Vegetarian 96-01

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I. NOTES OF INTEREST

A. Vegetable Crops Calendar.

March 7-14, 1996. Florida Postharvest Horticulture Institute and Industry Tour. Contact Steve Sargent, Coordinator.

II. COMMERCIAL VEGETABLES

A. 1995 Amendments To The Perishable Agricultural Commodities Act (PACA).

President Clinton signed a bill amending the PACA on November 15, 1995. The amendments significantly change PACA’s operation and growers who rely on PACA to enforce fair trading practices need to be aware of the changes.

Finally, dispute resolution without PACA means court action. Without PACA, growers will need to go to court to get paid. The alternative to PACA is expensive litigation.

KEY PROVISIONS OF THE NEW LAW

1. License fees

Traders are still exempt if they purchase less than $230,000 of produce in a calendar year, unless they purchase jobbing quantities from someone else. License fees are set at $550 plus $200 for each branch operated by the primary licensee in excess of nine such facilities, with a cap of $4,000. License fees are set for three years. After that they can be increased without congressional approval. Retailer’s license fees are phased out over the next three years.

2. Slow Pay

USDA now has the authority to assess civil penalties, not to exceed $2,000 for each violation or each day the violation continues. Under the old law, the only action USDA could take against slow pay/no pay was either license suspension or revocation. As a result, slow pay was rarely if ever enforced because of the severity of the sanction. Now, USDA has the ability to penalize slow pay/no pay with fines, although it is not yet clear the process they will use to determine slow pay violations.

3. Trust provisions

For licensees, trust benefits are preserved merely by including a trust rights statement on the invoice. There is no need to prepare and send trust notices to USDA and the buyer. For non-licensees, a trust notice must still be prepared and sent to the buyer in the time...
frames required under the old law. However, non-licensees do not need to send a trust notice to USDA anymore.

4. Rebates

The new PACA also adds a subsection defining sufficient disclosure of collateral fees and expenses (rebates). The use of collateral fees and expenses is one reason why retailers/wholesalers sought repeal of PACA. USDA considers failure to disclose their use as an unfair trade practice. The law now defines what constitutes sufficient disclosure and USDA will probably require disclosure of rebates on invoices. Collateral fees and expenses can be many things, but most commonly are rebates and/or promotional allowances. For example, if a supplier has a contract with a hospital to deliver weekly shipments of fruits and vegetables for cost plus 7%, sufficient disclosure means that promotional or volume discounts must be listed on the face of the weekly invoice - an unfair trade practice as defined by USDA if it is not.

5. Unfair trade practices

It is now illegal for producers to misrepresent the character, kind, grade, quality, quantity, size, pack, weight, condition, degrees of maturity, or state, country, or region of origin of any perishable commodity. It is also illegal for producers to remove signs on containers if that sign contained a statement signifying that the container complied with federal or state law as to grade or quality. Finally, it is now illegal for producers to substitute in the contents of a load after it has been officially inspected.

6. Misbranding

The new law limits misbranding liability solely to those who could have knowledge of a misbranding and the ability to correct it.

7. Investigations

USDA investigations begin only after it receives a written complaint. USDA must then notify the company of the nature of the investigation and must keep the identity of the person or company filing the complaint confidential. This is important because filing a complaint often terminates important business relationships. Filing fees of $60 and $300 for informal and formal complaints become a permanent part of the law.

WHAT IS MISSING?

1. The bill does not address first lien treatment in bankruptcy cases for growers who have filed valid trust notices.

2. The bill does not extend protection to transactions involving Puerto Rico and other U.S. territories.

3. The bill does not extend protection to cut flowers.

This statement is taken from a memorandum prepared by Kevin Morgan of the Florida Farm Bureau Federation.

(Maynard, Vegetarian 96-01)
B. N Fertilization of Carrots on Sandy Soils.

During the winter of 1994-95, we evaluated carrot production (nantes and imperator types) on sandy soils in Gainesville, FL. Three plantings, 23 Nov., 14 Dec., 1994, and 17 Jan, 1995 were used. N fertilization rates included 50, 100, 150, and 200 lb N/acre plus a zero-N check treatment. No P was applied, however all carrots received 150 lb K₂O/acre. N and K was applied in split applications part incorporated in the soil before planting and the remainder in three sidedressings during the season at approximately the 2, 4, and 6-inch plant height stages.

Two rows of carrots were planted about 12 inches apart on raised, pressed beds. The beds were 24 inches wide at the top and were spaced 4 feet apart center-to-center. Irrigation was by overhead sprinklers as needed to maintain tensiometers at -10 to -12 centibars at 8 inches deep in the bed. No pesticides were required on the first planting, however, labeled pesticides were used for foliar diseases on plantings 2 and 3.

Carrots were mechanically lifted at harvest and graded for root size. The responses for marketable root yield across N treatment for the three plantings are presented in the following figures. Yield was better for the first planting than the latter two plantings and ‘Choctaw’, the imperator carrot always out yielded ‘Early Scarlet Nantes’, the nantes carrot. In all three plantings and for both carrot types, most of the positive response to N fertilization occurred from zero to 100 lb N/acre. Yield leveled off between 100 and 150 lb N/acre and even decreased slightly as N rate continued to increase. Current N recommendations (as of 1995) are for 150 lb N/acre and data from these three plantings of carrot support this N recommendation.

(Hochmuth, Vegetarian 96-01)
Institute Program: March 7 and 8
Holiday Inn West, Gainesville

March 7: Morning Session

Postharvest Biology of Horticultural Crops
Dr. Don Huber, Horticultural Sciences Dept.

Applying HACCP Principles to Fresh Produce Operations
Dr. Charlie Sims, Food Science & Human Nutrition Dept.

Maintaining Quality during Harvest and Handling Operations
Dr. Steve Sargent, Horticultural Sciences Dept.

Understanding Chilling Injury and Recognizing Its Symptoms
Dr. Greg McCallum, USDA Horticultural Research Laboratory, Orlando

Effective Sanitation of Postharvest Handling Systems
Dr. Jerry Bartz, Plant Pathology Dept.

Efficient Precooling Operations
Dr. Mike Talbot, Agricultural & Biological Engineering Dept.

Luncheon

Featured Speaker:
Dr. Christine T. Stephens, Dean for Extension
Institute of Agricultural & Food Sciences
University of Florida

Afternoon Session

Nonchemical Alternatives to Methyl Bromide for Quarantine Treatment
Dr. Jeff Brecht, Horticultural Sciences Dept.

Update on Refrigeration Systems and Issues
Dr. Direlle Baird, Agricultural & Biological Engineering Department

Extending Postharvest Quality Using Controlled and Modified Atmospheres
Dr. Khe Chau, Agricultural & Biological Engineering Dept.

Alternative Strategies for Marketing Tomatoes
Dr. John VanSickle, Food & Resource Economics Dept.

Maintaining Postharvest Quality of Ornamental Crops
Dr. Dave Clark, Environmental Horticulture Dept.

Social Hour & Banquet

March 8: Morning Session

Current Status of Mechanical Harvest of Horticultural Crops
Dr. Galen K. Brown, Dept. of Citrus, Citrus Research and Education Center, Lake Alfred

Maintaining Postharvest Quality of Tropical Fruits
Ms. Maria Trunk, Manager of Postharvest Technology,
Brooks Tropicals, Homestead

Sensor Technologies for Postharvest Handling
Dr. Bill Miller, Citrus Research and Education Center, Lake Alfred

Maintaining Postharvest Quality of Citrus
Dr. Jackie Burns, Citrus Research and Education Center, Lake Alfred

Maintaining Postharvest Quality of Fresh-Cut Fruits and Vegetables
Dr. Liz Baldwin, U.S.D.A. Citrus & Subtropical Products Laboratory, Winter Haven

Maintaining Postharvest Quality of Fresh-Cut Citrus
Dr. Peter Petracek, Dept. of Citrus, Citrus Research and Education Center, Lake Alfred

Luncheon

Afternoon Session

Demonstrations at postharvest research facilities for horticultural crops at the University of Florida.

a) Postharvest Quality Management

Demonstrations will emphasize the accurate measurement of key quality parameters such as harvest maturity, color, flesh firmness and flavor; beneficial and detrimental effects of various handling techniques on the resultant quality of a variety of crops; effective sanitation of handling systems.

Dr. Jeff Brecht and Dr. Steve Sargent
Horticultural Sciences Department:

Dr. Jerry Bartz, Plant Pathology Department

b) Optimizing Cooling Operations

Techniques will be presented for accurately measuring air and pulp temperatures, relative humidity, air flow and function of a typical refrigeration system and several precooling methods.

Dr. Mike Talbot, Dr. Khe Chau and Dr. Direlle Baird
Agricultural & Biological Engineering Department

A display area featuring industry exhibits and materials will be available on both days.

Industry Tour: March 11-14

The Postharvest Industry Tour will provide an opportunity to experience first hand the latest technologies for handling and shipping a variety of horticultural crops. Participants will visit harvest, packing and shipping operations throughout central and south Florida, as well as a port facility and warehouse operations.

For more information contact Dr. Steve Sargent, Institute Coordinator: Tel. 352-392-1928, ext. 215 Fax. 352-392-5653
III VEGETABLE GARDENING

A. New Vegetable Varieties for 1996.

Every year along about January as I get my new seed company catalogs I marvel at the new entries and wonder how they will perform in Florida gardens. Ultimately these new seeds are purchased and grown by gardeners across the state, and I eventually (perhaps after 2 or 3 years) hear some feedback on their productivity. Fortunately, Master Gardeners can and do help speed up this process. Here in Florida they plant demonstration gardens and include new varieties along with the old standards for comparison.

The National Gardening magazine out of Burlington, VT has a network of gardeners, some of whom must be Master Gardeners, who trial the “new-but-not-yet-released” vegetable varieties that the companies plan to release. These testers are a diverse group from Alaska to Florida who grow the new varieties and report back to NG horticulturist Charlie Nardozzi the results of the trials. While not very scientific, this information from NG can be very useful in determining what to plant and grow in 1996. Obviously, one must conclude that the results might have been different if the testing had been done entirely in Florida.

In 1995 the NG group tested 22 of about 100 new offerings which would show up in the 1996 catalogs. While there were many outstanding varieties that the testers would recommend for gardeners to try, they picked 10 as the most promising. Table 1 shows the ranking of these top-10 picks according to performance and who would buy the seed in 1996. Following the table are descriptions of these ten varieties.

Table 1. National Gardening top ten new vegetable varieties for 1996.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rank</th>
<th>Would buy in 1996 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Senorita' pepper</td>
<td>8.00</td>
<td>84</td>
</tr>
<tr>
<td>'Sizzler' pepper</td>
<td>8.00</td>
<td>78</td>
</tr>
<tr>
<td>'Early Choice' corn</td>
<td>7.73</td>
<td>73</td>
</tr>
<tr>
<td>'Sugar Crunch' cucumber</td>
<td>7.33</td>
<td>72</td>
</tr>
<tr>
<td>'Optima' lettuce</td>
<td>7.88</td>
<td>63</td>
</tr>
<tr>
<td>'All Season' cucumber</td>
<td>7.60</td>
<td>65</td>
</tr>
<tr>
<td>'Jade A' hubbard squash</td>
<td>7.30</td>
<td>66</td>
</tr>
<tr>
<td>'Miracle Sweet' tomato</td>
<td>7.63</td>
<td>62</td>
</tr>
<tr>
<td>'Long Pie' pumpkin</td>
<td>7.07</td>
<td>66</td>
</tr>
<tr>
<td>'Aria' cucumber</td>
<td>7.61</td>
<td>61</td>
</tr>
<tr>
<td>'Bush Big Boy' tomato</td>
<td>7.38</td>
<td>62</td>
</tr>
</tbody>
</table>

*Rank = 1 = low, 10 = high (overall appraisal).*
‘Senorita’ (60 days from transplant) is a large-sized hybrid jalapeno pepper with high yields and a very mild flavor.

‘Sizzler’ (65 days from transplant) is a compact bush hybrid pepper that produces large, 10-inch, moderately hot peppers that turn red early. It out yielded Hungarian Hot Wax in these tests.

‘Early Choice’ hybrid sweet corn matures in 65 days from seed, and produces 2 yellow ears per stalk. It has the “sugar enhanced” gene, so is extra sweet.

‘Sugar Crunch’ hybrid cucumber (50 days) is a small slicing cucumber that may be used young as a pickler or when larger for slicing into salads.

‘All Season’ hybrid (49 days) is an early, all female flowering (gynoecious) slicing cucumber.

‘Aria’ cucumber produces 4 to 6 inch long bitter-free slicing fruits, but they are very thin skinned and the vines are not as robust as many other varieties.

‘Optima’ is a butterhead type of lettuce that performed as well or better than old standards such as ‘Bibb’ and ‘Buttercrunch’. ‘Optima’ has slightly frilled light green leaves.

‘Long Pie’ pumpkin (95 days) was described as an ‘oversized zucchini’ when ripe, with a smooth texture and great flavor rivaling any cooking pumpkin.

‘Jade A’ is a hubbard type of winter squash developed by Cornell University. It has a large vine (someone called it “northern Kudzu”), but produces five or six 8-pound fruits per vine. Keep in mind that foliage diseases often make growing hubbards in Florida somewhat risky.

‘Miracle Sweet’ indeterminate hybrid tomato (67 days from transplant) graded out highest of the four tomatoes tried. For some testers it produced an abundance of solid, crack-free, sweet-tasting fruits, but they were a bit small.

‘Bush Big Boy’ hybrid (71 days transplant to harvest) is like other Big Boys except it produces its large-size fruits on a compact, bush plant rather than the typical tall-vining characteristic of the indeterminate varieties.

Conclusion. These “test” results indicate that all of these varieties are worthy of trial here in Florida. But the new seed catalogs are chock full of items to try, both new and old. Keep in mind that our Ext. Cir SP 103 is still the guide to follow for those varieties with best performance records in this state. A revised version will soon be off the press. Watch for it.

(Stephens, Vegetarian 96-01)
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