Gentlemen:

Let's review some new developments (and possibly some old) in the field of vegetable production. Many of these have already been mentioned in magazine and news articles, grower meetings, vegegrams, etc. In selecting the items to be discussed, you may find that we missed some important developments. If so, please drop us a note so that it can be included in future newsletters.

**EXTENDER:** A new all-purpose bush, green, snapbean. Extender was bred and released by Dr. J. C. Hoffman of the Southeastern Vegetable Breeding Laboratory, Charleston, South Carolina. Many of you will recognize Extender as B2567-1 the code number under which it was tested in Florida for a number of years. Its performance was quite satisfactory in most Florida tests. It is reportedly suitable for fresh market and freezing. Seed is being increased by eleven seed companies and it should be generally available now.

**INDIAN RIVER:** A new tomato variety possessing moderate resistance to graywall. Credit for this important contribution goes to Mr. N. C. Hayslip of the Indian River Field Laboratory and to Dr. J. M. Walter and Mr. Dave Kelbert of the Gulf Coast Experiment Station. They report that Indian River has demonstrated it will produce well for fall, winter and spring harvests on the ground or on stakes in many producing areas of Florida. A drawback may be its failure to size up late-set fruits. As soon as seed becomes available, why not put this new tomato in small trial plantings?

**GARRISONIAN:** A new watermelon for growers who want a big melon in the 30 to 50 pound class. It is dark-green striped with a light green background. Garrisonian is elongated in shape, has deep-red high quality flesh. It is resistant to anthracnose, but highly susceptible to Fusarium wilt. This variety sets only a few melons per vine which probably accounts in part for its ability to size up well.

**BLACKSTONE:** Another new watermelon variety worth close observation. It might be classed as a Cannonball type, being round to oblong in shape and solid, medium green in color. Flesh is deep red and of high quality. It is resistant to anthracnose but only slightly resistant to Fusarium wilt. Maturity is as early or slightly earlier than Cannonball.

**TRI-X 317:** A seedless type watermelon that may be considered as a novelty. Seeds are quite expensive and special techniques must be employed in germination and pollination.

**TAKI GEM:** A very small melon in the New Hampshire Midget class. Taki Gem has good flesh color and quality.
SOUTHERN PEAS: Considerable progress has been made by Dr. A. P. Lorz of the Gainesville Experiment Station. He has several advanced breeding lines that are being prepared for release. One is a brown, semi-crowder which produces high yields of attractive, green pods. The other two are cream type peas; each possessing specific desirable characteristics. One line promises to be adopted to mechanical harvest for processing. The other, a fresh market type has yielded well when planted in August for harvest in late October and early November.

It is doubtful that any of these will be available at the retail level until the spring of 1960.

EMERALD: A new early blight resistant, pascal celery. Emerald celery was bred and released by Mr. E. A. Wolf, Everglades Experiment Station in cooperation with Cornell University and Central Florida Agricultural Experiment Station. Mr. Wolf reports that Emerald is highly resistant to early blight and quite tolerant of blackheart. He states that it appears to be slightly more brittle than summer pascal varieties. Britteness is evidenced by node-cracking. It is also more susceptible to premature seeding than summer pascal. Seed should be available in limited amounts to growers from seedsmen following harvest of the 1958 seed crop.

CANTALOUPES: Just a reminder to say that this crop has not been forgotten. Satisfactory progress is being made in breeding by Mr. B. F. Whitner at the Central Florida Experiment Station and workers at the Gainesville Station. Dr. Jamison is placing an advanced line of cantaloupe in field demonstrations with County Agents in selected counties throughout Florida. This melon appears to have resistance to downy and powdery mildew. It also possesses many desirable horticultural characteristics such as good size and shape, excellent flesh color and taste, heavy netting and ability to yield. It will not be available for commercial plantings until it has been tested further.

Now, to review some new developments in other fields:

PRE-PLANTING TREATMENT: SMDC (Vapam, VPM Soil Fumigant) looks very promising for use in the field in the production of certain vegetables. The chemical has been tested on sandy soils by Dr. Nelson Brooks at the Strawberry Investigations Laboratory on strawberries and okra. It has also been tested extensively by Mr. Donald Burgis and Mrs. A. J. Overman at the Central Florida Station on tomato and other crops. If applied properly, the treatment will give good control of weeds, nematodes and damping-off fungi. A general suggestion for rate of application is one pint of SMDC per 100 lineal feet of row. There are many precautions that have to be taken to insure success of the treatment such as proper soil preparation, good soil moisture, injection to about five inch depth, compaction of soil after injection and seeding after a safe period of 10 to 14 days in such a way as to prevent untreated soil from being moved to the treated area. A grower would do well to test this treatment on a small scale at first to acquaint himself with details in proper application.

WATERMELON SPACING AND FERTILIZATION: Results of a one-year study by Mr. L. H. Halsey of the Gainesville Station has brought out some interesting points to consider in spacing and fertilization of watermelons. He found that the largest number of melons using the Charleston Gray variety were produced at the closer spacings when adequate fertilizer and moisture were available. Surprisingly, size of melon was not forfeited to a great extent under closer spacings.
For more details on this subject, read the complete article in the January issue of the Sunshine State Agricultural Research Report. Remember, this is not a recommendation.

**DYRENE:** A new fungicide that may fit into a spray schedule for control of certain diseases of celery and tomatoes. Dr. John F. Darby of the Central Florida Experiment Station tested dyrene for the past three years and found it to be very effective for the control of early blight of celery. Fortunately, dyrene is also quite effective against late blight of celery.

Dr. R. A. Conover of the Sub-Tropical Experiment Station and Dr. R. E. Stall of the Indian River Field Laboratory have tested dyrene on tomatoes and found it to be effective in the control of gray leaf spot. Dr. Conover found that dyrene, although superior to maneb and zineb in the control of gray leaf spot of tomato, is inferior for control of late blight. Dyrene should, therefore, be used only where gray leaf spot is the principal disease and where late blight is not a threat.

**MECHANICAL AID FOR HARVESTING VEGETABLES:** A mechanical aid for harvesting vegetables, built and tested by Mr. E. S. Holmes and Mr. L. H. Halsey of the Gainesville Station, has been improved considerably since the first working model was made in 1957. It is estimated from preliminary tests that the harvester aid reduces labor requirements for harvesting and handling by 50 percent. In addition, there was less injury to cabbage by the use of this method of harvesting as compared with the old conventional method where cabbage heads were tossed into a cart. Detailed plans for this machine are available from Mr. Holmes.

Sincerely,

James Montelaro
Associate Vegetable Crop Specialist

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