



Current Report

PUBLISHED BY OKLAHOMA STATE UNIVERSITY
DISTRIBUTED THROUGH COUNTY EXTENSION OFFICES

HERBICIDE CHANGES FOR 1971

Howard A. L. Greer
Extension Weed Control Specialist

This publication is a supplement to fact sheets already available for suggestions of weed control in different crops. This will only refer to the new products that are available on the market for this year. A reference will be made to the fact sheet which gives information on products already on the market. This current report should be used with the fact sheet, not in place of it. A general Fact Sheet 2751 lists most of the products that are available for each crop but does not give the detail that is given in the publication for that specific crop. Be sure to read the label for instructions and limitations of the herbicide. If you need fact sheets on weed control in any specific crop, you can obtain these at your county extension office.

Weed Identification

Before using any herbicide it is advisable to identify the weed problem. At one time, before herbicides were widely used, crabgrass and pigweed were the main weed problems. Many of the other species could not compete well with these two weeds and therefore were not major problems. Since the use of herbicides has come into existence many other weed species that are resistant to certain herbicides have produced large numbers of seeds and have become abundant in many fields.

There are several good publications for identification of weeds. Among these is the publication "Weeds of the Southern United States", Circular E-807, which can be obtained at your county extension office. This publication contains color prints and major characteristics of the 120 most common weeds found in the south.

Another publication that is very valuable for weed identification is Agricultural Handbook 366 "Selected Weeds of the United States". This publication can be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. for \$4.00 per copy. It classifies weeds by family and gives description and drawings of the weed and a distribution map. This publication contains 463 pages and is an excellent aid in weed identification.

There are many other publications that are put out by states that are excellent aides in weed identification. A more recent one has been published by the Arkansas Extension Service. Another publication that is used extensively in Oklahoma is "Weeds of the North Central States." It is important to obtain some good weed identification aides and know weed problems before planning a weed control program.

Alfalfa

Information concerning weed control with herbicides in alfalfa is published in Fact Sheet 2761. A new herbicide that has been added for weed control in alfalfa since 1970 is Planavin (nitralin). This product should be incorporated into the soil. For more details on how to use this herbicide be sure to read the label.

If dodder is a problem in alfalfa, Farmers Bulletin No. 2211 "Controlling Dodder in Alfalfa" has been published by the U.S. Department of Agriculture. This can be ordered from the U.S. Government Printing Office in Washington, D.C. Single copies can be obtained at your County Extension Office. This publication gives excellent

information on the dodder plant, how it grows, and how to control it.

Some new products are being tested for weed control in alfalfa. It is expected that there will be some new products available in addition to the ones that are now on the market by the 1972 season.

Bermudagrass Pasture

There is no new information available for weed control in pastures in addition to that found in Fact Sheets 2754 and 2756. Research is being conducted with Banvel (dicamba) to determine the range of hard-to-kill weeds that it might control. This compound is now available for use in pastures. Preliminary information indicates that it may control many of the weeds that have been major problems in pastures. For special weed problems in pastures check the Banvel label to see if the specific weed is listed among those Banvel will control.

Brush Control

Brush control is a major problem in Oklahoma. Many resistant species are hard to control with present herbicides. Much of the information that is available is listed in Fact Sheet 2754 for different species of brush. Even though this fact sheet has a 1968 date on it, it is an up-to-date publication. This was reprinted in 1970 but the 1968 date was mistakenly added. In addition to this a special publication for mesquite control has been printed. This is Fact Sheet 2760. If sand sage is a problem in Western Oklahoma, Fact Sheet 2764 can be obtained for detailed information. Fact Sheet 2765 gives additional information on the control of shinnery oak in Western Oklahoma. In addition to these publications Current Report No. 2767 gives some information on factors influencing oak kill with 2,4,5-T in Eastern Oklahoma.

At the time of this publication there is much debate on the use of 2,4,5-T. A public hearing will be conducted by the Environmental Protection Agency to determine if 2,4,5-T will continue to be registered for use in brush control. If the decision should be to remove 2,4,5-T for this purpose these fact sheets would become obsolete. Other information will not be published on this subject until

this decision has been made. Brushkiller 170 (2,4-DP + 2,4-D) and Silvex are herbicides that can be used to replace 2,4,5-T for some brush species.

Corn

Fact Sheet 2757 gives information on the use of herbicides for weed control in corn. There are several new herbicides that are now in the testing program for weed control in corn. However, the only one that will be added at this time is Lasso + Atrazine. This combination, like the Sutan + Atrazine, gives good control of both grasses and broad-leaves. The Sutan + Atrazine must be incorporated immediately following application. The mixture of Lasso + Atrazine can be used as a preemergence herbicide or lightly incorporated. Read the label for directions of rates to use and how to properly apply this mixture. A special publication for weed control in corn and sorghum in the panhandle is available for that area of the state.

Cotton

The last publication for weed control with herbicides in cotton was printed for the 1970 season. This is Fact Sheet 2762. Ignore the 1968 date on the front since this was added to the publication by mistake. The only addition for weed control in cotton is Lasso (Alachlor) as a pre-emergence herbicide. This herbicide has a fairly narrow margin of safety for cotton. It is important to read the label and follow directions carefully. Lasso was used on a fairly large acreage of cotton in Oklahoma in 1970. Good weed control was observed and no injury to cotton occurred on medium and heavy texture soils.

More emphasis probably should be placed on mixtures of DSMA or MSMA with one of the other herbicides such as Caparol, Cotoran, Herban, or Karmex for postemergence weed control. These herbicides do a very good job of controlling weeds if used when the weeds are small. It is important to be sure a surfactant is in the mixture or to add a surfactant and use these mixtures as a directed spray if good results with no injury to the cotton are to be expected.

Grain Sorghum

No new herbicides are available for addition to Fact Sheet 2763 for the 1971 season at this time. If Igran receives label approval it will be added to this list as a preemergence herbicide. Most of the research has shown this compound to be similar to Milogard in its range of control of grasses and broadleaf weeds. It remains in the soil a shorter period of time than Milogard and would not be as much of a problem where wheat would be planted in the fall. Herban + Atrazine and Herban + Propazine are sold as Herban 21A and Herban 21P. In addition to these mixtures sold on the market, these compounds can be tank mixed. Be sure to read the labels and adjust the rate of each compound to the soil type that the sorghum will be grown on.

Horticultural Crops

The Fact Sheet 6008 is being reprinted on weed control in horticultural crops. No changes have been initiated for the herbicides listed for 1970.

Peanuts

Several changes will be made in Fact Sheet 2759 on weed control in peanuts. Many weed species resistant to presently used herbicides are giving problems to peanut farmers in Oklahoma. Extensive research has been done on many of these weeds.

In the preplant category Planavin (nutralin) can be added to the present three herbicides listed in the Fact Sheet. In many areas where nutsedge is a problem Vernam may be a very useful herbicide. However, if Colorado grass or brachiaria (signalgrass) is a problem Vernam may not give adequate control of these species. Therefore, mixtures of Balan + Vernam are now approved for use for these problems. In research trials the past couple of years the mixture of Treflan + Vernam has also been used. If this mixture is approved for use in 1971, it can also be added to this list.

Much research has been done with groundcrack and early postemergence

use of herbicides in peanuts. Many of these uses are in addition to a preplant or preemergence herbicide. Most of the groundcracking herbicides do not control grasses very well. They are often used as a follow-up to control many of the hard-to-kill weed species. According to information now available probably neither Falone or Sesone will be available for use in peanuts in 1971. Dyanap and Enide-dinitro will still be available for use in 1971. In addition to these another mixture of Alanap + dinitro which would be similar to Dyanap will be sold as Ancrack.

Research has been done with three other compounds and combinations of compounds that might be available in 1971. These are Lasso + dinitro, Amiben + dinitro, and 2,4-DB. If these compounds are approved for use they will be added to the list of herbicides available for weed control in peanuts. Be sure to check the label for approval for use in peanuts before using these compounds. Lasso + dinitro and Amiben + dinitro were successful in controlling a large percentage of the prickly sida, (often referred to as teaweed), and copperleaf in research trials and demonstrations in 1970. These compounds should be used when the weeds are very small.

The compound 2,4-DB is sold as Butyrac or Butoxone. This herbicide is very effective in controlling such weeds as morningglory and cocklebur. It has also showed some success in at least partial control of such weeds as horsenettle and silverleaf nightshade. These are perennial weeds and cannot be controlled very successfully. In addition to these, species that are beginning to show up in peanut fields, such as crotons and butter daisy, often referred to as sunflower, have been decreased significantly with this compound.

Soybeans

Research is being conducted at this time with several new herbicides for weed control in soybeans. Some of these compounds show excellent results in control of hard-to-kill weeds such as cocklebur. Some of these new compounds may be available for use in

soybeans by the time of the 1971 planting season. Preforan has label approval and will be included for use on a limited acreage as a trial use in Oklahoma in 1971. For information about other herbicides to use on soybeans see Fact Sheet 2752.

Some of the weed problems in soybeans in Oklahoma are quite difficult to control with present practices. A practice that is very usable and needs to be developed in Oklahoma is the use of directed spraying to control many of the hard-to-kill weeds. This practice has been used quite extensively in other areas in soybean production and has been used in Oklahoma in cotton weed control. Several good herbicides are available that can be used for directed spraying in soybeans but cannot be used for over the top spraying. Among the compounds to consider for directed spraying is Dyanap, dinitro, 2,4-DB, and Lorox.

Special Weed Problems

Information is available on some of the special weed problems in Oklahoma. Fact Sheet 2755 gives information available on bindweed control in cropland. The only addition that can be added at this time is the use of Telvar in a cotton rotation system. Be sure to read the label and follow directions for the use of this practice.

Another problem of great concern in crops in Oklahoma is the control of johnsongrass. Information on use of herbicides for control of johnsongrass is non-cropland and in cropland is available in Fact Sheet 2753. Some additional information is available on control of johnsongrass in a specific crop in the fact sheet written for that crop.

Two weeds that have increased very rapidly in Oklahoma are henbit (Lamium amplexicaule) and several members of the mustard family. The information available at this time for control of these species of weeds during the win-

ter in wheat and alfalfa is published in Current Report 2758.

Label Laws and Safety Precautions

There are fact sheets available for detailed information on the use of labels, safety precautions, and laws governing the safe use of pesticides. The label is probably the most important piece of information that you will read this year. Fact Sheet 7454 explains what you should expect to find on the label. Fact Sheet 7456 gives much of the information on laws governing the use of chemicals. Much of the information concerning Federal and State laws are included in this publication. Additional information on safe use of pesticides can be obtained in Fact Sheet 7450. Be sure to read the label and follow every precaution when using any herbicide.

Specific Herbicide Information

Many times there is a need for specific information on solubility, safety, formulations, and other types of information about a herbicide. Probably the best source of information available for detailed information on herbicides is a "Herbicide Handbook" printed by the Weed Science Society of America. The revised edition with all current information is now available, and can be obtained at \$4.00 per copy from the Weed Science Society of America, Agronomy Department, University of Illinois, Urbana, Illinois. This publication should be used by every dealer, distributor, and applicator of herbicides. It would be very valuable in many cases to growers who use herbicides quite extensively.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Extension Service is implied.