly, 7 weekly and 2 daily. Furthermore, the CES

TABLE XII

THE ALFALFA SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| ALFALFA                     | COUNTY<br>AGENTS<br>(n = 47) |        | AREA<br>AGENTS<br>(n = 20) |        | STATE<br>AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION<br>CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|------------------------------|--------|----------------------------|--------|----------------------------|--------|-----------------------|--------|------------------------------------|--------|--------------------|--------|
|                             | n                            | %      | n                          | %      | n                          | %      | n                     | %      | n                                  | %      | n                  | %      |
|                             |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| <u>FREQUENCY OF USE</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| DAILY                       | 3                            | 6.82   | 1                          | 6.25   | -                          | -      | 4                     | 6.06   | 5                                  | 8.47   | 9                  | 7.20   |
| WEEKLY                      | 8                            | 18.18  | 6                          | 37.50  | 1                          | 16.67  | 15                    | 22.73  | 13                                 | 22.03  | 28                 | 22.40  |
| MONTHLY                     | 20                           | 45.45  | 4                          | 25.00  | 2                          | 33.33  | 26                    | 39.39  | 22                                 | 37.29  | 48                 | 38.40  |
| ANNUALLY                    | 11                           | 25.00  | 3                          | 18.75  | 1                          | 16.67  | 15                    | 22.73  | 16                                 | 27.12  | 31                 | 24.80  |
| NEVER                       | 2                            | 4.55   | 2                          | 12.50  | 2                          | 33.33  | 6                     | 9.09   | 3                                  | 5.08   | 9                  | 7.20   |
| TOTAL*                      | 44                           | 100.00 | 16                         | 100.00 | 6                          | 100.00 | 66                    | 100.00 | 59                                 | 100.00 | 125                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| NONE                        | -                            | -      | -                          | -      | -                          | -      | -                     | -      | 1                                  | 1.89   | 1                  | 0.88   |
| LITTLE                      | 2                            | 5.00   | -                          | -      | -                          | -      | 2                     | 3.33   | -                                  | -      | 2                  | 1.77   |
| SOME                        | 9                            | 22.50  | 3                          | 20.00  | 1                          | 20.00  | 13                    | 21.67  | 17                                 | 32.07  | 30                 | 26.55  |
| MUCH                        | 29                           | 72.50  | 12                         | 80.00  | 4                          | 80.00  | 45                    | 75.00  | 35                                 | 66.04  | 80                 | 70.80  |
| TOTAL*                      | 40                           | 100.00 | 15                         | 100.00 | 5                          | 100.00 | 60                    | 100.00 | 53                                 | 100.00 | 113                | 100.00 |
| <u>ADEQUACY</u>             |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| SUFFICIENT                  | 38                           | 100.00 | 13                         | 86.67  | 3                          | 100.00 | 54                    | 96.43  | 39                                 | 76.47  | 93                 | 86.92  |
| UPDATE                      | -                            | -      | 2                          | 13.33  | -                          | -      | 2                     | 3.57   | 12                                 | 23.53  | 14                 | 13.08  |
| TOTAL*                      | 38                           | 100.00 | 15                         | 100.00 | 3                          | 100.00 | 56                    | 100.00 | 51                                 | 100.00 | 107                | 100.00 |
| <u>PEST REFERENCED</u>      |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| INSECT                      | 31                           | 33.70  | 9                          | 9.78   | 4                          | 4.35   | 44                    | 47.83  | 48                                 | 52.17  | 92                 | 100.00 |
| DISEASE                     | 13                           | 46.42  | 5                          | 17.85  | -                          | -      | 18                    | 64.27  | 10                                 | 35.71  | 28                 | 100.00 |
| WEED                        | 31                           | 38.75  | 8                          | 10.00  | 2                          | 2.50   | 41                    | 51.25  | 39                                 | 48.75  | 80                 | 100.00 |
| PARASITE                    | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| OTHER                       | -                            | -      | 1                          | 100.00 | -                          | -      | 1                     | 100.00 | -                                  | -      | 1                  | 100.00 |
| <u>CLIENTELE SERVED</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| COMMERCIAL                  | 8                            | 44.44  | 8                          | 44.44  | 2                          | 11.12  | 18                    | 100.00 | -                                  | -      | 18                 | 100.00 |
| DEALER                      | 12                           | 66.67  | 5                          | 27.78  | 1                          | 5.55   | 18                    | 100.00 | -                                  | -      | 18                 | 100.00 |
| COUNTY AGENT                | -                            | -      | 8                          | 72.73  | 3                          | 27.27  | 11                    | 100.00 | -                                  | -      | 11                 | 100.00 |
| PRODUCER                    | 34                           | 68.00  | 15                         | 30.00  | 1                          | 2.00   | 50                    | 100.00 | -                                  | -      | 50                 | 100.00 |
| DISTRIBUTER                 | 4                            | 40.00  | 6                          | 60.00  | -                          | -      | 10                    | 100.00 | -                                  | -      | 10                 | 100.00 |
| GARDENER                    | 1                            | 33.33  | 2                          | 66.67  | -                          | -      | 3                     | 100.00 | -                                  | -      | 3                  | 100.00 |

\*Omitted responses were not counted nor used in averaging

TABLE XIII

THE CORN SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| CORN                        | COUNTY<br>AGENTS<br>(n = 47) |        | AREA<br>AGENTS<br>(n = 20) |        | STATE<br>AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION<br>CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|------------------------------|--------|----------------------------|--------|----------------------------|--------|-----------------------|--------|------------------------------------|--------|--------------------|--------|
|                             | n                            | %      | n                          | %      | n                          | %      | n                     | %      | n                                  | %      | n                  | %      |
|                             | <hr/>                        |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| <u>FREQUENCY OF USE</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| DAILY                       | -                            | -      | -                          | -      | -                          | -      | -                     | -      | 2                                  | 4.44   | 2                  | 1.90   |
| WEEKLY                      | 2                            | 4.88   | 1                          | 7.14   | -                          | -      | 3                     | 5.00   | 4                                  | 8.89   | 7                  | 6.67   |
| MONTHLY                     | 13                           | 31.71  | 5                          | 35.71  | -                          | -      | 18                    | 30.00  | 8                                  | 17.78  | 26                 | 24.76  |
| ANNUALLY                    | 17                           | 41.46  | 5                          | 35.71  | 2                          | 40.00  | 24                    | 40.00  | 14                                 | 31.11  | 38                 | 36.19  |
| NEVER                       | 9                            | 21.95  | 3                          | 21.43  | 3                          | 60.00  | 15                    | 25.00  | 17                                 | 37.78  | 32                 | 30.48  |
| TOTAL*                      | 41                           | 100.00 | 14                         | 100.00 | 5                          | 100.00 | 50                    | 100.00 | 45                                 | 100.00 | 105                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| NONE                        | -                            | -      | -                          | -      | -                          | -      | -                     | -      | 2                                  | 5.71   | 2                  | 2.35   |
| LITTLE                      | 2                            | 5.71   | 1                          | 8.33   | -                          | -      | 3                     | 6.00   | 4                                  | 11.43  | 7                  | 8.24   |
| SOME                        | 15                           | 42.86  | 2                          | 16.67  | -                          | -      | 17                    | 34.00  | 12                                 | 34.29  | 29                 | 34.12  |
| MUCH                        | 18                           | 51.43  | 9                          | 75.00  | 3                          | 100.00 | 30                    | 60.00  | 17                                 | 48.57  | 47                 | 55.29  |
| TOTAL*                      | 35                           | 100.00 | 12                         | 100.00 | 3                          | 100.00 | 50                    | 100.00 | 35                                 | 100.00 | 85                 | 100.00 |
| <u>ADEQUACY</u>             |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| SUFFICIENT                  | 34                           | 100.00 | 12                         | 92.31  | 2                          | 100.00 | 48                    | 97.96  | 24                                 | 75.00  | 72                 | 88.89  |
| UPDATE                      | -                            | -      | 1                          | 7.69   | -                          | -      | 1                     | 2.04   | 8                                  | 25.00  | 9                  | 11.11  |
| TOTAL*                      | 34                           | 100.00 | 13                         | 100.00 | 2                          | 100.00 | 49                    | 100.00 | 32                                 | 100.00 | 81                 | 100.00 |
| <u>PEST REFERENCED</u>      |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| INSECT                      | 23                           | 53.49  | 4                          | 9.30   | 2                          | 4.65   | 29                    | 67.44  | 14                                 | 32.56  | 43                 | 100.00 |
| DISEASE                     | 10                           | 71.43  | 1                          | 7.14   | -                          | -      | 11                    | 78.57  | 3                                  | 21.43  | 14                 | 100.00 |
| WEED                        | 23                           | 41.07  | 7                          | 12.50  | 1                          | 1.79   | 31                    | 55.36  | 25                                 | 44.64  | 56                 | 100.00 |
| PARASITE                    | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| OTHER                       | -                            | -      | 1                          | 100.00 | -                          | -      | 1                     | 100.00 | -                                  | -      | 1                  | 100.00 |
| <u>CLIENTELE SERVED</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| COMMERCIAL                  | 3                            | 30.00  | 5                          | 50.00  | 2                          | 20.00  | 10                    | 100.00 | -                                  | -      | 10                 | 100.00 |
| DEALER                      | 7                            | 63.64  | 3                          | 27.27  | 1                          | 9.09   | 11                    | 100.00 | -                                  | -      | 11                 | 100.00 |
| COUNTY AGENT                | -                            | -      | 6                          | 75.00  | 2                          | 25.00  | 8                     | 100.00 | -                                  | -      | 8                  | 100.00 |
| PRODUCER                    | 31                           | 70.45  | 12                         | 27.27  | 1                          | 2.28   | 44                    | 100.00 | -                                  | -      | 44                 | 100.00 |
| DISTRIBUTER                 | 4                            | 57.14  | 3                          | 42.86  | -                          | -      | 7                     | 100.00 | -                                  | -      | 7                  | 100.00 |
| GARDENER                    | 1                            | 33.33  | 2                          | 66.67  | -                          | -      | 3                     | 100.00 | -                                  | -      | 3                  | 100.00 |

\*Omitted responses were not counted nor used in averaging

respondents and Extension Clientele considered this section to be of some value (based on 76 or 89.41 percent of the respondents checking much or some categories and an average value of 2.42). An overwhelming majority of the respondents (72 or 88.89%) believed this section was sufficient. It is further reported in TABLE XIII that the pests referenced most were insects and/or weeds. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Cotton Section of the  
OSU-CES Handbook

Reported in TABLE XIV are the frequency distributions of the respondents' perceptions of the Cotton Section of the OSU-CES Handbook. The greatest number (53) of the respondents indicated they never used this section of the OSU-CES Handbook. However, of those who used it, 20 used it annually, 18 monthly, 15 weekly and 6 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 72 or 80.90 percent of the respondents checking some or much categories and an average value of 2.29). An overwhelming majority of the respondents (74 or 90.24%) believed this section was sufficient. It is further reported in TABLE XIV that the pests referenced most were insects and/or weeds. Finally, it was further perceived by the CES respondents that

TABLE XIV

THE COTTON SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| COTTON                      | COUNTY AGENTS<br>(n = 47) |        | AREA AGENTS<br>(n = 20) |        | STATE AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|---------------------------|--------|-------------------------|--------|-------------------------|--------|-----------------------|--------|---------------------------------|--------|--------------------|--------|
|                             | n                         | %      | n                       | %      | n                       | %      | n                     | %      | n                               | %      | n                  | %      |
|                             | <hr/>                     |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| <u>FREQUENCY OF USE</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| DAILY                       | 1                         | 2.38   | 1                       | 6.67   | -                       | -      | 2                     | 3.22   | 4                               | 8.00   | 6                  | 5.36   |
| WEEKLY                      | 3                         | 7.14   | 4                       | 26.67  | -                       | -      | 7                     | 11.29  | 8                               | 16.00  | 15                 | 13.39  |
| MONTHLY                     | 6                         | 14.29  | 1                       | 6.67   | 2                       | 40.00  | 9                     | 14.52  | 9                               | 18.00  | 18                 | 16.07  |
| ANNUALLY                    | 8                         | 19.05  | 2                       | 13.33  | 1                       | 20.00  | 11                    | 17.74  | 9                               | 18.00  | 20                 | 17.86  |
| NEVER                       | 24                        | 57.14  | 7                       | 46.67  | 2                       | 40.00  | 33                    | 53.23  | 20                              | 40.00  | 53                 | 47.32  |
| TOTAL*                      | 42                        | 100.00 | 15                      | 100.00 | 5                       | 100.00 | 62                    | 100.00 | 50                              | 100.00 | 112                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| NONE                        | 3                         | 9.09   | 1                       | 7.69   | -                       | -      | 4                     | 8.00   | 5                               | 12.82  | 9                  | 10.11  |
| LITTLE                      | 5                         | 15.15  | 1                       | 7.69   | -                       | -      | 6                     | 12.00  | 2                               | 5.13   | 4                  | 8.99   |
| SOME                        | 5                         | 15.15  | 2                       | 15.38  | -                       | -      | 7                     | 14.00  | 9                               | 23.08  | 16                 | 17.98  |
| MUCH                        | 20                        | 60.61  | 9                       | 69.23  | 4                       | 100.00 | 33                    | 66.00  | 23                              | 58.97  | 56                 | 62.92  |
| TOTAL*                      | 33                        | 100.00 | 13                      | 100.00 | 4                       | 100.00 | 50                    | 100.00 | 39                              | 100.00 | 89                 | 100.00 |
| <u>ADEQUACY</u>             |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| SUFFICIENT                  | 31                        | 96.88  | 11                      | 100.00 | 3                       | 100.00 | 45                    | 97.83  | 29                              | 80.56  | 74                 | 90.24  |
| UPDATE                      | 1                         | 3.12   | -                       | -      | -                       | -      | 1                     | 2.17   | 7                               | 19.44  | 8                  | 9.76   |
| TOTAL*                      | 32                        | 100.00 | 11                      | 100.00 | 3                       | 100.00 | 46                    | 100.00 | 36                              | 100.00 | 82                 | 100.00 |
| <u>PEST REFERENCED</u>      |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| INSECT                      | 16                        | 32.65  | 6                       | 12.24  | 3                       | 6.13   | 25                    | 51.02  | 24                              | 48.98  | 49                 | 100.00 |
| DISEASE                     | 6                         | 46.15  | 3                       | 23.08  | -                       | -      | 9                     | 69.23  | 4                               | 30.77  | 13                 | 100.00 |
| WEED                        | 17                        | 34.69  | 7                       | 14.29  | 1                       | 2.04   | 25                    | 51.02  | 24                              | 48.98  | 49                 | 100.00 |
| PARASITE                    | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| OTHER                       | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| <u>CLIENTELE SERVED</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| COMMERCIAL                  | 2                         | 25.00  | 4                       | 50.00  | 2                       | 25.00  | 8                     | 100.00 | -                               | -      | 8                  | 100.00 |
| DEALER                      | 7                         | 70.00  | 2                       | 20.00  | 1                       | 10.00  | 10                    | 100.00 | -                               | -      | 10                 | 100.00 |
| COUNTY AGENT                | -                         | -      | 6                       | 66.67  | 3                       | 33.33  | 9                     | 100.00 | -                               | -      | 9                  | 100.00 |
| PRODUCER                    | 25                        | 67.57  | 11                      | 29.73  | 1                       | 2.70   | 37                    | 100.00 | -                               | -      | 37                 | 100.00 |
| DISTRIBUTER                 | 4                         | 57.14  | 3                       | 42.86  | -                       | -      | 7                     | 100.00 | -                               | -      | 7                  | 100.00 |
| GARDENER                    | 1                         | 50.00  | 1                       | 50.00  | -                       | -      | 2                     | 100.00 | -                               | -      | 2                  | 100.00 |

\*Omitted responses were not counted nor used in averaging



producers were the primary clientele served by this section of the OSU-CES Handbook.

The Pasture and Range Section  
of the OSU-CES Handbook

Reported in TABLE XV are the frequency distributions of the respondents' perceptions of the Pasture and Range Section of the OSU-CES Handbook. The greatest number (36) of the respondents indicated they used this section of the OSU-CES Handbook weekly, followed by 33 using it monthly, 28 annually, 13 daily and 12 never using it. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 119 or 97.54 percent of the respondents checking much or some categories and a mean value of 2.66). An overwhelming majority of the respondents (89 or 83.96%) believed this section was sufficient. It is further reported in TABLE XV that the pest referenced most was weeds. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Peanuts Section of the  
OSU-CES Handbook

Reported in TABLE XVI are the frequency distributions of the respondents' perceptions of the Peanuts Section of the OSU-CES Handbook. The greatest number (44) of the

TABLE XV

THE PASTURE AND RANGE SECTION OF THE OSU-CES HANDBOOK -  
 FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| PASTURE & RANGE             | COUNTY AGENTS<br>(n = 47) |              | AREA AGENTS<br>(n = 20) |              | STATE AGENTS<br>(n = 8) |              | SUB-TOTAL<br>(n = 75) |              | EXTENSION CLIENTELE<br>(n = 68) |              | TOTAL<br>(n = 143) |              |
|-----------------------------|---------------------------|--------------|-------------------------|--------------|-------------------------|--------------|-----------------------|--------------|---------------------------------|--------------|--------------------|--------------|
|                             | n                         | %            | n                       | %            | n                       | %            | n                     | %            | n                               | %            | n                  | %            |
| <u>FREQUENCY OF USE</u>     |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| DAILY                       | 6                         | 13.95        | -                       | -            | -                       | -            | 6                     | 9.52         | 7                               | 11.86        | 13                 | 10.65        |
| WEEKLY                      | 17                        | 39.53        | 3                       | 20.00        | 1                       | 20.00        | 21                    | 33.33        | 18                              | 25.42        | 36                 | 29.51        |
| MONTHLY                     | 12                        | 27.91        | 3                       | 20.00        | -                       | -            | 15                    | 23.81        | 18                              | 30.51        | 33                 | 27.05        |
| ANNUALLY                    | 5                         | 11.63        | 5                       | 33.33        | 2                       | 40.00        | 12                    | 19.05        | 16                              | 27.12        | 28                 | 22.95        |
| NEVER                       | <u>3</u>                  | <u>6.98</u>  | <u>4</u>                | <u>26.67</u> | <u>2</u>                | <u>40.00</u> | <u>9</u>              | <u>14.29</u> | <u>3</u>                        | <u>5.08</u>  | <u>12</u>          | <u>9.84</u>  |
| TOTAL*                      | 43                        | 100.00       | 15                      | 100.00       | 5                       | 100.00       | 63                    | 100.00       | 59                              | 100.00       | 122                | 100.00       |
| <u>VALUE OF INFORMATION</u> |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| NONE                        | -                         | -            | -                       | -            | -                       | -            | -                     | -            | 1                               | 1.54         | 1                  | 0.82         |
| LITTLE                      | 1                         | 2.50         | -                       | -            | -                       | -            | 1                     | 1.75         | 1                               | 1.54         | 2                  | 1.64         |
| SOME                        | 4                         | 10.00        | 3                       | 23.08        | 1                       | 25.00        | 8                     | 14.04        | 26                              | 40.00        | 34                 | 27.87        |
| MUCH                        | <u>35</u>                 | <u>87.50</u> | <u>10</u>               | <u>76.92</u> | <u>3</u>                | <u>75.00</u> | <u>48</u>             | <u>84.21</u> | <u>37</u>                       | <u>56.92</u> | <u>85</u>          | <u>69.67</u> |
| TOTAL*                      | 40                        | 100.00       | 13                      | 100.00       | 4                       | 100.00       | 57                    | 100.00       | 65                              | 100.00       | 122                | 100.00       |
| <u>ADEQUACY</u>             |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| SUFFICIENT                  | 34                        | 91.89        | 12                      | 92.31        | 2                       | 100.00       | 48                    | 92.31        | 41                              | 75.93        | 89                 | 83.96        |
| UPDATE                      | <u>3</u>                  | <u>8.11</u>  | <u>1</u>                | <u>7.69</u>  | -                       | -            | <u>4</u>              | <u>7.69</u>  | <u>13</u>                       | <u>24.07</u> | <u>17</u>          | <u>16.04</u> |
| TOTAL*                      | 37                        | 100.00       | 13                      | 100.00       | 2                       | 100.00       | 52                    | 100.00       | 54                              | 100.00       | 106                | 100.00       |
| <u>PEST REFERENCED</u>      |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| INSECT                      | 9                         | 31.03        | 4                       | 13.79        | 3                       | 10.35        | 16                    | 55.17        | 13                              | 44.83        | 29                 | 100.00       |
| DISEASE                     | 7                         | 63.64        | 1                       | 9.09         | -                       | -            | 8                     | 72.73        | 3                               | 27.27        | 11                 | 100.00       |
| WEED                        | 36                        | 37.11        | 9                       | 9.28         | 1                       | 1.03         | 46                    | 47.42        | 51                              | 52.58        | 97                 | 100.00       |
| PARASITE                    | -                         | -            | 1                       | 33.33        | -                       | -            | -                     | -            | 1                               | 100.00       | 1                  | 100.00       |
| OTHER                       | -                         | -            | 1                       | 33.33        | -                       | -            | 1                     | 33.33        | 2                               | 67.67        | 3                  | 100.00       |
| <u>CLIENTELE SERVED</u>     |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| COMMERCIAL                  | 10                        | 58.82        | 6                       | 35.29        | 1                       | 5.89         | 17                    | 100.00       | -                               | -            | 17                 | 100.00       |
| DEALER                      | 14                        | 73.68        | 5                       | 26.32        | -                       | -            | 19                    | 100.00       | -                               | -            | 19                 | 100.00       |
| COUNTY AGENT                | -                         | -            | 8                       | 80.00        | 2                       | 20.00        | 10                    | 100.00       | -                               | -            | 10                 | 100.00       |
| PRODUCER                    | 33                        | 68.75        | 14                      | 29.17        | 1                       | 2.08         | 48                    | 100.00       | -                               | -            | 48                 | 100.00       |
| DISTRIBUTER                 | 4                         | 44.44        | 5                       | 55.56        | -                       | -            | 9                     | 100.00       | -                               | -            | 9                  | 100.00       |
| GARDENER                    | 1                         | 25.00        | 3                       | 75.00        | -                       | -            | 4                     | 100.00       | -                               | -            | 4                  | 100.00       |

\*Omitted responses were not counted nor used in averaging

TABLE XVI

THE PEANUTS SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| PEANUTS                     | COUNTY<br>AGENTS<br>(n = 47) |              | AREA<br>AGENTS<br>(n = 20) |              | STATE<br>AGENTS<br>(n = 8) |               | SUB-TOTAL<br>(n = 75) |              | EXTENSION<br>CLIENTELE<br>(n = 68) |              | TOTAL<br>(n = 143) |              |
|-----------------------------|------------------------------|--------------|----------------------------|--------------|----------------------------|---------------|-----------------------|--------------|------------------------------------|--------------|--------------------|--------------|
|                             | n                            | %            | n                          | %            | n                          | %             | n                     | %            | n                                  | %            | n                  | %            |
| <u>FREQUENCY OF USE</u>     |                              |              |                            |              |                            |               |                       |              |                                    |              |                    |              |
| DAILY                       | 2                            | 4.65         | -                          | -            | -                          | -             | 2                     | 3.23         | 5                                  | 10.00        | 7                  | 6.25         |
| WEEKLY                      | 2                            | 4.65         | 3                          | 21.43        | -                          | -             | 5                     | 8.06         | 8                                  | 16.00        | 13                 | 11.61        |
| MONTHLY                     | 10                           | 23.26        | 5                          | 35.71        | 1                          | 20.00         | 16                    | 25.81        | 14                                 | 28.00        | 30                 | 26.78        |
| ANNUALLY                    | 8                            | 18.60        | 2                          | 14.29        | 2                          | 40.00         | 12                    | 19.35        | 6                                  | 12.00        | 18                 | 16.07        |
| NEVER                       | <u>21</u>                    | <u>48.84</u> | <u>4</u>                   | <u>28.57</u> | <u>2</u>                   | <u>40.00</u>  | <u>27</u>             | <u>43.55</u> | <u>17</u>                          | <u>34.00</u> | <u>44</u>          | <u>39.29</u> |
| TOTAL*                      | 43                           | 100.00       | 14                         | 100.00       | 5                          | 100.00        | 62                    | 100.00       | 50                                 | 100.00       | 112                | 100.00       |
| <u>VALUE OF INFORMATION</u> |                              |              |                            |              |                            |               |                       |              |                                    |              |                    |              |
| NONE                        | 2                            | 6.25         | 1                          | 7.69         | -                          | -             | 3                     | 6.12         | 4                                  | 9.76         | 7                  | 7.78         |
| LITTLE                      | 5                            | 15.62        | -                          | -            | -                          | -             | 5                     | 10.20        | 2                                  | 4.88         | 7                  | 7.78         |
| SOME                        | 4                            | 12.50        | 3                          | 23.08        | -                          | -             | 7                     | 14.29        | 9                                  | 21.95        | 16                 | 17.78        |
| MUCH                        | <u>21</u>                    | <u>65.63</u> | <u>9</u>                   | <u>69.23</u> | <u>4</u>                   | <u>100.00</u> | <u>34</u>             | <u>69.39</u> | <u>26</u>                          | <u>63.41</u> | <u>60</u>          | <u>66.66</u> |
| TOTAL*                      | 32                           | 100.00       | 13                         | 100.00       | 4                          | 100.00        | 49                    | 100.00       | 41                                 | 100.00       | 90                 | 100.00       |
| <u>ADEQUACY</u>             |                              |              |                            |              |                            |               |                       |              |                                    |              |                    |              |
| SUFFICIENT                  | 28                           | 96.55        | 11                         | 91.67        | 3                          | 100.00        | 42                    | 95.45        | 27                                 | 69.23        | 69                 | 83.13        |
| UPDATE                      | <u>1</u>                     | <u>3.45</u>  | <u>1</u>                   | <u>8.33</u>  | <u>-</u>                   | <u>-</u>      | <u>2</u>              | <u>4.55</u>  | <u>12</u>                          | <u>30.77</u> | <u>14</u>          | <u>16.87</u> |
| TOTAL*                      | 29                           | 100.00       | 12                         | 100.00       | 3                          | 100.00        | 44                    | 100.00       | 39                                 | 100.00       | 83                 | 100.00       |
| <u>PEST REFERENCED</u>      |                              |              |                            |              |                            |               |                       |              |                                    |              |                    |              |
| INSECT                      | 12                           | 29.27        | 5                          | 12.20        | 3                          | 7.31          | 20                    | 48.78        | 21                                 | 51.22        | 41                 | 100.00       |
| DISEASE                     | 11                           | 26.83        | 6                          | 14.63        | 1                          | 2.44          | 18                    | 43.90        | 23                                 | 56.10        | 41                 | 100.00       |
| WEED                        | 17                           | 33.33        | 7                          | 13.73        | 1                          | 1.96          | 25                    | 49.02        | 26                                 | 50.98        | 51                 | 100.00       |
| PARASITE                    | -                            | -            | -                          | -            | -                          | -             | -                     | -            | -                                  | -            | -                  | -            |
| OTHER                       | -                            | -            | -                          | -            | -                          | -             | -                     | -            | -                                  | -            | -                  | -            |
| <u>CLIENTELE SERVED</u>     |                              |              |                            |              |                            |               |                       |              |                                    |              |                    |              |
| COMMERCIAL                  | 1                            | 11.11        | 6                          | 66.67        | 2                          | 22.22         | 9                     | 100.00       | -                                  | -            | 9                  | 100.00       |
| DEALER                      | 7                            | 58.33        | 4                          | 33.33        | 1                          | 8.34          | 12                    | 100.00       | -                                  | -            | 12                 | 100.00       |
| COUNTY AGENT                | -                            | -            | 7                          | 70.00        | 3                          | 30.00         | 10                    | 100.00       | -                                  | -            | 10                 | 100.00       |
| PRODUCER                    | 23                           | 65.71        | 11                         | 31.43        | 1                          | 2.86          | 35                    | 100.00       | -                                  | -            | 35                 | 100.00       |
| DISTRIBUTER                 | 3                            | 42.86        | 4                          | 57.14        | -                          | -             | 7                     | 100.00       | -                                  | -            | 7                  | 100.00       |
| GARDENER                    | 1                            | 50.00        | 1                          | 50.00        | -                          | -             | 2                     | 100.00       | -                                  | -            | 2                  | 100.00       |

\*Omitted responses were not counted nor used in averaging

respondents indicated they never used this section of the OSU-CES Handbook. However, of those who used it 30 used it monthly, 18 annually, 13 weekly and 7 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 76 or 84.44 percent of the respondents checking much or some categories and a mean value of 2.43). An overwhelming majority of the respondents (69 or 83.13%) believed this section was sufficient. It is further reported in TABLE XVI that the pest referenced most were disease, weeds, or insects. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Small Grains Section of the  
OSU-CES Handbook

Reported in TABLE XVII are the frequency distributions of the respondents' perceptions of the Small Grains Section of the OSU-CES Handbook. The greatest number (37) of the respondents indicated they used this section of the OSU-CES Handbook weekly, followed by 33 using it monthly, 27 annually, or 18 daily and 8 never using it. Furthermore, the CES respondents and Extension Clientele considered this section to be of much value (based on 83 or 97.64 percent of the respondents checking some or much categories and an average value of 2.54). An overwhelming majority of the respondents (89 or 84.76%) believed this section was

TABLE XVII

THE SMALL GRAINS SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| SMALL GRAINS                | COUNTY<br>AGENTS<br>(n = 47) |              | AREA<br>AGENTS<br>(n = 20) |              | STATE<br>AGENTS<br>(n = 8) |              | SUB-TOTAL<br>(n = 75) |              | EXTENSION<br>CLIENTELE<br>(n = 68) |              | TOTAL<br>(n = 143) |              |
|-----------------------------|------------------------------|--------------|----------------------------|--------------|----------------------------|--------------|-----------------------|--------------|------------------------------------|--------------|--------------------|--------------|
|                             | n                            | %            | n                          | %            | n                          | %            | n                     | %            | n                                  | %            | n                  | %            |
| <u>FREQUENCY OF USE</u>     |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| DAILY                       | 10                           | 22.73        | 2                          | 13.33        | -                          | -            | 12                    | 18.46        | 6                                  | 10.34        | 18                 | 14.63        |
| WEEKLY                      | 14                           | 31.82        | 4                          | 26.67        | -                          | -            | 18                    | 27.69        | 19                                 | 32.76        | 37                 | 30.08        |
| MONTHLY                     | 10                           | 22.73        | 6                          | 40.00        | 2                          | 33.33        | 18                    | 27.69        | 15                                 | 25.86        | 33                 | 26.83        |
| ANNUALLY                    | 8                            | 18.18        | 2                          | 13.33        | 2                          | 33.33        | 12                    | 18.46        | 15                                 | 25.86        | 27                 | 21.95        |
| NEVER                       | <u>2</u>                     | <u>4.54</u>  | <u>1</u>                   | <u>6.67</u>  | <u>2</u>                   | <u>33.33</u> | <u>5</u>              | <u>7.69</u>  | <u>3</u>                           | <u>5.17</u>  | <u>8</u>           | <u>6.50</u>  |
| TOTAL*                      | 44                           | 100.00       | 15                         | 100.00       | 6                          | 100.00       | 65                    | 100.00       | 58                                 | 100.00       | 123                | 100.00       |
| <u>VALUE OF INFORMATION</u> |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| NONE                        | -                            | -            | -                          | -            | -                          | -            | -                     | -            | 1                                  | 1.92         | 1                  | 1.18         |
| LITTLE                      | 1                            | 7.14         | -                          | -            | -                          | -            | 1                     | 3.03         | -                                  | -            | 1                  | 1.18         |
| SOME                        | 10                           | 71.43        | 4                          | 28.57        | 1                          | 20.00        | 15                    | 45.45        | 16                                 | 30.77        | 31                 | 36.47        |
| MUCH                        | <u>3</u>                     | <u>21.43</u> | <u>10</u>                  | <u>71.43</u> | <u>4</u>                   | <u>80.00</u> | <u>17</u>             | <u>51.52</u> | <u>35</u>                          | <u>67.31</u> | <u>52</u>          | <u>61.17</u> |
| TOTAL*                      | 14                           | 100.00       | 14                         | 100.00       | 5                          | 100.00       | 33                    | 100.00       | 51                                 | 100.00       | 85                 | 100.00       |
| <u>ADEQUACY</u>             |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| SUFFICIENT                  | 35                           | 97.22        | 12                         | 92.31        | 3                          | 100.00       | 50                    | 96.15        | 39                                 | 73.58        | 89                 | 84.76        |
| UPDATE                      | <u>1</u>                     | <u>2.78</u>  | <u>1</u>                   | <u>7.69</u>  | -                          | -            | <u>2</u>              | <u>3.85</u>  | <u>14</u>                          | <u>26.42</u> | <u>16</u>          | <u>15.24</u> |
| TOTAL*                      | 36                           | 100.00       | 13                         | 100.00       | 3                          | 100.00       | 52                    | 100.00       | 53                                 | 100.00       | 105                | 100.00       |
| <u>PEST REFERENCED</u>      |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| INSECT                      | 26                           | 30.23        | 9                          | 10.47        | 4                          | 4.65         | 39                    | 45.35        | 47                                 | 54.65        | 86                 | 100.00       |
| DISEASE                     | 17                           | 35.47        | 5                          | 10.42        | 1                          | 2.03         | 23                    | 47.92        | 25                                 | 52.08        | 48                 | 100.00       |
| WEED                        | 31                           | 36.90        | 10                         | 11.90        | 2                          | 2.39         | 43                    | 51.19        | 41                                 | 48.81        | 84                 | 100.00       |
| PARASITE                    | -                            | -            | -                          | -            | -                          | -            | -                     | -            | -                                  | -            | -                  | -            |
| OTHER                       | -                            | -            | 1                          | 50.00        | -                          | -            | 1                     | 50.00        | 1                                  | 50.00        | 2                  | 100.00       |
| <u>CLIENTELE SERVED</u>     |                              |              |                            |              |                            |              |                       |              |                                    |              |                    |              |
| COMMERCIAL                  | 6                            | 40.00        | 7                          | 46.67        | 2                          | 13.33        | 15                    | 100.00       | -                                  | -            | 15                 | 100.00       |
| DEALER                      | 12                           | 66.67        | 54                         | 27.78        | 1                          | 5.55         | 18                    | 100.00       | -                                  | -            | 18                 | 100.00       |
| COUNTY AGENT                | -                            | -            | 7                          | 70.00        | 3                          | 30.00        | 10                    | 100.00       | -                                  | -            | 10                 | 100.00       |
| PRODUCER                    | 31                           | 67.39        | 14                         | 30.43        | 1                          | 2.18         | 46                    | 100.00       | -                                  | -            | 46                 | 100.00       |
| DISTRIBUTER                 | 3                            | 42.86        | 4                          | 57.14        | -                          | -            | 7                     | 100.00       | -                                  | -            | 7                  | 100.00       |
| GARDENER                    | 2                            | 50.00        | 2                          | 50.00        | -                          | -            | 4                     | 100.00       | -                                  | -            | 4                  | 100.00       |

\*Omitted responses were not counted nor used in averaging

sufficient. It is further reported in TABLE XVII that the pests referenced most were insects and/or weeds. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Stored Grains Section of the  
OSU-CES Handbook

Reported in TABLE XVIII are the frequency distributions of the respondents' perceptions of the Stored Grains Section of the OSU-CES Handbook. The greatest number (56) of the respondents indicated they used this section of the OSU-CES Handbook annually, followed by never (32), monthly (21), weekly (4) and daily (1). Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 77 or 84.61 percent of the respondents checking much or some categories and an average value of 2.26). An overwhelming majority of the respondents (87 or 85.29%) believed this section was sufficient. It is further reported in TABLE XVIII that the pest referenced most was insects. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

TABLE XVIII

THE STORED GRAINS SECTION OF THE OSU-CES HANDBOOK -  
 FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| STORED GRAINS               | COUNTY AGENTS<br>(n = 47) |              | AREA AGENTS<br>(n = 20) |              | STATE AGENTS<br>(n = 8) |              | SUB-TOTAL<br>(n = 75) |              | EXTENSION CLIENTELE<br>(n = 68) |              | TOTAL<br>(n = 143) |              |
|-----------------------------|---------------------------|--------------|-------------------------|--------------|-------------------------|--------------|-----------------------|--------------|---------------------------------|--------------|--------------------|--------------|
|                             | n                         | %            | n                       | %            | n                       | %            | n                     | %            | n                               | %            | n                  | %            |
| <u>FREQUENCY OF USE</u>     |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| DAILY                       | -                         | -            | -                       | -            | -                       | -            | -                     | -            | 1                               | 2.04         | 1                  | 0.88         |
| WEEKLY                      | 1                         | 2.27         | -                       | -            | -                       | -            | 1                     | 1.54         | 3                               | 6.12         | 4                  | 3.51         |
| MONTHLY                     | 10                        | 22.73        | 3                       | 17.65        | 1                       | 25.00        | 14                    | 21.54        | 7                               | 14.29        | 21                 | 18.42        |
| ANNUALLY                    | 26                        | 59.09        | 9                       | 52.94        | -                       | -            | 35                    | 53.85        | 21                              | 42.86        | 56                 | 49.12        |
| NEVER                       | <u>7</u>                  | <u>15.91</u> | <u>5</u>                | <u>29.41</u> | <u>3</u>                | <u>75.00</u> | <u>15</u>             | <u>23.07</u> | <u>17</u>                       | <u>34.69</u> | <u>32</u>          | <u>28.07</u> |
| TOTAL*                      | 44                        | 100.00       | 17                      | 100.00       | 4                       | 100.00       | 65                    | 100.00       | 49                              | 100.00       | 114                | 100.00       |
| <u>VALUE OF INFORMATION</u> |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| NONE                        | 1                         | 2.56         | 1                       | 8.33         | -                       | -            | 2                     | 3.70         | 2                               | 5.40         | 4                  | 4.40         |
| LITTLE                      | 4                         | 10.26        | -                       | -            | -                       | -            | 4                     | 7.41         | 6                               | 16.22        | 10                 | 10.99        |
| SOME                        | 13                        | 33.33        | 8                       | 66.67        | 1                       | 33.33        | 22                    | 40.74        | 13                              | 35.14        | 35                 | 38.46        |
| MUCH                        | <u>21</u>                 | <u>53.85</u> | <u>3</u>                | <u>25.00</u> | <u>2</u>                | <u>66.67</u> | <u>26</u>             | <u>48.15</u> | <u>16</u>                       | <u>43.24</u> | <u>42</u>          | <u>46.15</u> |
| TOTAL*                      | 39                        | 100.00       | 12                      | 100.00       | 3                       | 100.00       | 54                    | 100.00       | 37                              | 100.00       | 91                 | 100.00       |
| <u>ADEQUACY</u>             |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| SUFFICIENT                  | 36                        | 100.00       | 10                      | 90.91        | 2                       | 100.00       | 48                    | 97.96        | 39                              | 73.58        | 87                 | 85.29        |
| UPDATE                      | -                         | -            | <u>1</u>                | <u>9.09</u>  | -                       | -            | <u>1</u>              | <u>2.04</u>  | <u>14</u>                       | <u>26.42</u> | <u>15</u>          | <u>14.71</u> |
| TOTAL*                      | 36                        | 100.00       | 11                      | 100.00       | 2                       | 100.00       | 49                    | 100.00       | 53                              | 100.00       | 102                | 100.00       |
| <u>PEST REFERENCED</u>      |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| INSECT                      | 32                        | 44.44        | 10                      | 13.89        | 1                       | 1.39         | 43                    | 59.72        | 29                              | 40.28        | 72                 | 100.00       |
| DISEASE                     | 9                         | 81.82        | 2                       | 18.18        | -                       | -            | 5                     | 62.50        | 3                               | 37.50        | 8                  | 100.00       |
| WEED                        | -                         | -            | -                       | -            | -                       | -            | -                     | -            | -                               | -            | -                  | -            |
| PARASITE                    | -                         | -            | -                       | -            | -                       | -            | -                     | -            | -                               | -            | -                  | -            |
| OTHER                       | 1                         | 33.33        | 1                       | 33.33        | -                       | -            | 2                     | 66.67        | 1                               | 33.33        | 3                  | 100.00       |
| <u>CLIENTELE SERVED</u>     |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| COMMERCIAL                  | 3                         | 60.00        | 2                       | 40.00        | -                       | -            | 5                     | 100.00       | -                               | -            | 5                  | 100.00       |
| DEALER                      | 9                         | 81.82        | 2                       | 18.18        | -                       | -            | 11                    | 100.00       | -                               | -            | 11                 | 100.00       |
| COUNTY AGENT                | -                         | -            | 5                       | 83.33        | 1                       | 16.67        | 6                     | 100.00       | -                               | -            | 6                  | 100.00       |
| PRODUCER                    | 30                        | 71.43        | 12                      | 28.57        | -                       | -            | 42                    | 100.00       | -                               | -            | 42                 | 100.00       |
| DISTRIBUTER                 | 4                         | 66.67        | 2                       | 33.33        | -                       | -            | 6                     | 100.00       | -                               | -            | 6                  | 100.00       |
| GARDENER                    | 1                         | 50.00        | 1                       | 50.00        | -                       | -            | 2                     | 100.00       | -                               | -            | 2                  | 100.00       |

\*Omitted responses were not counted nor used in averaging

The Fruit and Nut Section of the  
OSU-CES Handbook

Reported in TABLE XIX are the frequency distributions of the respondents' perceptions of the Fruit and Nut Section of the OSU-CES Handbook. The greatest number (28) of the respondents indicated they used this section of the OSU-CES Handbook annually, followed by 27 weekly, 25 monthly, 24 never and 20 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of much value (based on 93 or 91.18 percent of the respondents checking much or some categories and an average value of 2.50). An overwhelming majority of the respondents (77 or 86.52%) believed this section was sufficient. It is further reported in TABLE XIX that the pests referenced most were insects and/or disease. Finally, it was further perceived by the CES respondents that producers and gardeners were the primary clientele served by this section of the OSU-CES Handbook.

The Household Pests Section of the  
OSU-CES Handbook

Reported in TABLE XX are the frequency distributions of the respondents' perceptions of the Household Pest Section of the OSU-CES Handbook. The greatest number (30) of the respondents indicated they used this section of the OSU-CES Handbook monthly, followed by 29 weekly, 25



TABLE XIX  
 THE FRUIT AND NUTS SECTION OF THE OSU-CES HANDBOOK -  
 FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| FRUIT & NUTS                | COUNTY AGENTS<br>(n = 47) |        | AREA AGENTS<br>(n = 20) |        | STATE AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|---------------------------|--------|-------------------------|--------|-------------------------|--------|-----------------------|--------|---------------------------------|--------|--------------------|--------|
|                             | n                         | %      | n                       | %      | n                       | %      | n                     | %      | n                               | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| DAILY                       | 15                        | 32.61  | 1                       | 5.26   | -                       | -      | 16                    | 22.86  | 4                               | 7.41   | 20                 | 16.13  |
| WEEKLY                      | 20                        | 43.48  | 5                       | 26.32  | 1                       | 20.00  | 26                    | 37.14  | 1                               | 1.85   | 27                 | 21.77  |
| MONTHLY                     | 9                         | 19.57  | 5                       | 26.32  | 1                       | 20.00  | 15                    | 21.43  | 10                              | 18.52  | 25                 | 20.16  |
| ANNUALLY                    | 1                         | 2.17   | 6                       | 31.58  | 1                       | 20.00  | 8                     | 11.43  | 20                              | 37.04  | 28                 | 22.58  |
| NEVER                       | 1                         | 2.17   | 2                       | 10.52  | 2                       | 40.00  | 5                     | 7.14   | 19                              | 35.18  | 24                 | 19.35  |
| TOTAL*                      | 46                        | 100.00 | 19                      | 100.00 | 5                       | 100.00 | 70                    | 100.00 | 54                              | 100.00 | 124                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| NONE                        | -                         | -      | 1                       | 5.88   | -                       | -      | 1                     | 1.59   | 3                               | 7.69   | 4                  | 3.92   |
| LITTLE                      | -                         | -      | -                       | -      | -                       | -      | -                     | -      | 5                               | 12.82  | 5                  | 4.90   |
| SOME                        | 5                         | 11.63  | 8                       | 47.06  | 2                       | 66.67  | 15                    | 23.81  | 14                              | 35.90  | 29                 | 28.43  |
| MUCH                        | 38                        | 88.37  | 8                       | 47.06  | 1                       | 33.33  | 47                    | 74.60  | 17                              | 43.59  | 64                 | 62.75  |
| TOTAL*                      | 43                        | 100.00 | 17                      | 100.00 | 3                       | 100.00 | 63                    | 100.00 | 39                              | 100.00 | 102                | 100.00 |
| <u>ADEQUACY</u>             |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| SUFFICIENT                  | 34                        | 89.47  | 14                      | 93.33  | 2                       | 100.00 | 50                    | 90.91  | 27                              | 79.41  | 77                 | 86.52  |
| UPDATE                      | 4                         | 10.53  | 1                       | 6.67   | -                       | -      | 5                     | 9.09   | 7                               | 20.59  | 12                 | 13.48  |
| TOTAL*                      | 38                        | 100.00 | 15                      | 100.00 | 2                       | 100.00 | 55                    | 100.00 | 34                              | 100.00 | 89                 | 100.00 |
| <u>PEST REFERENCED</u>      |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| INSECT                      | 39                        | 50.00  | 11                      | 14.10  | 1                       | 1.28   | 51                    | 65.38  | 27                              | 34.62  | 78                 | 100.00 |
| DISEASE                     | 36                        | 52.94  | 9                       | 13.24  | 1                       | 1.47   | 46                    | 67.65  | 22                              | 32.35  | 68                 | 100.00 |
| WEED                        | 16                        | 57.14  | 6                       | 21.43  | -                       | -      | 22                    | 78.57  | 6                               | 21.43  | 28                 | 100.00 |
| PARASITE                    | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| OTHER                       | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| <u>CLIENTELE SERVED</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| COMMERCIAL                  | 7                         | 63.64  | 3                       | 27.27  | 1                       | 9.09   | 11                    | 100.00 | -                               | -      | 11                 | 100.00 |
| DEALER                      | 10                        | 71.43  | 3                       | 21.43  | 1                       | 7.14   | 14                    | 100.00 | -                               | -      | 14                 | 100.00 |
| COUNTY AGENT                | -                         | -      | 6                       | 75.00  | 2                       | 25.00  | 8                     | 100.00 | -                               | -      | 8                  | 100.00 |
| PRODUCER                    | 28                        | 66.67  | 13                      | 30.95  | 1                       | 2.38   | 42                    | 100.00 | -                               | -      | 42                 | 100.00 |
| DISTRIBUTER                 | 4                         | 50.00  | 3                       | 37.50  | 1                       | 12.50  | 8                     | 100.00 | -                               | -      | 8                  | 100.00 |
| GARDENER                    | 26                        | 76.47  | 6                       | 17.65  | 2                       | 5.88   | 34                    | 100.00 | -                               | -      | 34                 | 100.00 |

\*Omitted responses were not counted nor used in averaging

TABLE XX

THE HOUSEHOLD PESTS SECTION OF THE OSU-CES HANDBOOK -  
 FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| HOUSEHOLD PESTS             | COUNTY AGENTS<br>(n = 47) |              | AREA AGENTS<br>(n = 20) |              | STATE AGENTS<br>(n = 8) |              | SUB-TOTAL<br>(n = 75) |              | EXTENSION CLIENTELE<br>(n = 68) |              | TOTAL<br>(n = 143) |              |
|-----------------------------|---------------------------|--------------|-------------------------|--------------|-------------------------|--------------|-----------------------|--------------|---------------------------------|--------------|--------------------|--------------|
|                             | n                         | %            | n                       | %            | n                       | %            | n                     | %            | n                               | %            | n                  | %            |
| <u>FREQUENCY OF USE</u>     |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| DAILY                       | 10                        | 21.74        | -                       | -            | 1                       | 16.67        | 11                    | 15.71        | 3                               | 5.88         | 14                 | 11.57        |
| WEEKLY                      | 22                        | 47.83        | 3                       | 16.67        | -                       | -            | 25                    | 35.71        | 4                               | 7.84         | 29                 | 23.97        |
| MONTHLY                     | 12                        | 26.09        | 6                       | 33.33        | 3                       | 50.00        | 21                    | 30.00        | 9                               | 17.65        | 30                 | 24.79        |
| ANNUALLY                    | 1                         | 2.17         | 4                       | 22.22        | 1                       | 16.67        | 6                     | 8.57         | 19                              | 37.25        | 25                 | 20.66        |
| NEVER                       | <u>1</u>                  | <u>2.17</u>  | <u>5</u>                | <u>27.78</u> | <u>1</u>                | <u>16.66</u> | <u>7</u>              | <u>10.00</u> | <u>16</u>                       | <u>31.37</u> | <u>23</u>          | <u>19.01</u> |
| TOTAL*                      | 46                        | 100.00       | 18                      | 100.00       | 6                       | 100.00       | 70                    | 100.00       | 51                              | 100.00       | 121                | 100.00       |
| <u>VALUE OF INFORMATION</u> |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| NONE                        | -                         | -            | 1                       | 8.33         | -                       | -            | 1                     | 1.67         | 2                               | 5.71         | 3                  | 3.16         |
| LITTLE                      | 1                         | 2.33         | -                       | -            | -                       | -            | 1                     | 1.67         | 5                               | 14.29        | 6                  | 6.32         |
| SOME                        | 6                         | 13.95        | 7                       | 58.33        | 1                       | 20.00        | 14                    | 23.33        | 13                              | 37.14        | 27                 | 28.42        |
| MUCH                        | <u>36</u>                 | <u>83.72</u> | <u>4</u>                | <u>33.33</u> | <u>4</u>                | <u>80.00</u> | <u>44</u>             | <u>73.33</u> | <u>15</u>                       | <u>42.86</u> | <u>59</u>          | <u>62.10</u> |
| TOTAL*                      | 43                        | 100.00       | 12                      | 100.00       | 5                       | 100.00       | 60                    | 100.00       | 35                              | 100.00       | 95                 | 100.00       |
| <u>ADEQUACY</u>             |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| SUFFICIENT                  | 35                        | 89.74        | 10                      | 90.91        | 3                       | 100.00       | 48                    | 90.57        | 27                              | 71.05        | 75                 | 82.42        |
| UPDATE                      | <u>4</u>                  | <u>10.26</u> | <u>1</u>                | <u>9.09</u>  | -                       | -            | <u>5</u>              | <u>9.43</u>  | <u>11</u>                       | <u>28.95</u> | <u>16</u>          | <u>15.58</u> |
| TOTAL*                      | 39                        | 100.00       | 11                      | 100.00       | 3                       | 100.00       | 53                    | 100.00       | 38                              | 100.00       | 91                 | 100.00       |
| <u>PEST REFERENCED</u>      |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| INSECT                      | 42                        | 47.19        | 12                      | 13.48        | 3                       | 3.37         | 57                    | 64.04        | 32                              | 35.96        | 89                 | 100.00       |
| DISEASE                     | -                         | -            | -                       | -            | -                       | -            | -                     | -            | -                               | -            | -                  | -            |
| WEED                        | -                         | -            | -                       | -            | -                       | -            | -                     | -            | -                               | -            | -                  | -            |
| PARASITE                    | -                         | -            | -                       | -            | -                       | -            | -                     | -            | -                               | -            | -                  | -            |
| OTHER                       | 1                         | 100.00       | -                       | -            | -                       | -            | 1                     | 100.00       | -                               | -            | 1                  | 100.00       |
| <u>CLIENTELE SERVED</u>     |                           |              |                         |              |                         |              |                       |              |                                 |              |                    |              |
| COMMERCIAL                  | 8                         | 57.14        | 4                       | 28.57        | 2                       | 14.29        | 14                    | 100.00       | -                               | -            | 14                 | 100.00       |
| DEALER                      | 10                        | 66.67        | 3                       | 20.00        | 2                       | 13.33        | 15                    | 100.00       | -                               | -            | 15                 | 100.00       |
| COUNTY AGENT                | -                         | -            | 5                       | 62.50        | 3                       | 37.50        | 8                     | 100.00       | -                               | -            | 8                  | 100.00       |
| PRODUCER                    | 28                        | 73.68        | 9                       | 23.68        | 1                       | 2.64         | 38                    | 100.00       | -                               | -            | 38                 | 100.00       |
| DISTRIBUTER                 | 3                         | 42.86        | 3                       | 42.86        | 1                       | 14.28        | 7                     | 100.00       | -                               | -            | 7                  | 100.00       |
| GARDENER                    | 13                        | 76.47        | 3                       | 17.65        | 1                       | 5.88         | 17                    | 100.00       | -                               | -            | 17                 | 100.00       |

\*Omitted responses were not counted nor used in averaging

annually, 23 never and 14 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of much value (based on 86 or 90.52 percent of the respondents checking much or some categories and an average value of 2.50). An overwhelming majority of the respondents (75 or 82.42%) believed this section was sufficient. It is further reported in TABLE XX that the pest referenced most was insects. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Ornamentals Section of the  
OSU-CES Handbook

Reported in TABLE XXI are the frequency distributions of the respondents' perceptions of the Ornamentals Section of the OSU-CES Handbook. The greatest number (31) of the respondents indicated they used this section of the OSU-CES Handbook monthly, followed by 29 weekly, 23 daily, 21 annually and 20 never. Furthermore, the CES respondents and Extension Clientele considered this section to be of much value (based on 95 or 93.14 percent of the respondents checking much or some categories and an average value of 2.57). An overwhelming majority of the respondents (77 or 85.56%) believed this section was sufficient. It is further reported in TABLE XXI that the pests referenced most were insects, disease and/or weeds. Finally, it was further perceived by the CES respondents that producers and

TABLE XXI

THE ORNAMENTALS SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| ORNAMENTALS                 | COUNTY<br>AGENTS<br>(n = 47) |        | AREA<br>AGENTS<br>(n = 20) |        | STATE<br>AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION<br>CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|------------------------------|--------|----------------------------|--------|----------------------------|--------|-----------------------|--------|------------------------------------|--------|--------------------|--------|
|                             | n                            | %      | n                          | %      | n                          | %      | n                     | %      | n                                  | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| DAILY                       | 18                           | 39.13  | -                          | -      | 1                          | 14.29  | 20                    | 27.78  | 3                                  | 5.77   | 23                 | 18.55  |
| WEEKLY                      | 19                           | 41.30  | 6                          | 31.58  | 2                          | 28.57  | 26                    | 36.11  | 3                                  | 5.77   | 29                 | 23.39  |
| MONTHLY                     | 6                            | 13.04  | 8                          | 42.10  | 2                          | 28.57  | 16                    | 22.22  | 15                                 | 28.85  | 31                 | 25.00  |
| ANNUALLY                    | 2                            | 4.35   | 2                          | 10.53  | 1                          | 14.29  | 5                     | 6.49   | 16                                 | 30.77  | 21                 | 16.93  |
| NEVER                       | 1                            | 2.17   | 3                          | 15.79  | 1                          | 14.28  | 5                     | 6.49   | 15                                 | 28.84  | 20                 | 16.13  |
| TOTAL*                      | 46                           | 100.00 | 19                         | 100.00 | 7                          | 100.00 | 72                    | 100.00 | 52                                 | 100.00 | 124                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| NONE                        | -                            | -      | 1                          | 6.67   | -                          | -      | 1                     | 1.56   | 2                                  | 5.26   | 3                  | 2.94   |
| LITTLE                      | -                            | -      | -                          | -      | -                          | -      | -                     | -      | 4                                  | 10.53  | 4                  | 3.92   |
| SOME                        | 5                            | 11.63  | 6                          | 40.00  | 1                          | 16.67  | 12                    | 18.75  | 15                                 | 39.47  | 27                 | 26.47  |
| MUCH                        | 38                           | 88.37  | 8                          | 53.33  | 5                          | 83.33  | 51                    | 79.69  | 17                                 | 44.74  | 68                 | 66.67  |
| TOTAL*                      | 43                           | 100.00 | 15                         | 100.00 | 6                          | 100.00 | 64                    | 100.00 | 38                                 | 100.00 | 102                | 100.00 |
| <u>ADEQUACY</u>             |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| SUFFICIENT                  | 37                           | 97.37  | 12                         | 85.71  | 3                          | 75.00  | 52                    | 92.86  | 25                                 | 73.53  | 77                 | 85.56  |
| UPDATE                      | 1                            | 2.63   | 2                          | 14.29  | 1                          | 25.00  | 4                     | 7.14   | 9                                  | 26.47  | 13                 | 14.44  |
| TOTAL*                      | 38                           | 100.00 | 14                         | 100.00 | 4                          | 100.00 | 56                    | 100.00 | 34                                 | 100.00 | 90                 | 100.00 |
| <u>PEST REFERENCED</u>      |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| INSECT                      | 40                           | 47.06  | 12                         | 14.12  | 4                          | 4.70   | 56                    | 65.88  | 29                                 | 34.12  | 85                 | 100.00 |
| DISEASE                     | 34                           | 47.22  | 10                         | 13.89  | 4                          | 5.56   | 48                    | 66.67  | 24                                 | 33.33  | 72                 | 100.00 |
| WEED                        | 17                           | 44.74  | 7                          | 18.42  | 1                          | 2.63   | 25                    | 65.79  | 13                                 | 34.21  | 38                 | 100.00 |
| PARASITE                    | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| OTHER                       | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| <u>CLIENTELE SERVED</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| COMMERCIAL                  | 9                            | 52.94  | 5                          | 29.41  | 3                          | 17.65  | 17                    | 100.00 | -                                  | -      | 17                 | 100.00 |
| DEALER                      | 8                            | 57.14  | 4                          | 28.57  | 2                          | 14.29  | 14                    | 100.00 | -                                  | -      | 14                 | 100.00 |
| COUNTY AGENT                | -                            | -      | 6                          | 60.00  | 4                          | 40.00  | 10                    | 100.00 | -                                  | -      | 10                 | 100.00 |
| PRODUCER                    | 25                           | 64.10  | 12                         | 30.77  | 2                          | 5.13   | 39                    | 100.00 | -                                  | -      | 39                 | 100.00 |
| DISTRIBUTER                 | 4                            | 50.00  | 3                          | 37.50  | 1                          | 12.50  | 8                     | 100.00 | -                                  | -      | 8                  | 100.00 |
| GARDENER                    | 24                           | 72.73  | 7                          | 21.21  | 2                          | 6.06   | 33                    | 100.00 | -                                  | -      | 33                 | 100.00 |

\*Omitted responses were not counted nor used in averaging

gardeners were the primary clientele served by this section of the OSU-CES Handbook.

The Turfgrass Section of the  
OSU-CES Handbook

Reported in TABLE XXII are the frequency distributions of the respondents' perceptions of the Turfgrass Section of the OSU-CES Handbook. The greatest number (37) of the respondents indicated they used this section of the OSU-CES Handbook monthly, followed by 32 annually, 24 weekly, 19 daily and 11 never. Furthermore, the CES respondents and Extension Clientele considered this section to be of much value (based on 97 or 94.17 percent of the respondents checking much or some categories and an average value of 2.50). An overwhelming majority of the respondents (82 or 85.42%) believed this section was sufficient. It is further reported in TABLE XXII that the pests referenced most were insects, disease and/or weeds. Finally, it was further perceived by the CES respondents that producers and gardeners were the primary clientele served by this section of the OSU-CES Handbook.

The Greenhouse Section of the  
OSU-CES Handbook

Reported in TABLE XXIII are the frequency distributions of the respondents' perceptions of the Greenhouse Section

TABLE XXII

THE TURFGRASS SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| TURFGRASS                   | COUNTY<br>AGENTS<br>(n = 47) |        | AREA<br>AGENTS<br>(n = 20) |        | STATE<br>AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION<br>CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|------------------------------|--------|----------------------------|--------|----------------------------|--------|-----------------------|--------|------------------------------------|--------|--------------------|--------|
|                             | n                            | %      | n                          | %      | n                          | %      | n                     | %      | n                                  | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| DAILY                       | 14                           | 30.43  | 1                          | 5.26   | 1                          | 14.29  | 16                    | 22.22  | 3                                  | 5.88   | 19                 | 15.45  |
| WEEKLY                      | 14                           | 30.43  | 3                          | 15.29  | 2                          | 28.57  | 19                    | 26.39  | 5                                  | 9.80   | 24                 | 19.51  |
| MONTHLY                     | 14                           | 30.43  | 5                          | 26.32  | 1                          | 14.29  | 20                    | 27.78  | 17                                 | 33.33  | 37                 | 30.08  |
| ANNUALLY                    | 3                            | 6.52   | 7                          | 36.84  | 2                          | 28.57  | 12                    | 16.67  | 20                                 | 39.22  | 32                 | 26.02  |
| NEVER                       | 1                            | 2.17   | 3                          | 15.79  | 1                          | 14.29  | 5                     | 6.94   | 6                                  | 11.76  | 11                 | 8.94   |
| TOTAL*                      | 46                           | 100.00 | 19                         | 100.00 | 7                          | 100.00 | 72                    | 100.00 | 51                                 | 100.00 | 123                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| NONE                        | -                            | -      | 1                          | 6.67   | -                          | -      | 1                     | 1.61   | 1                                  | 2.44   | 2                  | 1.94   |
| LITTLE                      | 1                            | 2.44   | -                          | -      | -                          | -      | 1                     | 6.61   | 3                                  | 7.32   | 4                  | 3.88   |
| SOME                        | 9                            | 21.95  | 8                          | 53.33  | 1                          | 16.67  | 18                    | 29.03  | 19                                 | 46.43  | 37                 | 35.92  |
| MUCH                        | 31                           | 75.61  | 6                          | 40.00  | 5                          | 83.33  | 42                    | 67.74  | 18                                 | 43.90  | 60                 | 58.25  |
| TOTAL*                      | 41                           | 100.00 | 15                         | 100.00 | 6                          | 100.00 | 62                    | 100.00 | 41                                 | 100.00 | 103                | 100.00 |
| <u>ADEQUACY</u>             |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| SUFFICIENT                  | 36                           | 92.31  | 13                         | 92.86  | 4                          | 100.00 | 53                    | 92.98  | 29                                 | 74.36  | 82                 | 85.42  |
| UPDATE                      | 3                            | 7.69   | 1                          | 7.14   | -                          | -      | 4                     | 7.02   | 10                                 | 25.64  | 14                 | 14.58  |
| TOTAL*                      | 39                           | 100.00 | 14                         | 100.00 | 4                          | 100.00 | 57                    | 100.00 | 39                                 | 100.00 | 96                 | 100.00 |
| <u>PEST REFERENCED</u>      |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| INSECT                      | 29                           | 41.43  | 9                          | 12.86  | 4                          | 5.71   | 42                    | 60.00  | 28                                 | 40.00  | 70                 | 100.00 |
| DISEASE                     | 29                           | 44.61  | 7                          | 10.77  | 3                          | 4.62   | 39                    | 60.00  | 26                                 | 40.00  | 65                 | 100.00 |
| WEED                        | 35                           | 44.30  | 9                          | 11.39  | 3                          | 3.80   | 47                    | 59.49  | 32                                 | 40.51  | 79                 | 100.00 |
| PARASITE                    | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| OTHER                       | -                            | -      | -                          | -      | -                          | -      | -                     | -      | 1                                  | 100.00 | 1                  | 100.00 |
| <u>CLIENTELE SERVED</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| COMMERCIAL                  | 12                           | 63.16  | 5                          | 26.31  | 2                          | 10.53  | 19                    | 100.00 | -                                  | -      | 19                 | 100.00 |
| DEALER                      | 11                           | 64.71  | 4                          | 23.53  | 2                          | 11.76  | 17                    | 100.00 | -                                  | -      | 17                 | 100.00 |
| COUNTY AGENT                | -                            | -      | 6                          | 60.00  | 4                          | 40.00  | 10                    | 100.00 | -                                  | -      | 10                 | 100.00 |
| PRODUCER                    | 26                           | 66.67  | 12                         | 30.77  | 1                          | 2.56   | 39                    | 100.00 | -                                  | -      | 39                 | 100.00 |
| DISTRIBUTER                 | 2                            | 28.57  | 4                          | 57.14  | 1                          | 14.29  | 7                     | 100.00 | -                                  | -      | 7                  | 100.00 |
| GARDENER                    | 21                           | 70.00  | 7                          | 23.33  | 2                          | 6.67   | 30                    | 100.00 | -                                  | -      | 30                 | 100.00 |

\*Omitted responses were not counted nor used in averaging

TABLE XXIII

THE GREENHOUSE SECTION OF THE OSU-CES HANDBOOK - FREQUENCY  
DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| GREENHOUSE                  | COUNTY<br>AGENTS<br>(n = 47) |        | AREA<br>AGENTS<br>(n = 20) |        | STATE<br>AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION<br>CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|------------------------------|--------|----------------------------|--------|----------------------------|--------|-----------------------|--------|------------------------------------|--------|--------------------|--------|
|                             | n                            | %      | n                          | %      | n                          | %      | n                     | %      | n                                  | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| DAILY                       | -                            | -      | -                          | -      | -                          | -      | -                     | -      | 2                                  | 4.25   | 2                  | 1.82   |
| WEEKLY                      | 3                            | 7.32   | -                          | -      | 1                          | 20.00  | 4                     | 6.35   | 2                                  | 4.25   | 6                  | 5.45   |
| MONTHLY                     | 15                           | 36.59  | 3                          | 17.65  | 2                          | 40.00  | 20                    | 31.75  | 5                                  | 10.64  | 25                 | 22.73  |
| ANNUALLY                    | 17                           | 41.46  | 6                          | 35.29  | 1                          | 20.00  | 24                    | 38.09  | 8                                  | 17.02  | 32                 | 29.09  |
| NEVER                       | 6                            | 14.63  | 8                          | 47.06  | 1                          | 20.00  | 15                    | 23.81  | 30                                 | 63.83  | 45                 | 40.91  |
| TOTAL*                      | 41                           | 100.00 | 17                         | 100.00 | 5                          | 100.00 | 63                    | 100.00 | 47                                 | 100.00 | 110                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| NONE                        | -                            | -      | 1                          | 8.33   | -                          | -      | 1                     | 1.96   | 5                                  | 17.24  | 6                  | 7.50   |
| LITTLE                      | 2                            | 5.71   | 1                          | 8.33   | -                          | -      | 3                     | 5.88   | 7                                  | 24.14  | 10                 | 12.50  |
| SOME                        | 8                            | 22.86  | 5                          | 41.67  | -                          | -      | 13                    | 25.49  | 8                                  | 27.59  | 21                 | 26.25  |
| MUCH                        | 25                           | 71.43  | 5                          | 41.67  | 4                          | 100.00 | 34                    | 66.67  | 9                                  | 31.03  | 43                 | 53.75  |
| TOTAL*                      | 35                           | 100.00 | 12                         | 100.00 | 4                          | 100.00 | 51                    | 100.00 | 29                                 | 100.00 | 80                 | 100.00 |
| <u>ADEQUACY</u>             |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| SUFFICIENT                  | 32                           | 96.97  | 9                          | 90.00  | 3                          | 100.00 | 44                    | 95.65  | 20                                 | 76.92  | 64                 | 88.89  |
| UPDATE                      | 1                            | 3.03   | 1                          | 10.00  | -                          | -      | 2                     | 4.35   | 6                                  | 23.08  | 8                  | 11.11  |
| TOTAL*                      | 33                           | 100.00 | 10                         | 100.00 | 3                          | 100.00 | 46                    | 100.00 | 26                                 | 100.00 | 72                 | 100.00 |
| <u>PEST REFERENCED</u>      |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| INSECT                      | 25                           | 52.08  | 8                          | 16.67  | 2                          | 4.17   | 35                    | 72.92  | 13                                 | 27.08  | 48                 | 100.00 |
| DISEASE                     | 27                           | 55.10  | 6                          | 12.24  | 2                          | 4.09   | 35                    | 71.43  | 14                                 | 28.57  | 49                 | 100.00 |
| WEED                        | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| PARASITE                    | -                            | -      | -                          | -      | -                          | -      | -                     | -      | -                                  | -      | -                  | -      |
| OTHER                       | -                            | -      | -                          | -      | -                          | -      | -                     | -      | 1                                  | 100.00 | 1                  | 100.00 |
| <u>CLIENTELE SERVED</u>     |                              |        |                            |        |                            |        |                       |        |                                    |        |                    |        |
| COMMERCIAL                  | 4                            | 44.45  | 3                          | 33.33  | 2                          | 22.22  | 9                     | 100.00 | -                                  | -      | 9                  | 100.00 |
| DEALER                      | 7                            | 53.58  | 4                          | 30.77  | 2                          | 15.38  | 13                    | 100.00 | -                                  | -      | 13                 | 100.00 |
| COUNTY AGENT                | -                            | -      | 4                          | 57.14  | 3                          | 42.86  | 7                     | 100.00 | -                                  | -      | 7                  | 100.00 |
| PRODUCER                    | 26                           | 68.42  | 10                         | 26.32  | 2                          | 5.26   | 38                    | 100.00 | -                                  | -      | 38                 | 100.00 |
| DISTRIBUTER                 | 3                            | 37.50  | 3                          | 37.50  | 2                          | 25.00  | 8                     | 100.00 | -                                  | -      | 8                  | 100.00 |
| GARDENER                    | 14                           | 73.68  | 4                          | 21.05  | 1                          | 5.27   | 19                    | 100.00 | -                                  | -      | 19                 | 100.00 |

\*Omitted responses were not counted nor used in averaging

of the OSU-CES Handbook. The greatest number (45) of the respondents indicated they never used this section of the OSU-CES Handbook. However, of those who did use it 32 used it annually, 25 monthly, 6 weekly and 2 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 64 or 80.00 percent of the respondents checking much or some categories and an average value of 2.26). An overwhelming majority of the respondents (64 or 88.89%) believed this section was sufficient. It is further reported in TABLE XXIII that the pests referenced most were insects and/or disease. Finally, it was further perceived by the CES respondents that producers and gardeners were the primary clientele served by this section of the OSU-CES Handbook.

The Commercial Vegetables Section  
of the OSU-CES Handbook

Reported in TABLE XXIV are the frequency distributions of the respondents' perceptions of the Commercial Vegetables Section of the OSU-CES Handbook. The greatest number (26) of the respondents indicated they used this section of the OSU-CES Handbook monthly, followed by 24 weekly, 24 never, 23 annually and 12 daily. Furthermore, the CES respondents and Extension Clientele considered this section to be of some value (based on 76 or 88.37 percent of the respondents checking much or some categories and an average value of 2.48). An overwhelming majority of the respondents (63 or



TABLE XXIV

THE COMMERCIAL VEGETABLES SECTION OF THE OSU-CES HANDBOOK -  
 FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| COMMERCIAL VEGETABLES       | COUNTY AGENTS<br>(n = 47) |        | AREA AGENTS<br>(n = 20) |        | STATE AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|---------------------------|--------|-------------------------|--------|-------------------------|--------|-----------------------|--------|---------------------------------|--------|--------------------|--------|
|                             | n                         | %      | n                       | %      | n                       | %      | n                     | %      | n                               | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| DAILY                       | 7                         | 17.50  | 1                       | 5.56   | -                       | -      | 8                     | 12.50  | 4                               | 8.89   | 12                 | 11.01  |
| WEEKLY                      | 13                        | 32.50  | 4                       | 22.22  | 3                       | 50.00  | 20                    | 31.25  | 4                               | 8.89   | 24                 | 22.02  |
| MONTHLY                     | 8                         | 20.00  | 5                       | 27.78  | 1                       | 16.66  | 14                    | 21.88  | 12                              | 26.67  | 26                 | 23.85  |
| ANNUALLY                    | 7                         | 17.50  | 4                       | 22.22  | 1                       | 16.66  | 12                    | 18.75  | 11                              | 24.44  | 23                 | 21.10  |
| NEVER                       | 5                         | 12.50  | 4                       | 22.22  | 1                       | 16.66  | 10                    | 15.62  | 14                              | 31.11  | 24                 | 22.02  |
| TOTAL*                      | 40                        | 100.00 | 18                      | 100.00 | 6                       | 100.00 | 64                    | 100.00 | 45                              | 100.00 | 109                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| NONE                        | -                         | -      | 1                       | 6.25   | -                       | -      | 1                     | 1.89   | 5                               | 15.15  | 6                  | 6.98   |
| LITTLE                      | -                         | -      | -                       | -      | -                       | -      | -                     | -      | 4                               | 12.12  | 4                  | 4.65   |
| SOME                        | 5                         | 15.62  | 5                       | 31.25  | -                       | -      | 10                    | 18.87  | 9                               | 27.27  | 19                 | 22.09  |
| MUCH                        | 27                        | 84.38  | 10                      | 62.50  | 5                       | 100.00 | 42                    | 79.24  | 15                              | 45.45  | 57                 | 66.28  |
| TOTAL*                      | 32                        | 100.00 | 16                      | 100.00 | 5                       | 100.00 | 53                    | 100.00 | 33                              | 100.00 | 86                 | 100.00 |
| <u>ADEQUACY</u>             |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| SUFFICIENT                  | 27                        | 87.10  | 12                      | 85.71  | 3                       | 75.00  | 42                    | 85.71  | 21                              | 65.63  | 63                 | 77.78  |
| UPDATE                      | 4                         | 12.90  | 2                       | 14.29  | 1                       | 25.00  | 7                     | 14.29  | 11                              | 34.38  | 18                 | 22.22  |
| TOTAL*                      | 31                        | 100.00 | 14                      | 100.00 | 4                       | 100.00 | 49                    | 100.00 | 32                              | 100.00 | 81                 | 100.00 |
| <u>PEST REFERENCED</u>      |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| INSECT                      | 26                        | 40.00  | 9                       | 13.85  | 2                       | 3.07   | 37                    | 56.92  | 28                              | 43.08  | 65                 | 100.00 |
| DISEASE                     | 25                        | 48.08  | 6                       | 11.54  | 1                       | 1.92   | 32                    | 61.54  | 20                              | 38.46  | 52                 | 100.00 |
| WEED                        | 20                        | 39.22  | 9                       | 17.64  | 2                       | 3.92   | 31                    | 60.78  | 20                              | 39.22  | 51                 | 100.00 |
| PARASITE                    | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| OTHER                       | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| <u>CLIENTELE SERVED</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| COMMERCIAL                  | 6                         | 60.00  | 2                       | 20.00  | 2                       | 20.00  | 10                    | 100.00 | -                               | -      | 10                 | 100.00 |
| DEALER                      | 9                         | 69.23  | 4                       | 30.77  | -                       | -      | 13                    | 100.00 | -                               | -      | 13                 | 100.00 |
| COUNTY AGENT                | -                         | -      | 6                       | 60.00  | 4                       | 40.00  | 10                    | 100.00 | -                               | -      | 10                 | 100.00 |
| PRODUCER                    | 26                        | 56.10  | 14                      | 34.15  | 4                       | 9.75   | 41                    | 100.00 | -                               | -      | 41                 | 100.00 |
| DISTRIBUTER                 | 2                         | 50.00  | 2                       | 50.00  | -                       | -      | 4                     | 100.00 | -                               | -      | 4                  | 100.00 |
| GARDENER                    | 14                        | 87.50  | 1                       | 6.25   | 1                       | 6.25   | 16                    | 100.00 | -                               | -      | 16                 | 100.00 |

\*Omitted responses were not counted nor used in averaging

77.78%) believed this section was sufficient. It is further reported in TABLE XXIV that the pests referenced most were insects, disease and/or weeds. Finally, it was further perceived by the CES respondents that producers were the primary clientele served by this section of the OSU-CES Handbook.

The Home Vegetables Section  
of the OSU-CES Handbook

Reported in TABLE XXV are the frequency distributions of the respondents' perceptions of the Home Vegetables Section of the OSU-CES Handbook. The greatest number (26) of the respondents indicated they used this section of the OSU-CES Handbook weekly, followed by 25 daily, 24 monthly, 20 annually and 17 never using it. Furthermore, the CES respondents and Extension Clientele considered this section to be of much value (based on 80 or 90.91 percent of the respondents checking much or some categories and a mean value of 2.55). An overwhelming majority of the respondents (64 or 82.05%) believed this section was sufficient. It is further reported in TABLE XXV that the pests referenced most were insects, disease and/or weeds. Finally, it was further perceived by the CES respondents that gardeners and producers were the primary clientele served by this section of the OSU-CES Handbook.

TABLE XXV

THE HOME VEGETABLES SECTION OF THE OSU-CES HANDBOOK -  
 FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

| HOME VEGETABLES             | COUNTY AGENTS<br>(n = 47) |        | AREA AGENTS<br>(n = 20) |        | STATE AGENTS<br>(n = 8) |        | SUB-TOTAL<br>(n = 75) |        | EXTENSION CLIENTELE<br>(n = 68) |        | TOTAL<br>(n = 143) |        |
|-----------------------------|---------------------------|--------|-------------------------|--------|-------------------------|--------|-----------------------|--------|---------------------------------|--------|--------------------|--------|
|                             | n                         | %      | n                       | %      | n                       | %      | n                     | %      | n                               | %      | n                  | %      |
| <u>FREQUENCY OF USE</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| DAILY                       | 18                        | 43.90  | 2                       | 11.11  | -                       | -      | 20                    | 31.25  | 5                               | 10.42  | 25                 | 22.32  |
| WEEKLY                      | 16                        | 39.02  | 3                       | 16.67  | 3                       | 60.00  | 22                    | 34.38  | 4                               | 8.33   | 26                 | 23.21  |
| MONTHLY                     | 5                         | 12.20  | 8                       | 44.44  | -                       | -      | 13                    | 20.31  | 11                              | 22.91  | 24                 | 21.43  |
| ANNUALLY                    | 2                         | 4.88   | 3                       | 16.67  | 1                       | 20.00  | 6                     | 9.37   | 14                              | 29.17  | 20                 | 17.86  |
| NEVER                       | -                         | -      | 2                       | 11.11  | 1                       | 20.00  | 3                     | 4.96   | 14                              | 29.17  | 17                 | 15.18  |
| TOTAL*                      | 41                        | 100.00 | 18                      | 100.00 | 5                       | 100.00 | 64                    | 100.00 | 48                              | 100.00 | 112                | 100.00 |
| <u>VALUE OF INFORMATION</u> |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| NONE                        | -                         | -      | 1                       | 5.88   | -                       | -      | 1                     | 1.78   | 3                               | 9.37   | 4                  | 4.54   |
| LITTLE                      | -                         | -      | 1                       | 5.88   | -                       | -      | 1                     | 1.78   | 3                               | 9.37   | 4                  | 4.54   |
| SOME                        | 4                         | 11.43  | 5                       | 29.41  | -                       | -      | 9                     | 16.07  | 11                              | 34.38  | 20                 | 22.73  |
| MUCH                        | 31                        | 88.57  | 10                      | 58.82  | 4                       | 100.00 | 45                    | 80.36  | 15                              | 46.88  | 60                 | 68.18  |
| TOTAL*                      | 35                        | 100.00 | 17                      | 100.00 | 4                       | 100.00 | 56                    | 100.00 | 32                              | 100.00 | 88                 | 100.00 |
| <u>ADEQUACY</u>             |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| SUFFICIENT                  | 27                        | 84.37  | 12                      | 92.31  | 3                       | 100.00 | 42                    | 87.50  | 22                              | 73.33  | 64                 | 82.05  |
| UPDATE                      | 5                         | 15.63  | 1                       | 7.69   | -                       | -      | 6                     | 12.50  | 8                               | 26.67  | 14                 | 17.95  |
| TOTAL*                      | 32                        | 100.00 | 13                      | 100.00 | 3                       | 100.00 | 48                    | 100.00 | 30                              | 100.00 | 78                 | 100.00 |
| <u>PEST REFERENCED</u>      |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| INSECT                      | 36                        | 46.15  | 12                      | 15.38  | 3                       | 3.85   | 51                    | 65.38  | 27                              | 34.62  | 78                 | 100.00 |
| DISEASE                     | 33                        | 51.56  | 8                       | 12.50  | 2                       | 3.13   | 43                    | 67.19  | 21                              | 32.81  | 64                 | 100.00 |
| WEED                        | 25                        | 44.64  | 8                       | 14.28  | 1                       | 1.79   | 34                    | 60.71  | 22                              | 39.29  | 56                 | 100.00 |
| PARASITE                    | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| OTHER                       | -                         | -      | -                       | -      | -                       | -      | -                     | -      | -                               | -      | -                  | -      |
| <u>CLIENTELE SERVED</u>     |                           |        |                         |        |                         |        |                       |        |                                 |        |                    |        |
| COMMERCIAL                  | 2                         | 40.00  | 3                       | 60.00  | -                       | -      | 5                     | 100.00 | -                               | -      | 5                  | 100.00 |
| DEALER                      | 11                        | 73.33  | 3                       | 20.00  | 1                       | 6.67   | 15                    | 100.00 | -                               | -      | 15                 | 100.00 |
| COUNTY AGENT                | -                         | -      | 6                       | 60.00  | 4                       | 40.00  | 10                    | 100.00 | -                               | -      | 10                 | 100.00 |
| PRODUCER                    | 19                        | 61.29  | 11                      | 35.48  | 1                       | 3.23   | 31                    | 100.00 | -                               | -      | 31                 | 100.00 |
| DISTRIBUTER                 | 5                         | 62.50  | 3                       | 37.50  | -                       | -      | 8                     | 100.00 | -                               | -      | 8                  | 100.00 |
| GARDENER                    | 30                        | 75.00  | 7                       | 17.50  | 3                       | 7.50   | 40                    | 100.00 | -                               | -      | 40                 | 100.00 |

\*Omitted responses were not counted nor used in averaging

General Characteristics of the  
OSU-CES Handbook

TABLE XXVI summarizes the perceptions of the general characteristics of the OSU-CES Handbook. The OSU-CES Handbook contains information concerning Integrated Pest Management (IPM). The respondents were asked if this handbook should contain more information concerning IPM. Forty four percent of the CES respondents indicated that the OSU-CES Handbook should contain more IPM information while only 33.82% of the Extension clientele indicated it should. The area agents and clientele were in greater agreement on less need and the county and state agents agreed on more need. It was further reported by the CES respondents and Extension clientele that the OSU-CES Handbook was more widely used throughout the spring and summer months. The county agents and area agents indicated there was more use of the Handbook in winter than fall; whereas, the state agents and clientele indicated more use in fall than winter.

The overall perception of the OSU-CES Handbook was that it was of high value as indicated by 135 or 94.41% of both CES respondents and Extension Clientele rating it of high or moderate value and an average value of 3.59 overall. This view was consistent among all groups.

TABLE XXVI

## GENERAL CHARACTERISTICS OF THE OSU-CES HANDBOOK - FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS

|                                  |              | COUNTY AGENT |       | AREA AGENT |       | STATE AGENT |       | SUBTOTAL CES PERSONNEL |       | CLIENTELE |       | TOTAL |       |
|----------------------------------|--------------|--------------|-------|------------|-------|-------------|-------|------------------------|-------|-----------|-------|-------|-------|
|                                  |              | n            | %     | n          | %     | n           | %     | n                      | %     | n         | %     | n     | %     |
| MORE IPM INFORMATION IN HANDBOOK | YES          | 23           | 48.94 | 6          | 30.00 | 4           | 50.00 | 33                     | 44.00 | 23        | 33.82 | 56    | 39.16 |
|                                  | NO           | 17           | 36.17 | 9          | 45.00 | -           | -     | 26                     | 34.67 | 34        | 50.00 | 60    | 41.96 |
|                                  | UNDECIDED    | 7            | 14.89 | 5          | 25.00 | 4           | 50.00 | 16                     | 21.33 | 11        | 16.18 | 27    | 18.88 |
|                                  | TOTALS       | 47           | 100   | 20         | 100   | 8           | 100   | 75                     | 100   | 68        | 100   | 143   | 100   |
| SEASON MOST FREQUENTLY USED      | SPRING       | 44           | 39.64 | 17         | 36.17 | 7           | 36.84 | 68                     | 38.64 | 65        | 45.45 | 133   | 41.69 |
|                                  | SUMMER       | 41           | 36.94 | 15         | 31.91 | 6           | 31.58 | 62                     | 35.23 | 46        | 32.17 | 108   | 33.86 |
|                                  | FALL         | 8            | 7.21  | 6          | 12.77 | 5           | 26.32 | 19                     | 10.80 | 25        | 17.48 | 44    | 13.79 |
|                                  | WINTER       | 18           | 22.22 | 8          | 17.02 | 1           | 5.26  | 27                     | 15.34 | 7         | 4.90  | 34    | 10.66 |
| OVERALL VALUE OF HANDBOOK        | HIGH (4)     | 42           | 89.36 | 15         | 75.00 | 7           | 87.50 | 64                     | 85.33 | 39        | 57.35 | 103   | 72.03 |
|                                  | MODERATE (3) | 4            | 8.51  | 3          | 15.00 | 1           | 10.67 | 8                      | 10.67 | 24        | 35.29 | 32    | 22.38 |
|                                  | SLIGHT (2)   | -            | -     | -          | -     | -           | -     | -                      | -     | 3         | 4.41  | 3     | 2.09  |
|                                  | NO (1)       | -            | -     | -          | -     | -           | -     | -                      | -     | -         | -     | -     | -     |
|                                  | UNDECIDED    | 1            | 2.13  | 2          | 10.00 | -           | -     | 3                      | 4.00  | 2         | 2.94  | 5     | 3.50  |
| TOTALS                           | 47           | 100          | 20    | 100        | 8     | 100         | 75    | 100                    | 68    | 100       | 143   | 100   |       |
| $\bar{x}$                        |              | 3.91         |       | 3.81       |       | 3.88        |       | 3.73                   |       | 3.55      |       | 3.59  |       |

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The purpose of this chapter was to present a summary of the study problem, methodology and major findings. Major findings, conclusions and recommendations were presented based upon analysis of data collected and interpretation resulting from the design and procedures utilized to conduct the study. The study was conducted to determine the perceived value and use of the Extension Agent's Handbook of Insect, Plant Disease and Weed Control by Oklahoma County Extension Agents, Area and State Extension Specialists and Clientele.

#### Purpose

The purpose of this study was to determine the perceived value of the OSU-CES Handbook, who uses it, and to what extent it was used. A secondary purpose was to identify which sections of the OSU-CES Handbook were referenced most frequently and to determine the value of each section.

## Objectives

To accomplish the purpose of the study, the research focused on:

1. Identifying the frequency CES personnel and CES clientele reference the OSU-CES Handbook.
2. Identifying the perceived value of the OSU-CES Handbook by CES personnel and CES clientele.
3. Determining the adequacy of the information received by CES personnel and CES clientele from each section.
4. Identifying what pest categories are most frequently referenced by CES personnel and CES clientele in each section.
5. Determining the perceived interest with regard to Integrated Pest Management (IPM) by CES personnel and CES clientele.
6. Determining which season of the year the OSU-CES Handbook was most frequently used by CES personnel and CES clientele.
7. Identifying the overall perception of the OSU-CES Handbook by CES personnel and CES clientele.

## Major Findings of the Study

Reported in TABLE XXVII is the summary of the perceptions of the CES personnel and clientele concerning the OSU-CES Handbook.

TABLE XXVII

SUMMARY OF THE FREQUENCY DISTRIBUTION OF RESPONDENTS' PERCEPTIONS OF THE OSU-CES HANDBOOK BY SECTION

| OSU-CES HANDBOOK SECTION | PRIMARY FREQUENCY OF USE |    | VALUE OF INFORMATION* CATEGORY | PRIMARY ADEQUACY n - % | PRIMARY PEST REFERENCED |        | PRIMARY CLIENTELE SERVED |    |
|--------------------------|--------------------------|----|--------------------------------|------------------------|-------------------------|--------|--------------------------|----|
|                          | FREQUENCY                | %  |                                |                        | PEST                    | n      | CLIENTELE                | n  |
| SAFETY                   | ANNUALLY                 | 52 | SOME                           | SUFFICIENT             |                         |        | PRODUCER                 | 43 |
|                          | MONTHLY                  | 28 | 2.33                           | 105-89.74              |                         |        | CO AGENT                 | 31 |
| EQUIPMENT                | ANNUALLY                 | 57 | SOME                           | SUFFICIENT             |                         |        | PRODUCER                 | 43 |
|                          | MONTHLY                  | 24 | 1.96                           | 98-90.74               |                         |        | CO AGENT                 | 23 |
| BEEF CATTLE              | ANNUALLY                 | 32 | SOME                           | SUFFICIENT             | INSECT                  | 52     | PRODUCER                 | 47 |
|                          | NEVER                    | 30 |                                |                        |                         |        |                          |    |
|                          | MONTHLY                  | 23 | 2.36                           | 79-96.34               | PARASITE                | 21     | CO AGENT                 | 19 |
| DAIRY CATTLE             | NEVER                    | 56 | SOME                           | SUFFICIENT             | INSECT                  | 36     | PRODUCER                 | 39 |
|                          | ANNUALLY                 | 20 | 2.09                           | 61-95.31               | PARASITE                | 26     | CO AGENT                 | 17 |
|                          | MONTHLY                  | 19 |                                |                        |                         |        |                          |    |
| SHEEP & GOATS            | NEVER                    | 49 | SOME                           | SUFFICIENT             | INSECT                  | 34     | PRODUCER                 | 41 |
|                          | MONTHLY                  | 24 | 2.17                           | 64-95.52               | PARASITE                | 30     | CO AGENT                 | 18 |
|                          | ANNUALLY                 | 23 |                                |                        |                         |        |                          |    |
| HORSES                   | NEVER                    | 52 | SOME                           | SUFFICIENT             | INSECT                  | 34     | PRODUCER                 | 41 |
|                          | ANNUALLY                 | 29 | 2.23                           | 67-94.37               | PARASITE                | 32     | CO AGENT                 | 18 |
|                          | MONTHLY                  | 21 |                                |                        |                         |        |                          |    |
| POULTRY                  | NEVER                    | 64 | SOME                           | SUFFICIENT             | INSECT                  | 28     | PRODUCER                 | 32 |
|                          | MONTHLY                  | 18 | 2.00                           | 59-95.16               | PARASITE                | 18     | CO AGENT                 | 15 |
|                          | ANNUALLY                 | 16 |                                |                        |                         |        |                          |    |
| PETS                     | NEVER                    | 40 | SOME                           | SUFFICIENT             | INSECT                  | 39     | PRODUCER                 | 36 |
|                          | ANNUALLY                 | 27 | 2.20                           | 61-88.41               | PARASITE                | 29     | CO AGENT                 | 18 |
|                          | MONTHLY                  | 24 |                                |                        |                         |        |                          |    |
| AQUATIC PLANTS           | ANNUALLY                 | 36 | SOME                           | SUFFICIENT             | WEED                    | 70     | PRODUCER                 | 45 |
|                          | NEVER                    | 26 |                                |                        |                         |        |                          |    |
|                          | MONTHLY                  | 25 | 2.37                           | 67-80.72               |                         |        | CO AGENT                 | 21 |
|                          |                          |    |                                |                        |                         | DEALER | 20                       |    |
| ROADSIDE WEEDS & BRUSH   | ANNUALLY                 | 40 | SOME                           | SUFFICIENT             | WEED                    | 85     | PRODUCER                 | 35 |
|                          | MONTHLY                  | 29 | 2.22                           | 79-85.87               |                         |        | COMMERCIAL               | 20 |
|                          | NEVER                    | 18 |                                |                        |                         |        |                          |    |
| ALFALFA                  | MONTHLY                  | 39 | MUCH                           | SUFFICIENT             | INSECT                  | 92     | PRODUCER                 | 50 |
|                          | ANNUALLY                 | 25 | 2.67                           | 93-86.92               | WEED                    | 80     | CO-AGENT                 | 25 |
|                          | WEEKLY                   | 23 |                                |                        |                         |        |                          |    |



TABLE XXVII (CONTINUED)

| OSU-CES HANDBOOK<br>SECTION | PRIMARY<br>FREQUENCY<br>OF USE |    | VALUE OF<br>INFORMATION*<br>CATEGORY<br>X | PRIMARY<br>ADEQUACY<br>n - % | PRIMARY<br>PEST<br>REFERENCED |    | PRIMARY<br>CLIENTELE<br>SERVED |    |
|-----------------------------|--------------------------------|----|---|------------------------------|-------------------------------|----|--------------------------------|----|
|                             | FREQUENCY                      | %  |   |                              | PEST                          | n  | CLIENTELE                      | n  |
| CORN                        | ANNUALLY                       | 36 | SOME<br>2.42                              | SUFFICIENT<br>72-88.89       | WEED                          | 56 | PRODUCER                       | 44 |
|                             | NEVER                          | 31 |   |                              | INSECT                        | 43 | CO-AGENT                       | 25 |
|                             | MONTHLY                        | 25 |   |                              |                               |    |                                |    |
| COTTON                      | NEVER                          | 47 | SOME<br>2.29                              | SUFFICIENT<br>74-90.24       | INSECT                        | 49 | PRODUCER                       | 37 |
|                             | ANNUALLY                       | 18 |   |                              | WEED                          | 49 | CO-AGENT                       |    |
|                             | MONTHLY                        | 16 |   |                              |                               |    |                                |    |
|                             | WEEKLY                         | 13 |   |                              |                               |    |                                |    |
| PASTURE &<br>RANGE          | WEEKLY                         | 30 | MUCH<br>2.66                              | SUFFICIENT<br>89-83.96       | WEED                          | 97 | PRODUCER                       | 48 |
|                             | MONTHLY                        | 27 |   |                              | INSECT                        | 29 | CO-AGENTS                      | 22 |
|                             | ANNUALLY                       | 23 |   |                              |                               |    |                                |    |
| PEANUTS                     | NEVER                          | 29 | SOME<br>2.43                              | SUFFICIENT<br>69-83.13       | WEED                          | 51 | PRODUCER                       | 35 |
|                             | MONTHLY                        | 26 |   |                              | INSECT                        | 41 | CO-AGENT                       | 19 |
|                             | ANNUALLY                       | 16 |   |                              | DISEASE                       | 41 |                                |    |
| SMALL<br>GRAINS             | WEEKLY                         | 30 | MUCH<br>2.54                              | SUFFICIENT<br>89-84.76       | INSECT                        | 86 | PRODUCER                       | 46 |
|                             | MONTHLY                        | 27 |   |                              | WEED                          | 84 | CO-AGENTS                      | 23 |
| STORED<br>GRAINS            | ANNUALLY                       | 49 | SOME<br>2.26                              | SUFFICIENT<br>87-85.29       | INSECT                        | 72 | PRODUCER                       | 42 |
|                             | NEVER                          | 28 |   |                              |                               |    | CO-AGENTS                      | 18 |
| FRUIT &<br>NUTS             | ANNUALLY                       | 23 | MUCH<br>2.50                              | SUFFICIENT<br>77-86.52       | INSECT                        | 78 | PRODUCER                       | 42 |
|                             | WEEKLY                         | 22 |   |                              | DISEASE                       | 68 | GARDENER                       | 34 |
|                             | MONTHLY                        | 20 |   |                              |                               |    | CO-AGENT                       | 23 |
|                             | NEVER                          | 19 |   |                              |                               |    |                                |    |
|                             | DAILY                          | 16 |   |                              |                               |    |                                |    |
| HOUSEHOLD<br>PEST           | MONTHLY                        | 25 | SOME<br>2.49                              | SUFFICIENT<br>75-82.42       | INSECT                        | 89 | PRODUCER                       | 38 |
|                             | WEEKLY                         | 24 |   |                              |                               |    | CO-AGENT                       | 22 |
|                             | ANNUALLY                       | 21 |   |                              |                               |    |                                |    |
|                             | NEVER                          | 18 |   |                              |                               |    |                                |    |
|                             | DAILY                          | 12 |   |                              |                               |    |                                |    |
| ORNAMENTALS                 | MONTHLY                        | 25 | MUCH<br>2.57                              | SUFFICIENT<br>77-85.56       | INSECT                        | 85 | PRODUCER                       | 39 |
|                             | WEEKLY                         | 28 |   |                              | DISEASE                       | 72 | GARDENER                       | 33 |
|                             | DAILY                          | 19 |   |                              |                               |    | CO-AGENT                       | 25 |
|                             | ANNUALLY                       | 17 |   |                              |                               |    |                                |    |
|                             | NEVER                          | 16 |   |                              |                               |    |                                |    |

TABLE XXVII (CONTINUED)

| OSU-CES HANDBOOK<br>SECTION | PRIMARY<br>FREQUENCY<br>OF USE |    | VALUE OF<br>INFORMATION*<br>CATEGORY | PRIMARY<br>ADEQUACY<br>n - % | PRIMARY<br>PEST<br>REFERENCED |    | PRIMARY<br>CLIENTELE<br>SERVED |    |
|-----------------------------|--------------------------------|----|--------------------------------------|------------------------------|-------------------------------|----|--------------------------------|----|
|                             | FREQUENCY                      | %  |                                      |                              | PEST                          | n  | CLIENTELE                      | n  |
| TURFGRASS                   | MONTHLY                        | 30 | MUCH<br>2.50                         | SUFFICIENT<br>82-85.42       | WEED                          | 79 | PRODUCER                       | 39 |
|                             | ANNUALLY                       | 26 |                                      |                              | INSECT                        | 70 | GARDENER                       | 30 |
|                             | WEEKLY                         | 20 |                                      |                              | DISEASE                       | 65 | CO-AGENT                       | 25 |
|                             | DAILY                          | 15 |                                      |                              |                               |    |                                |    |
| GREENHOUSE                  | NEVER                          | 40 | SOME<br>2.26                         | SUFFICIENT<br>64-88.89       | DISEASE                       | 49 | PRODUCER                       | 38 |
|                             | ANNUALLY                       | 29 |                                      |                              | INSECT                        | 48 | CO-AGENT                       | 20 |
|                             | MONTHLY                        | 22 |                                      |                              |                               |    | GARDENER                       | 19 |
| COMMERCIAL<br>VEGETABLES    | MONTHLY                        | 24 | SOME<br>2.48                         | SUFFICIENT<br>63-77.78       | INSECT                        | 65 | PRODUCER                       | 41 |
|                             | WEEKLY                         | 22 |                                      |                              | DISEASE                       | 52 | CO-AGENT                       | 23 |
|                             | NEVER                          | 22 |                                      |                              | WEED                          | 51 |                                |    |
|                             | ANNUALLY                       | 21 |                                      |                              |                               |    |                                |    |
|                             | DAILY                          | 11 |                                      |                              |                               |    |                                |    |
| HOME<br>VEGETABLES          | WEEKLY                         | 23 | SOME<br>2.55                         | SUFFICIENT<br>64-82.05       | INSECT                        | 78 | GARDNER                        | 40 |
|                             | DAILY                          | 22 |                                      |                              | DISEASE                       | 64 | PRODUCER                       | 31 |
|                             | MONTHLY                        | 21 |                                      |                              | WEED                          | 56 | CO-AGENT                       | 22 |
|                             | ANNUALLY                       | 15 |                                      |                              |                               |    |                                |    |
|                             | NEVER                          | 15 |                                      |                              |                               |    |                                |    |

\*Omitted responses were not counted nor used in averaging

### Frequency of Use

The primary frequency of use of the safety and equipment sections of the OSU-CES Handbook was annually for over 50% of the respondents and monthly for about 25%. The animal sections were primarily used annually and monthly, in that order, with frequencies ranging from 16 to 32%. Dairy cattle, sheep and goats, horses, poultry and pets had large percentages (40-64%) of respondents indicating they never used those sections. The CES personnel and the clientele had similar usage patterns except for beef cattle and pets. CES personnel used the beef cattle section primarily weekly and monthly, whereas the clientele used it monthly, annually and never. The pets section was used by CES personnel primarily monthly, while the clientele used it annually and never.

The aquatic plants and roadside weeds and brush sections were primarily used annually (36-40%). The county agents used the aquatic plants section more frequently (monthly and annually) than did the clientele (annually and never). The alfalfa section was used primarily monthly (30%), while corn was used annually (36%). The cotton section was never used by (47%), but those who did, used it almost equally annually, monthly and weekly. Peanuts was similar. Pasture and range and small grains were spread fairly equally over weekly, monthly and annually, in that order. Larger percentages of the Area Extension Agents used

the alfalfa, corn and cotton sections more frequently than the other CES personnel or clientele.

The stored grain section was used annually by 49%, but never used by 28%. The fruit and nuts, household pests, ornamentals, turfgrass, commercial vegetables and home vegetables sections were spread over all five frequency categories fairly equally in variable orders. The greenhouse section was primarily used annually and monthly. Those who never used these sections ranged from 15% for home vegetables to 40% for greenhouse. The CES personnel used these sections more frequently than did the clientele. The greenhouse section was used more by CES personnel than clientele. The commercial vegetables section was used weekly by Extension personnel more than clientele.

#### Value of the Information

All sections received an average value rating of at least some on the scale of none (0), little (1), some (2) or much (3). The safety and equipment sections and the animal sections all received value ratings of some. The equipment section received the lowest average rating of any section (1.96), but that was still a rating of some value. The beef cattle section received an average rating of much value (2.57) from the CES personnel, but the clientele rating was low enough to reduce it to a some value rating overall.

The alfalfa section received a much value rating (2.67) as did pasture and range (2.66), ornamentals (2.57), home

vegetables (2.55), small grains (2.54), fruit and nuts (2.50) and turfgrass (2.50). Although their overall rating was some, the following sections were rated of much value by CES personnel: commercial vegetables (2.75), household pests (2.67), greenhouse (2.57) and corn (2.54). All other plant and specialty sections received some value ratings.

#### The Adequacy of the Information

The safety and equipment sections and the animal sections were all rated sufficient by over 90 percent of those responding to those sections, except the pets section. Over 88 percent rated it sufficient. Of the plant sections, only one, cotton, received a sufficient rating from over 90 percent of those responding. The other plant sections had from 8 (for corn) to 17 (for pasture and range) persons indicating they needed updating. With the exception of aquatic plants (10 CES and 6 clientele), clientele were the greater majority recommending update.

The remainder of the sections had from 12 (household pests) to 18 (commercial vegetables) persons recommending update. The exception was greenhouse, which had 89 percent of those responding that it was sufficient. More CES personnel were recommending update for these sections, although the majority were still clientele. The section with the lowest percentage indicating it sufficient was commercial vegetables with 77 percent.

### The Pests Referenced Most Frequently

The safety and equipment sections did not have pests to be referenced. However, due to the design of the questionnaire, all pests could be checked for all sections and some respondents did check pests for these sections and pests in other sections that were not included in those sections. Those responses were omitted from the report.

The pests referenced most frequently in the animal sections were insect and parasite, in that order, in all sections. Weed was the primary pest referenced in the plant sections, except alfalfa, cotton and small grains, where insect was the primary pest, followed by weed. Peanuts was the only section with disease as a primary pest. It was equal to insect, although weed was still the most often chosen pest. For the remainder of the sections insect was the primary pest, with the exception of turfgrass and greenhouse. The primary pest referenced for turfgrass was weed, and for greenhouse, disease. Disease was a primary pest for all these remaining sections, except household pests, although not the primary pest most often checked.

### The Clientele Provided Information

The CES respondents were asked to indicate the different types of clientele (commercial applicators, dealers, county agents, producers, distributors and gardeners) provided information from each section. Producer

was the primary type of clientele provided information from all sections, except home vegetables, which was gardener. Gardener was the next most often cited clientele provided information by CES respondents from the Handbook, followed by dealer and commercial applicators. County agents were clientele for state and area agents for information from many of the sections.

General Characteristics of the  
OSU-CES Handbook

TABLE XXVII summarizes the perceptions of the general characteristics of the OSU-CES Handbook. The OSU-CES Handbook contains information concerning Integrated Pest Management (IPM). The respondents were asked if this handbook should contain more information concerning IPM. Forty four percent of the CES respondents indicated that the OSU-CES Handbook should contain more IPM information while only 33.82% of the Extension clientele indicated it should. The area agents and clientele were in greater agreement on less need and the county and state agents agreed on more need. It was further reported by the CES respondents and Extension clientele that the OSU-CES Handbook was more widely used throughout the spring and summer months. The county agents and area agents indicated there was more use of the Handbook in winter than fall; whereas, the state agents and clientele indicated more use in fall than winter.

The overall perception of the OSU-CES Handbook was that it was of high value as indicated by 135 or 94.41% of both CES respondents and Extension Clientele rating it of high or moderate value and an average value of 3.59 overall. This view was consistent among all groups.

### Conclusions

The major findings of the study prompted the following conclusions:

1. Primary usage of the Handbook was monthly or annually by both the CES personnel and clientele. CES personnel tended to use most sections of the Handbook more frequently than did the clientele. Both CES personnel and clientele selectively use the sections that apply to them and their area of the state, as almost all sections had many who never used that section. State and area agents seem to be selective about the sections they used. This would appear logical since they are more specialized.

2. All sections of the Handbook appear to be valuable to both CES personnel and clientele, as all sections received at least a some value average rating. Several sections were rated much value and the average rating allowed the ranking of the sections on value. The alfalfa section was rated the highest overall and equipment lowest.

3. The Handbook appears to be adequately current based on the ratings of sufficient by over 77 percent of those responding on all sections. Priorities for updating could



be set for those sections rated sufficient by less than 90 percent of those responding in order from lower to higher percentages.

4. The pests referenced most often followed a logical sequence with insect being primary for animal sections and weed for plant. There were some interesting exceptions where some plant sections had more insect reference, such as alfalfa, cotton and small grains. Disease also was a primary pest referenced in most of the plant sections and the primary referenced for the greenhouse section.

5. Producer and gardener were the primary types of clientele provided information from the Handbook by the CES respondents. Dealers and commercial applicators were also provided information from some sections. County agent was a type of clientele provided information by the state and area agents from all sections.

6. CES personnel indicated more interest in additional Integrated Pest Management information in the Handbook than did the clientele. Perhaps the CES personnel would be required to interpret the IPM information to the clientele.

7. Spring and summer were the times of heaviest use of the Handbook, as indicated by both CES personnel and clientele. This is a logical pattern as the pests are most prevalent during those months.

8. The overall value of the Handbook was rated high by both CES personnel and clientele. This corresponds with the

ratings of the different sections and indicates this is a valuable resource for CES personnel and clientele alike.

### Recommendations

The following recommendations were based on the findings of this study and the conclusions that were reached:

1. The OSU-CES Handbook should continue to be published and the updating of the sections should be done based on the value and adequacy ratings of this study.

2. All sections of the Handbook should be retained, based on the value ratings given in this study. The equipment section was the only section which appeared to have any ratings questioning it.

3. Based on the interest by the CES personnel, more Integrated Pest Management information should be included in the Handbook.

4. Similar studies to this should be done periodically to continually assess the value and adequacy of the Handbook.

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APPENDIXES

APPENDIX A

CES PERSONNEL QUESTIONNAIRE



(1) Would you like the handbook to contain more information on Integrated Pest Management?

(circle) YES NO

If yes, what should be added?

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(2) What time of the year is the handbook most frequently used?

(circle all that apply)

SPRING SUMMER WINTER FALL

(3) What is your overall general perception of the value of the Extension Agents Handbook on a scale of 1 to 4 with 4 being highest?

(circle) HIGH MODERATELY SLIGHTLY NO  
4 3 2 1

(4) Please feel free to make any suggestions to help improve the content of this handbook.

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(5) Please circle what position you currently hold.

STATE AREA DISTRICT COUNTY



APPENDIX B

CLIENTELE QUESTIONNAIRE



(1) Would you like the handbook to contain more information on Integrated Pest Management?

(circle) YES NO

If yes, what should be added?

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(2) What time of the year is the handbook most frequently used?

(circle all that apply)

SPRING SUMMER WINTER FALL

(3) What is your overall general perception of the value of the Extension Agents Handbook on a scale of 1 to 4 with 4 being highest?

(circle) HIGH MODERATELY SLIGHTLY NO  
4 3 2 1

(4) Please feel free to make any suggestions to help improve the content of this handbook.

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(5) What is your present job title? \_\_\_\_\_

(6) What county are you in? \_\_\_\_\_

APPENDIX C

COVER LETTER TO CLIENTELE



# COOPERATIVE EXTENSION SERVICE

DIVISION OF AGRICULTURE • OKLAHOMA STATE UNIVERSITY

Department of Entomology • 501 Life Science West • (405) 744-5531  
Stillwater, Oklahoma 74078

February 3, 1989

Dear User of Extension Handbook:

Presently, we are conducting research on the Extension Agent's Handbook of Insects, Plant Disease, and Weed Control as to its perceived value in terms of quality of material and value of information that it contains.

The purpose of this study is to ask you, the user, if this handbook contains the proper information which can be easily interpreted and applied. It is also important to know the extent to which this handbook is used and who commonly uses it. In addition, we would like to know what sections are referenced most frequently and how often they are used.

We know you need factual information that is accurate, precise, and can be referenced quickly and accurately. Therefore, we need your help and cooperation to update and improve this handbook. You are an important resource because only you can tell us the best ways to improve it. Enclosed you will find a survey form and a self-addressed stamped envelope to aid in its return.

We realize time schedules are tight, but your participation is invaluable in this effort and is extremely appreciated. Thank you for taking the time to complete this survey; every effort will be made to improve the handbook so it will satisfy your needs.

Sincerely,

Jim T. Criswell  
Extension Pesticide Coordinator



APPENDIX D

FOLLOW-UP COVER LETTER TO CLIENTELE



# COOPERATIVE EXTENSION SERVICE

DIVISION OF AGRICULTURE • OKLAHOMA STATE UNIVERSITY

Department of Entomology • 501 Life Science West • (405) 744-5531  
Stillwater, Oklahoma 74078

March 7, 1989

Dear User of Extension Handbook:

This is to remind you of the letter and survey you previously received. We are conducting research on the Extension Agent's Handbook of Insects, Plant Disease, and Weed Control as to its perceived value in terms of quality of material and value of information that it contains. The information you provide is extremely important to you and the success of this Handbook.

The purpose of this study is to ask you, the user, if this handbook contains the proper information which can be easily interpreted and applied. It is also important to know the extent to which this handbook is used and who commonly uses it. In addition, we would like to know what sections are referenced most frequently and how often they are used.

We know you need factual information that is accurate, precise, and can be referenced quickly and accurately. Therefore, we need your help and cooperation to update and improve this handbook. You are an important resource because only you can tell us the best ways to improve it. Enclosed you will find a survey form and a self-addressed stamped envelope to aid in its return.

We realize time schedules are tight, but your participation is invaluable in this effort and is extremely appreciated. Thank you for taking the time to complete this survey; every effort will be made to improve the handbook so it will satisfy your needs. If you haven't already responded please do so as soon as possible. We are looking forward to hearing from you.

Thank you,

Jim T. Criswell  
Extension Pesticide Coordinator

APPENDIX E

COVER LETTER TO CES PERSONNEL FROM DR. BOGLE





# COOPERATIVE EXTENSION SERVICE

DIVISION OF AGRICULTURE • OKLAHOMA STATE UNIVERSITY  
 Department of Entomology • 501 Life Science West • (405) 744-5531  
 Stillwater, Oklahoma 74078

March 2, 1989

Dear Extension Agent:

Dr. Criswell is presently conducting an evaluation on the Extension Agent's Handbook of Disease, Insect and Weed Control as to its perceived value in terms of quality of material, the value of information that it contains and which sections are most frequently used.

We know you need information that is accurate, precise, and can be referenced quickly and accurately. Therefore, Dr. Criswell needs your help and cooperation to update and improve the Handbook. You are an important resource because only you can tell us the best ways to improve it. Enclosed you will find a survey form to be completed and returned.

We realize time schedules are tight, however, your participation is invaluable in this effort and is extremely appreciated. Please take the time to complete this survey; every effort will be made to improve the Handbook so it will satisfy your needs.

Please return the survey to Dr. Jim Criswell by March 17, 1989.

Sincerely,

A handwritten signature in cursive script that reads 'T. Roy Bogle'.

T. Roy Bogle  
 Associate Director

cc: District Directors  
 Raymond Campbell

2  
VITA

Jimmy Allen Ames

Candidate for the Degree of  
Master of Science

Thesis: USAGE OF THE EXTENSION AGENTS' HANDBOOK OF INSECTS,  
PLANT DISEASE AND WEED CONTROL AS PERCEIVED BY  
OKLAHOMA COUNTY AGENTS AND CLIENTELE

Major Field: Agricultural Education

Biographical:

Personal Data: Born in South Coffeyville, Oklahoma, February 22, 1964, the son of Harry T. and Ruthlene Ames. Due to the loss of my mother at a very early age, my parents now are Harry T. and Kathrine E. Ames.

Education: Graduated from Lenapah High School, Lenapah, Oklahoma in May, 1982; received the Associate of Science degree in Agriculture from Connors State College, Warner, Oklahoma, May 1984; received Bachelor of Science degree in Agricultural Education from Oklahoma State University in December, 1986; completed requirements for Master of Science degree at Oklahoma State University, Stillwater, Oklahoma, in December, 1989.

Professional Experience: Production agriculture background in cattle, sheep, swine, horses, milo, oats, corn, soybean, wheat and alfalfa farming; Ames Custom haying operation manager through August of 1984; Oklahoma State University, Food Service, Animal Science North Range and Agriculture Engineering Lab assistant, August, 1984 to July, 1987; Student taught Morrison, Oklahoma, Fall 1986; Vocational Agriculture Instructor, Marland High School, Marland, Oklahoma, July, 1987 to June, 1988; transportation department, Stillwater Public Schools to present.

Organizations: Oklahoma Vocational Agriculture  
Teachers Association; Oklahoma Education  
Association; Alpha Tau Alpha; Collegiate FFA.