Vegetarian 86-02

February 17, 1986

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I. NOTES OF INTEREST

A. New Publications


B. Vegetable Crops Calendar


March 24, 1986. IFAS Weed Workers. 1304 Fifield Hall, Gainesville. 1:30 - 5:00 P.M.


II. COMMERCIAL VEGETABLES

A. Onion Varieties For Florida.

Onions are a relatively minor crop in Florida, but there appears to be potential for increased production for local use and shipping. Onions are marketed in Florida as dry bulbs and as green bulbs, usually with a green top several inches long. The green form, known as 'Florida Sweets' are sold through local markets and roadside stands.

The principal limitations to increased production are identification of varieties better suited to Florida conditions, difficulty in drying bulbs that mature as the summer rainy season approaches, and developing a market for 'Florida Sweets'.

Growers should evaluate some new varieties each year to observe performance on their own farm. Plant only those that show real promise based on IFAS, industry or grower trials. A limited number of new varieties should be evaluated so that observations on plant performance and characteristics and yields can be noted and recorded. It is relatively easy to establish a trial, but very time consuming to
make all of the observations necessary to make a decision on adoption of a new variety for large scale production.

Some factors to consider before adopting a variety are:

*Yield - The variety should have the potential to produce crops at least equivalent to those already grown. Because of their minor importance, commercial yield data is not available, however, yields of 500 to 1000 50-lb bags have been obtained in various experimental plantings.

*Disease Resistance - The most economical and effective means of pest management is through the use of varieties with genetic resistance to disease. Some onion varieties are resistant or tolerant to pink root, and these varieties should be used where this disease is expected to be present. When all other factors are about equal, it would be prudent to select a variety with needed disease resistance.

*Horticultural Quality - Desirable characteristics in an onion variety include the ability to withstand low temperature stress, freedom from bolting, earliness, and the tendency to mature and cure quickly.

*Adaptability - Successful varieties must perform well under the range of conditions usually encountered on the individual form. Only short-day onions can be grown successfully in Florida.

*Market Acceptability - Well cured, large size (more than 3 in. in diameter), yellow, Grano or Granex-type onions are most readily accepted in the marketplace. There is a limited demand for white and red-skinned onions.

Usually, there is a direct relationship between pungency and storage life, i.e. short-day onions which are generally mild do not store as well as long-day or northern onions which are more pungent. Among the short-day onions, the red-skinned types generally store better than the yellow types which in turn store better than the white types.

Yellow-Skinned Bulb Onion Varieties:

Dessex is a very early, short-day hybrid developed by ARCO Seed Co. Bulbs are thick-flat shaped, with firm flesh which is slightly more pungent than Granex. Tolerant to Pink Root.

Granex 33 is an early, short-day hybrid developed by Asgrow. Bulbs are medium-thick flat to deep-flat shaped. Tolerant to Pink Root.

Granex 429 is a medium-early, short-day hybrid developed by Asgrow. Bulbs are deeper and less tapered than other Granex hybrids and are nearly round.
Granex Yellow PRR is a medium early, short-day hybrid developed by the USDA and Texas Agricultural Experiment Station. Bulbs are thick-flat shaped. Tolerant to Pink Root.

Henry's Special PRR is a very early, short-day hybrid developed by ARCO Seed Co. Bulbs are flattened-globe shaped. Tolerant to Pink Root.

Texas Grano 502 PRR is an early, short-day open-pollinated variety developed by the Texas Agricultural Experiment Station. Bulbs are top-shaped. Tolerant to Pink Root.

White-Skinned Bulb Onion Varieties:

White Granex PRR is a medium-early, short-day hybrid developed by the USDA. Bulbs are thick-flat shaped. Tolerant to Pink Root.

Red-Skinned Bulb Onion Varieties:

Tropicana Red PRR is a medium maturity, short-day hybrid developed by ARCO Seed Co. Bulbs are thick-flat shaped and pungent.

Red Grano PRR is a medium maturity, open-pollinated variety developed by ARCO Seed Co. Bulbs are top-shaped and mild. Tolerant to Pink Root.

Green Bunching Onion Varieties:

White Portugal is an early, open-pollinated, white, mild flavored bunching onion.

Beltsville Bunching is an open-pollinated, Japanese bunching type developed by the USDA. Tolerant to Pink Root and Smut.

Perfecto Blanco is an open-pollinated variety developed by Northrup King. Bulbs slowly and is ideal for stripping.

(Maynard Veg. 86-02)

B. U.S. Fresh Market Vegetable Production: 1985 Summary

The Crop Reporting Board of the USDA has released 1985 production data for the ten fresh market vegetables currently included in their estimates. Overall, 218 million hundredweight were harvested from 1.07 million acres that were valued at 2.85 billion dollars. Harvested acreage declined 1%, production was unchanged and value decreased 9% as compared to 1984.

Florida continued to rank second in harvested acres, production and value of the ten crops included in the data (Table 1). Note that many of Florida's important crops are not included, e.g. cabbage, cucumber, eggplant, escarole and endive, pepper, radish, squash, watermelon.
Table 1. Leading Fresh Market Vegetable States in 1985.¹

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Harvested Area % of Total</th>
<th>Production % of Total</th>
<th>Value % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California</td>
<td>44.4</td>
<td>California 49.4</td>
<td>California 49.7</td>
</tr>
<tr>
<td>2</td>
<td>Florida</td>
<td>12.3</td>
<td>Florida 11.9</td>
<td>Florida 18.4</td>
</tr>
<tr>
<td>3</td>
<td>Texas</td>
<td>5.6</td>
<td>Arizona 6.6</td>
<td>Arizona 5.0</td>
</tr>
<tr>
<td>4</td>
<td>Arizona</td>
<td>5.4</td>
<td>Texas 4.1</td>
<td>Texas 4.5</td>
</tr>
<tr>
<td>5</td>
<td>Michigan</td>
<td>5.1</td>
<td>Oregon 3.9</td>
<td>New York 3.2</td>
</tr>
</tbody>
</table>

¹Includes asparagus, broccoli, carrot, cauliflower, celery, sweet corn, lettuce, honeydew melon, onion, tomato.

Florida ranked first in tomato and sweet corn production, second in celery production, third in lettuce production, and fourth in carrot production in the United States. Processing crop data in the same report showed small acreages of snap beans and pickles being reported from the state.

(Maynard Veg. 86-02)

C. 1986 Watermelon Institute Program is Set.

The 1986 Watermelon Institute program appears below. It will be held on Friday, March 21, 1986 in Salon 3 of the Sheraton Maitland Hotel in Orlando. I think we have a good program with timely topics, some of which were inserted based on responses from our questionnaire from last year. We are holding the program in conjunction with the Florida Watermelon Association meetings as an experiment to see what kind of attendance we will receive. Let's go all-out in advertising the program to our growers. To help in this regard, you might point out that there will be a free social hour after our program which hopefully will encourage growers to stay and participate in the Watermelon Association meetings.

(Hochmuth Veg. 86-02)
1986 IFAS-WATERMELON INSTITUTE
Sheraton Maitland
Salon 3
Friday, March 21, 1986

PROGRAM

12:00 to 1:00 PM  Registration

1:00  Introduction  - Dan Cantliffe, Vegetable Crops Department, Gainesville

1:10  Watermelon Varieties for Florida - Jim Crall, AREC, Leesburg

1:30  Soil Testing and Fertility Recommendations for Optimum Watermelon Production - Ed Hanlon, Soil Science Department, Gainesville

1:50  Mulching, Transplanting, and Row Cover Practices for Early Watermelon Production - Steve Olson, NFREC, Quincy

2:15  Plant Spacing for Optimum Watermelon Yields - Gary Brinen, Alachua County Extension Service, Gainesville

2:30  Irrigation Methods and Pointers for Watermelon Production in Florida - Dorota Hamon, Agricultural Engineering Department, Gainesville

2:50  Break

3:00  Double Cropping - Principles and Practices - George Hochmuth, Vegetable Crops Department, Gainesville

3:20  Packing and Shipping Florida Watermelons - Mark Sherman, Vegetable Crops Department, Gainesville

3:35  Marketing Possibilities for Florida Watermelons and the Potential for Icebox Varieties - Panel Discussion

4:15  Environmental Concerns and Pesticide Issues Confronting Florida Watermelon Growers - Daniel Botts, Florida Fruit and Vegetable Association, Orlando

4:50  Comments from the Florida Watermelon Association - Jerry Brown, Florida Watermelon Association

5:00  Adjourn
III. HOME VEGETABLE GARDENING

A. Freeze-Damage Report on Garden Vegetables.

January can always be expected to be a cold month in Florida. Fortunately, cold fronts blasting the state are of short duration, except in rare instances such as occurred in December 1983 and January, 1985. However, for gardeners who have a winter garden at the time one of these freezes hits the state, considerable damage to vegetables often does occur.

While spring (February through May) is the major gardening season for most people here in Florida, a considerable number do grow vegetables through the winter. In south Florida, both warm and cool season vegetables are found mixed in garden plots, while in central and north Florida, mostly the cool season vegetables are attempted.

Damage from mid-winter freezes usually is light on cool season vegetables, generally throughout the state. Of course, the warm-season items such as cucumbers and tomatoes are injured or even killed, depending upon the severity of the cold, the physiological condition (hardiness) of the vegetables, and the amount of cold protection provided.

A comparison of the previous three freezes and the damages inflicted on garden vegetables at Gainesville reveals some interesting observations. Since Gainesville is in the northern district, some of the state's coldest temperatures (but not the coldest) were recorded here. In December of 1983 (the Christmas freeze), lowest temperatures were in the 16-18°F range. Damage to cool-season vegetables was considerable due to the cold occurring when vegetables were not overly hardy. In January, 1985, the "Super-bowl-cold" dropped temperatures to 10-15°F with highs only in the 20's. Again, even cool season vegetables were heavily damaged, this time primarily due to the absolute severity of the cold. However, the cold wave which struck Gainesville in January, 1986, resulted in minimal damage to cool season vegetables, even though temperatures dipped to 18°F. Damage was not severe primarily because the temperature did not stay low for long (only about 4-6 hours), and because the cold came late in the season (January 27) when the vegetables had become thoroughly hardened. In fact, the temperature climbed back to a high of 40°F on the day after the coldest night.

The following is a list of the vegetables which were growing in a mature to over-mature stage in the Gainesville observation garden, completely unprotected, during the January, 1986, freeze.
Table 1. Cool-season vegetables surviving the 18°F freeze, January 27, 1986, Gainesville.

<table>
<thead>
<tr>
<th>Vegetable</th>
<th>Vegetable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans, fava</td>
<td>Coriander</td>
</tr>
<tr>
<td>Beans, garbanzo</td>
<td>Endive</td>
</tr>
<tr>
<td>Beets</td>
<td>Fennel</td>
</tr>
<tr>
<td>Broccoli</td>
<td>Kale</td>
</tr>
<tr>
<td>Brussels sprouts</td>
<td>Kohlrabi</td>
</tr>
<tr>
<td>Burdock</td>
<td>Leeks</td>
</tr>
<tr>
<td>Cabbage</td>
<td>Mint</td>
</tr>
<tr>
<td>Carrot</td>
<td>Mustard</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>Onion</td>
</tr>
<tr>
<td>Catnip</td>
<td>Parsley</td>
</tr>
<tr>
<td>Celeriac</td>
<td>Parsnip</td>
</tr>
<tr>
<td>Celery</td>
<td>Radish</td>
</tr>
<tr>
<td>Chard</td>
<td>Sage</td>
</tr>
<tr>
<td>Chicory</td>
<td>Salsify</td>
</tr>
<tr>
<td>Chinese cabbage</td>
<td>Spinach</td>
</tr>
<tr>
<td>Chives</td>
<td>Tarragon</td>
</tr>
<tr>
<td>Chrysanthemum, edible</td>
<td>Thyme</td>
</tr>
<tr>
<td>Collard</td>
<td>Turnip</td>
</tr>
</tbody>
</table>

While all of the vegetables listed survived, some such as coriander and fennel, did receive obvious leaf burn of varying degrees. Keep in mind that the absence of a particular vegetable does not imply that it was killed. There were no cool-season vegetables killed at this site. Other vegetables not mentioned just were not planted here. Also, gardeners should be expecting some latent injury to show up. For example, premature seeding (bolting) may become a problem with some things such as celery and Chinese cabbage. It usually occurs on larger, older, vigorously growing plants exposed to below 40°F for two weeks or more. Extension agents and others should learn several lessons from an observation such as this. Among them are 1) that winter gardens can be a successful venture even in north Florida, and 2) which specific vegetables might be expected to survive unprotected in similar situations in another year.

(Stephens Veg. 86-02)

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