

-----ADAP MIS-----
MARKETING INFORMATION SYSTEMS

A Publication of the
Agriculture Development in the American Pacific

ADAP Publication No. 99-9

**Production Forecasts and Information
for the states of
Kosrae and Pohnpei,
Federated States of Micronesia**

*Compiled by
Jackson A. Phillip
ADAP MIS Cooperator
College of Micronesia-FSM
Cooperative Extension Service
Pohnpei Campus*

April 1999

BACKGROUND INFORMATION

The ADAP Marketing Information Systems project (MIS) is a federally funded project developed to enhance marketing information systems within the ADAP regions in the Pacific. ADAP is the acronym for *Agriculture Development in the American Pacific* and is consist of the five land grant institutions in the American Pacific - University of Hawaii (UHI), University of Guam (UOG), American Samoa Community College (ASCC), College of the Northern Mariana Islands, and the College of Micronesia (COM). In the COM region there is of course three national colleges, Palau Community College (PCC), College on the Marshall Islands (CMI), and College of Micronesia-FSM (COM-FSM). At this point in time, only PCC and COM-FSM are participating in the project. In the COM-FSM region, Pohnpei and Kosrae states are currently participating.

MIS project activities started in Pohnpei November 1997 after a training was conducted for the five agriculture extension in Pohnpei by Mr. Bob Barber and Dr. John Brown, both of UOG.

MIS was implemented for the state of Kosrae in February 1999. Although all the islands states in the Federated States of Micronesia were targeted, original budget and funding were made to pilot test the program in Pohnpei. Funds not utilized for the project in Pohnpei were used the implement MIS in Kosrae. COM Cooperator Jackson Phillip of COM-FSM conducted the training and the initial survey of 10 farmers.

THIS PUBLICATION...

This is the first publication on the ADAP MIS for the College of Micronesia-FSM and it reflects results of the program as conducted in Pohnpei and Kosrae. Crop production estimates for Pohnpei for the period from December 1997 to May 1999 are included. The main purpose of showing those statistics is to inform all our audiences and stakeholders the fact that MIS as tool for planning for agriculture and agricultural marketing activities, is now available.

In addition, some instructions on both how to conduct field surveys and the use of computer the template. These instructions are far less than complete and are adequate for those who have already participated in training and/or demonstrations conducted for MIS. It is not the intention of the author that anyone should use those instructions without first attending training

programs. It is anticipated that subsequent publications will provide more insight to the project and the program as well as more information on MIS. It is for that reason that comments and recommendations are welcome.

THE ULTIMATE GOALS OF MIS...

For the ADAP region, the aim of the MIS project is to be able to link information with regards to market information within the region. Another goal of the project is to be able to use information generated with the MIS project as tools or means to provide technical assistance, e.g. appropriate spacing, pests and disease control, appropriate cultural methods.

ACTIVITIES OF THE MIS PROJECT...

Since the purpose of MIS is to develop and maintain computer database for the purpose of crop production forecasts, the main activities are monthly field survey and computer inputting. Surveys are made on a month basis to gather data on (1) new planting and (2) update observation on previously surveyed plantings. These field data are entered into a Microsoft Excel template developed for specifically for the project. A database is developed from which production forecasts are made.

The forecast is an estimate, in this case, estimates of (1) how many pounds of vegetables, root crops, and fruits should be available at any given period of time, e.g. estimated pounds of Cucumber is expected to be produced during the period between March 25, 1999 to June 14, 1999. You could also make a recall estimate with this computer program, e.g. how much produce were

estimated to be produced from December 1, 1998 to December 31, 1999. These forecasts could either be made by crop or by farm. Most of the data being published in this publication are recall estimates from December 1997. Remember the project started in Pohnpei November 1997.

ESTIMATE INCOME...

The ADAP MIS basically is to estimate crop production based on actual crops planted in the field, however, it could also be used estimate gross income. You could use MS Word to publish the information or use MS Excel to modify it to include more information.

In Word, you could create a professional looking document just by adding, say a title and some narratives, even in the local language. You can send the information - forecast by crop or by farm from the MIS template directly to either Word or Excel.

When the data is sent to Excel, you could modify the spreadsheet to include formulas for which you could use to figure income, for example.

OTHER SYSTEMS FOR INCOME ESTIMATES...

There is another MIS or Marketing Information Systems, which was developed by the Technical Assistants funded by the Asian Development Bank. The ADB MIS is used to determine production and income based on actual harvest and market of different crops. The survey questions in the ADB MIS are a little different, they include actual expenses, e.g. labor fertilizers, chemicals, etc. and marketing which the ADAP MIS does not deal with. And in addition to determining farmer's income, the ADB MIS could actually give you a figure on what a farmer made per hour as if he is on salary.

The mention of the ADB MIS in this publication, although brief, is for the purpose of awareness to our clientele or audiences and stakeholders. And it should be noted that the ADB MIS could be implemented to supplement the ADAP MIS effort.

OTHER USES OF MIS....

One could use MS Word to publish the estimated information - forecast. For example, the production estimates, something similar to this publication. You could also use MS Excel to modify the forecasts by adding other information, example, price per pound, etc. and generate other information such as estimated gross income per crop or by farm.

In Word, you could create a professional looking document just by adding, say a title and some narratives in the local vernacular. Add graphics or pictures, etc.

You can send the information - forecast by crop or by farm from the MIS template directly to either Word or Excel.

When the data is sent to Excel, you could modify the spreadsheet to include formulas for which you could use to figure out other parameters, e.g. gross income. Let's take 'gross income' as being something you would like to do because one farmer, e.g. Tolenoa Kilafwakun, the first farmer we surveyed for the MIS, wanted to know how much he could expect during any given period.

Procedure:

1. Open AgProd (Click Start - Program - AgProd). The program will start with the template checking for links between tables (you don't need to know this). Just click OK, OK, OK, three times and you are in the main menu.
2. The main menu will be something that looks like this, click the mouse on Report.
 Data Entry
 Reports
 Queries
 Utilities
 Database Management
 Exit Database
3. The next menu will appear as the following:
 Preview Data Collection sheet
 Preview Production Estimate
 Preview People Tale by Village and Last Name
 Return to main menu

..Click Preview Production Estimate

4. When the next menu appears, there will be two calendars on it. Select the year, month, and day in the first calendar as the beginning of the forecast period.
5. Repeat step 4 in the second calendar as the ending date. You could either make an estimate or forecast by crop or by farm.
6. Click on the long bar under the first Calendar for forecast by crop or
7. Click on similar bar under the second calendar to make forecast by farm.
8. Select print under File menu to print the entire forecast or
9. Select to print to page, e.g. 6 to 6.

NOTE: When you make a forecast, whether by crop or by farm, the forecast will be for all the farms in the database. However, you could print only one farm by selecting the page number.

Suppose you want to send the information to either MS Word or MS Excel.

Remember - the printed forecast in Microsoft Word is very much similar to when it is printed directly in Microsoft Access, the MIS template. Therefore if you will not modify the format, there is no need to send the data to Word for printing.

To send data to Microsoft Excel.

Procedure:

1. On the main menu of Access, not the MIS menu, right about the middle of the menu bar you will see a big W for Word. Excel is hidden on the same menu.
2. Click on the small icon like an upside down triangle-like and you will see the following:
 - a. Publish it with MS Word
 - b. Analyze it with MS Excel
3. Click on Excel. Information for all of the farms in the database will now be sent to Excel.
4. All you have to do now all you have to do is insert formulas.

Procedure:

1. Before you start you will have to delete column A, B, and C, as you are not interested in data in those columns.
2. Go to the column G, second after the heading *SumOfPounds* and put the following formula, =sum(E3*F3).
3. Copy the formula all the way down to the end of the spreadsheet.
4. Type in selling prices for each of the crops in the column between the Yield and where you just put the formula.
5. Print

To Add New Farm to the Database...

Procedure...

1. Open Agprod
2. On the main menu, click on Data Entry, the next menu will appear and on top of the page will be something like this

Observation Date	<input type="text"/>
Add New Farm	<input type="text"/>
FarmID	<input type="text"/>
Crop	<input type="text"/>

3. Click on Add New Farm
4. On the next menu, click on Add New Farmer to People Table and type in First Name, Initials (if any) and Last Name - you may want to enter Village, etc., but not necessary.
5. Click Add Person to Database
6. Click on the Toilet Bowl to go back.

REMEMBER - If you make a mistake while typing in info, click on the toilet bowl before you click the Add Person to Database button. This way, the wrong information will not be saved.

SOME POINTERS FOR THE FIELD SURVEY...

It may not be possible to learn how to conduct the survey or to learn the instructions on the computer use aspects of the program without actual training by someone the first time. And what follows does not give you the entire picture as it does not include all possible circumstances that may be found during field survey

The field survey part of this program is carried out at least once a month and therefore by following the following pointers, the task should be easier and there should be fewer margins for error.

1. Always start at the same point and if possible, in the same sequence as you did the survey in each farm. By doing so, you will follow the sequence of crops in the survey for which you will do the updates on.
2. Do the survey as a group or at least in pairs until you have more experience and could do it by yourself.

3. One person does the recording and the other takes care of the measurements.
4. Insert other observations in the space for Notes, even if you do not think such observation is useful.
5. Make sure to note when you adjusted for number of rows or for row length, e.g. there were 9 rows but because of missing space, you estimated that the contents of the 9 rows would only filled 5 rows. Under the survey, you put 5 rows, but you note under Note something like, '9 rows adjusted.
6. As you complete each farm, don't just leave. Sit down and give the survey to your colleague to review it.
7. Whoever is to review should make sure he did not have any question. If any, discuss and/or go back and measure wherever you don't both agree. Better still, as you complete one crop, right there and then, the recorder should call out all the readings made to the other person to confirm.
8. When there is uneven spacing, measure the length of 3 plants and average.
9. When there is uneven row length, measure the longest and the shortest and average.
10. When there is uneven row spacing, measure the distance between 3 rows and average. For double planting, measure the distance between the first row of plants on the first row to the second row of plants on the second row, that is your space between rows.
11. Use decimal reading only when necessary i.e. vegetables planted in high densities, e.g. Green Onion, Carrots, etc. and round up for the rest.
12. Do not use decimal reading for such crops as Tapioca or Watermelon.

DATABASE AS A REFERENCE SOURCE...

With the ADAP MIS database setup and maintained, it is possible to provide at an instance any and all information regarding individual farmers operation. Let us take a scenario where a farmer is applying for a loan to increase his operation. One of the most important questions that banks will ask is, have you been farming and how much did you farm within the last 6 months or one year ago. Such information may not be so handy for any farmer to provide. However, with the MIS database, such information could be made available, thus saving the farmer and the bank times to response and to verify answers.

Another scenario, let say there was a typhoon that destroyed all the farms on the island and the governor wanted to know what was the extend of the damage. Those farmers who are participating in the MIS program will have a better chance of providing the information. Their claims will be backup with a set of statistics as provided for in the MIS template (database).

Another hypothetical situation...?

Pohnpei State is hosting the next World's Olympic, year 2000, and would like to know what type of vegetables and roots crops are available during the period or how many acres should be planted and when to be able to provide enough for all the visitor (150,000 athletes from the other countries). Such information could be provided in less than half a day.

Figure 1. The following statistics represents estimated production from January 1998 to January 1999 for Pohnpei. A fictitious Unit Price is given to each crop just to illustrate how the template could be used to generate other information such as 'Estimated Sales Values' of crops within any given period of time.

Crop	No of Crops	Area in acres	Est. Yields in Pounds	Unit Cost	Estimated Sales Value in Dollars
Cucumber	45	1.78	69,012	0.75	\$ 51,759.00
Sweet Potato	29	1.36	31,824	0.35	\$ 11,138.40
Eggplant	24	1.31	23,058	0.85	\$ 19,599.30
Squash, Pumpkin	4	0.15	9,344	0.15	\$ 1,401.60
Watermelon	3	0.06	6,192	0.25	\$ 1,548.00
Pepper, Sweet	13	0.25	5,444	1.50	\$ 8,166.00
Beans, Long	7	0.10	3,037	1.50	\$ 4,555.50
Corn, Sweet	3	0.10	2,812	1.25	\$ 3,515.00
Onion, Green Bunching	9	0.15	2,661	2.25	\$ 5,987.25
Bittermelon	6	0.20	2,602	0.95	\$ 2,471.90
Cabbage, Chinese	5	0.15	1,500	0.85	\$ 1,275.00
Gourd, Luffa	1	0.02	1,104	0.45	\$ 496.80
Cabbage, Chinese loose-leaf	7	0.06	920	0.85	\$ 782.00
Squash, Summer	2	0.26	896	0.35	\$ 313.60
Radish, Daikon	5	0.06	663	0.85	\$ 563.55
Tomato, Large	1	0.01	563	0.85	\$ 478.55
Beans, Snap	3	0.05	515	1.75	\$ 901.25
Ginger	1	0.06	482	1.55	\$ 747.10
Kankong	1	0.01	380	1.75	\$ 665.00
Melon, Cantaloupe	1	0.02	377	0.45	\$ 169.65
	170	6.16	163,386		\$ 116,534.45
			81.7 Tons		

Figure 2. The following figures represent Kosrae production forecast for the period March 1, 199 to May 31, 1999.

Crop	No of Crops	Acreage	Est. Yields in lb.
Sweet Potato	7	0.29	11,775
Cucumber	10	0.19	7,565
Cassava	6	0.12	6,088
Taro, Colocasia	6	0.34	2,180
Cabbage, Chinese	10	0.10	1,108
Watermelon	2	0.04	1,029
Tomato, Large	1	0.01	825
Pepper, Sweet	3	0.01	447
Gourd, Bottle	1	0.00	328
Papaya	2	0.03	294
Beans, Long	4	0.01	234
Eggplant	1	0.01	160
Cabbage, Head	1	0.01	150
Squash, Summer	1	0.01	26
Pineapple	1	0.02	6
		1.19	32,215 lbs.

Figure 3. The Marketing Information Systems is for the purpose of making forecasts, that is, production estimates for any given period of time in the future. However, it could also be used to recall production estimates in the past. The following is an illustration of the capability and the usefulness of the computer template. In short, when a database is maintained, one could use production figures in the past for such tasks as grant writing, verifying crop loss, etc.

Dec-97 Crop	No of Crops	Acres	Yields - lbs.
Onion, Green Bunching	3	0.18	4,830
Sweet Potato	3	0.18	4,442
Eggplant	8	0.49	3,837
Cucumber	3	0.17	1,925
Corn, Sweet	1	0.02	759
Bittermelon	1	0.06	638
Pepper, Sweet	2	0.04	300
Squash, Summer	2	0.26	298
Radish, Daikon	1	0.04	241
Cabbage, Chinese loose-leaf	2	0.03	96
Beans, Snap	1	0.06	40
		1.53	17,406
Jan-98 Crop	No of Crops	Acres	Yields - lbs.
Eggplant	11	0.63	3,610
Cucumber	6	0.39	2,834
Sweet Potato	3	0.1	2,588
Squash, Summer	2	0.26	896
Bittermelon	3	0.1	804
Pepper, Sweet	3	0.04	531
Corn, Sweet	1	0.06	471
Cabbage, Chinese loose-leaf	2	0.03	141
Onion, Green Bunching	1	0.03	30
		1.64	11,905
Feb-98 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	5	0.32	3,811
Squash, Pumpkin	1	0.09	3,120
Eggplant	7	0.49	2,626
Sweet Potato	3	0.12	2,201
Onion, Green Bunching	2	0.06	1,397
Corn, Sweet	2	0.07	1,308
Cabbage, Chinese loose-leaf	1	0.02	385
Bittermelon	2	0.06	382
Beans, Snap	1	0.01	77
Pepper, Sweet	1	0.01	75
Beans, Long	1	0	25
		1.25	15,407

Mar-98 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	4	0.24	3,487
Sweet Potato	4	0.14	2,459
Squash, Pumpkin	1	0.09	1,872
Eggplant	5	0.29	1,262
Onion, Green Bunching	5	0.10	877
Pepper, Sweet	1	0.01	273
Bittermelon	2	0.06	147
Beans, Snap	1	0.04	90
Radish, Daikon	1	0.03	41
Beans, Long	1	0	16
		1.0	10,524

Apr-98 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	2	0.05	878
Sweet Potato	3	0.11	744
Eggplant	3	0.14	474
Bittermelon	1	0.02	381
Onion, Green Bunching	3	0.03	257
Radish, Daikon	1	0.03	98
Pepper, Sweet	1	0.01	77
Cabbage, Chinese	1	0.01	73
Beans, Long	1	0	54
Beans, Snap	1	0.04	6
		0.44	3042

May-98 Crop	No of Crops	Acres	Yields - lbs.
Sweet Potato	2	0.06	1,016
Cucumber	1	0.03	899
Cabbage, Chinese	1	0.01	51
Beans, Long	1	0	37
Ginger	1	0.06	30
		0.16	2,033

Jun-98 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	4	0.23	1,119
Ginger	1	0.06	452
Eggplant	2	0.09	402
Cabbage, Chinese loose-leaf	3	0.01	18
Pepper, Sweet	1	0.01	12
Onion, Green Bunching	1	0.03	2
		0.43	2,005

Jul-98 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	9	0.42	7,680
Corn, Sweet	1	0.03	1,033
Eggplant	2	0.09	959
Beans, Long	1	0.01	684
Cabbage, Chinese	1	0.02	381
Pepper, Sweet	1	0.01	364
Beans, Snap	1	0.01	343
Onion, Green Bunching	1	0.03	49
Kankong	1	0.01	34
		0.63	11,527

Aug-98 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	14	0.63	12,296
Sweet Potato	4	0.17	4,484
Squash, Pumpkin	1	0.05	1,656
Eggplant	4	0.16	1,119
Beans, Long	1	0.01	1,111
Cabbage, Chinese	1	0.1	726
Radish, Daikon	4	0.04	477
Kankong	1	0.01	65
Pepper, Sweet	1	0.01	6
		1.18	21,940

Sep-98 Crop	No of Crops	Acres	Yields - lbs.
Sweet Potato	10	0.48	12,473
Cucumber	19	0.64	8,821
Eggplant	7	0.44	1,896
Squash, Pumpkin	2	0.05	1,132
Pepper, Sweet	3	0.09	553
Cabbage, Chinese loose-leaf	1	0	376
Beans, Long	2	0.05	159
Cabbage, Chinese	2	0.11	151
Tomato, Large	1	0.01	141
Kankong	1	0.01	63
Radish, Daikon	2	0.01	47
Onion, Green Bunching	1	0.01	7
		1.9	25,819

Oct-98 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	21	0.68	10,342
Eggplant	6	0.39	3,129
Squash, Pumpkin	2	0.02	1,364
Pepper, Sweet	5	0.11	1,282
Watermelon	2	0.04	1,200
Tomato, Large	1	0.01	422
Beans, Long	2	0.05	410
Melon, Cantaloupe	1	0.02	189
Kankong	1	0.01	65
Cabbage, Chinese	1	0.01	7
Onion, Green Bunching	1	0.01	6
		1.35	18,416

Nov-98 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	18	0.52	9,022
Watermelon	3	0.06	4,958
Eggplant	6	0.39	2,941
Gourd, Luffa	1	0.02	1,035
Pepper, Sweet	4	0.09	953
Sweet Potato	2	0.05	760
Squash, Pumpkin	1	0.01	200
Melon, Cantaloupe	1	0.02	189
Cabbage, Chinese	1	0.01	111
Kankong	1	0.01	63
Beans, Long	1	0.02	22
Onion, Green Bunching	1	0.01	8
		1.21	20,262

Dec-98 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	12	0.37	5,112
Sweet Potato	4	0.32	4,669
Eggplant	5	0.37	2,165
Pepper, Sweet	3	0.07	1,303
Beans, Long	1	0.02	223
Bittermelon	1	0.05	207
Gourd, Luffa	1	0.02	69
Kankong	1	0.01	65
Watermelon	1	0.01	35
Onion, Green Bunching	1	0.01	3
		1.25	13,851

Jan-99 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	5	0.19	2,586
Eggplant	3	0.14	904
Bittermelon	1	0.05	681
Sweet Potato	1	0.02	432
Beans, Long	2	0.05	295
Kankong	1	0.01	25
Onion, Green Bunching	1	0.02	23
Pepper, Sweet	1	0	16
	15	0.48	4,962

Feb-99 Crop	No of Crops	Acres	Yields - lbs.
Eggplant	3	0.16	1,359
Cucumber	6	0.18	1,288
Beans, Snap	1	0.01	113
Beans, Long	1	0.03	84
Radish, Daikon	1	0	55
Onion, Green Bunching	2	0.04	25
		0.42	2,924

Mar-99 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	10	0.3	3,311
Eggplant	6	0.26	1,851
Pepper, Sweet	2	0.09	791
Sweet Potato	1	0.03	763
Beans, Snap	1	0	465
Beans, Long	1	0.03	310
Radish, Daikon	2	0.02	270
Pepper, Hot	1	0.03	102
Corn, Sweet	1	0.01	96
Cabbage, Chinese	1	0.02	48
Onion, Green Bunching	1	0.02	22
		0.81	8,029

Apr-99 Crop	No of Crops	Acres	Yields - lbs.
Cucumber	9	0.23	4,053
Eggplant	4	0.16	1,311
Sweet Potato	5	0.11	1,182
Beans, Long	1	0.03	191
Pepper, Sweet	1	0.05	155
Pepper, Hot	1	0.03	98
			6,990

May-99 Crop	No of Crops	Acres	Yields - lbs.
Sweet Potato	6	0.17	2,748
Cucumber	6	0.19	2,232
Eggplant	2	0.08	471
Pepper, Hot	1	0.03	102
		0.47	5,553

Figure 4. The inclusion of the following summary is to illustrate how the MIS template generates information or forecast for by farm. Since the author did not have any prior permission to publish by names, and that such information is confidential, only one forecast by farm is included in this publication. And to protect the confidentiality of farmers, names and farm IDs are not included.

Crop Production Estimate Summary by Farm

For the Period 1/1/98 to 1/31/99

Crop	Planting ID	Date Planted	Acres	Estimated Yield for Period (lbs.)
Sweet Potato	3080	10/15/97	0.06	986
Eggplant	3081	10/1/97	0.03	626
Eggplant	3082	8/1/97	0.03	21
Eggplant	3083	8/1/97	0.06	34
Squash, Pumpkin	3084	11/1/97	0.09	4992
Eggplant	3085	11/15/97	0.08	1925
Cabbage, Chinese loose-leaf	3086	11/21/97	0.01	113
Eggplant	3087	11/1/97	0.06	987
Eggplant	3089	9/1/97	0.14	922
Cucumber	3091	12/2/97	0.12	2834
Onion, Green Bunching	3094	12/2/97	0.03	961
Cucumber	3095	11/1/97	0.08	1772
Corn, Sweet	3097	12/2/97	0.02	837
Cucumber	3098	10/1/97	0.03	258
Bittermelon	3099	9/15/97	0.06	98
Bittermelon	3100	10/15/97	0.02	296
Bittermelon	3101	11/15/97	0.03	440

Cucumber	3144	12/5/97	0.08	7038
Beans, Long	3145	12/5/97	0.00	41
Beans, Snap	3146	12/5/97	0.01	77
Corn, Sweet	3147	11/13/97	0.06	942
Onion, Green Bunching	3148	12/5/97	0.03	685
Onion, Green Bunching	3149	1/15/98	0.01	274
Beans, Snap	3150	1/15/98	0.04	95
Beans, Long	3162	2/5/98	0.00	91
Bittermelon	3163	1/5/98	0.02	440
Bittermelon	3164	10/11/97	0.02	440
Radish, Daikon	3165	2/4/98	0.03	139
Onion, Green Bunching	3166	1/5/98	0.01	321
Pepper, Sweet	3167	1/6/98	0.01	350
Onion, Green Bunching	3168	1/5/98	0.01	321
Cabbage, Chinese loose-leaf	3169	1/9/98	0.02	385
Eggplant	3170	9/19/97	0.07	1650
Cabbage, Chinese	3172	2/20/98	0.01	124
Cucumber	3173	2/25/98	0.03	1682
Squash, summer	3174	10/15/97	0.04	112
Squash, summer	3175	10/15/97	0.22	784
Pepper, Sweet	3188	5/1/98	0.01	375
Onion, Green Bunching	3189	5/1/98	0.03	51
Squash, Pumpkin	3190	5/1/98	0.05	2304
Cucumber	3191	5/1/98	0.06	2022
Eggplant	3202	4/14/98	0.02	954
Eggplant	3203	4/14/98	0.06	1860
Corn, Sweet	3204	4/30/98	0.03	1033
Cabbage, Chinese loose-leaf	3205	5/11/98	0.00	8
Cabbage, Chinese loose-leaf	3206	5/11/98	0.00	5
Cabbage, Chinese loose-leaf	3207	5/11/98	0.00	5

Beans, Snap	3208	5/11/98	0.01	343
Cucumber	3228	6/18/98	0.03	530
Cucumber	3229	6/18/98	0.03	530
Eggplant	3230	6/18/98	0.04	728
Eggplant	3231	6/18/98	0.04	728
Radish, Daikon	3233	6/18/98	0.02	274
Radish, Daikon	3234	6/18/98	0.01	137
Cabbage, Chinese	3235	6/18/98	0.10	823
Melon, Cantaloupe	3237	7/12/98	0.02	377
Cucumber	3238	7/15/98	0.02	1094
Cucumber	3240	7/12/98	0.02	1094
Radish, Daikon	3242	7/2/98	0.01	38
Radish, Daikon	3243	7/2/98	0.00	75
Cucumber	3244	7/29/98	0.02	1467
Cucumber	3245	8/16/98	0.02	978
Cabbage, Chinese loose-leaf	3246	8/8/98	0.00	376
Eggplant	3303	10/1/98	0.05	974
Bittermelon	3307	10/4/98	0.05	888
Onion, Green Bunching	3309	11/12/98	0.02	23
Cucumber	3314	12/2/98	0.08	106
Beans, Long	3315	11/2/98	0.03	237
Beans, Long	3316	9/29/98	0.02	302
Pepper, Sweet	3317	10/14/98	0.00	38