Vegetarian A Vegetable Crops Extension Publication
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I. NOTES OF INTEREST

A. New Publications


To obtain copies of the above listed publications notify the authors or request from Publications Distribution Center, Building 660, University of Florida, Gainesville, FL 32611.

B. Vegetable Crops Calendar


2. November 4-7 - FSHS Meeting - Doral Hotel - Miami Beach, FL.
II. COMMERCIAL VEGETABLE PRODUCTION

A. Commercial Management for Increased Pest Control in Tomatoes

The importance of cultural control and sanitation as an integral part of pest control in tomato production was made very clear through several presentations at the 1984 Florida Tomato Institute, held September 6, 1984 at Marco Island, Florida.

As A. J. Overman pointed out, migration and rotation practices to escape nematodes, soil-borne diseases, insects, and weeds are gradually being surplanted in modern tomato production by use of soil fumigation. When virgin land was easily available, appropriately located, and cheaply prepared for crops, soil fumigation was rarely needed. Growers migrated from one location to another routinely. Today new land is rare, old land is expensive, and the high cost of tomato production demands maximum marketable yield per unit of land managed.

J. B. Jones and K. Pohronezny in their presentations on the survival and in-fields spread of the bacterial spot pathogen in Florida pointed out that the bacteria will survive long periods of time on volunteer tomato plants in and around the fields.

Experimental results also show that when these infected volunteers are disced down, the bacteria may survive in the buried residue up to 3 months.

Discing the fields periodically in the off season eliminated the volunteers. Fields that were disced once and planted to sorghum had volunteer tomatoes present in the field when the next tomato crop was planted. Bacterial spot was associated with the volunteers.

Wind driven rain has been known to spread bacterial spot from diseased to nearby healthy plants for many years. Hand thinning and pruning are also implicated in spreading the disease down the row.

Recently bacteria have been shown to be dispersed long distances aerially. This can happen two ways. One is in an aerosol form during or after rains. The other is the aerial dispersal of bacteria over crops during dry, sunny periods. When the bacteria land on the tomato plant, they may survive as epiphytes on the surface of apparently healthy leaves. When the conditions then become favorable, the bacteria can multiply and disease then appears.

In a tomato monoculture system a cultural management system that includes the following is indicated.

1. Destruction of crops immediately after harvest. Disease organisms, nematodes, insects and weed seeds increase with time. Disease organisms, insects and weed seeds can spread to surrounding fields.

2. Fallow cultivate between tomato crops. This eliminates the volunteer tomato plants in the field and reduces nematodes and weeds. Herbicide fallowing does not effectively control the nematode population. A combination of herbicide & cultivation fallowing may be best to control difficult weed pests such as nutsedge.
3. Cover Crops. Several agronomic crops suppress specific nematode and weed species. The fast growing grasses are some of the best. Volunteer tomato plants may survive in a cover crop, however. If cover crops are used, they should be disced under far enough ahead of planting to allow complete crop residue breakdown. (Stall - Veg. 84-9)

III. HOME VEGETABLE GARDENING

A. Safety in the Vegetable Garden

Under normal circumstances, growing vegetables at home is a fascinating and rewarding hobby for many Floridians. However, the fun and benefits are quickly ended by careless gardening practices which result in accidental injury, poisoning, pain, or suffering. Like garden insects and diseases, accidents in and around the garden are better prevented than treated. Accidents waiting to happen are present throughout the gardening season, but can be prevented with common good sense and simple precautions.

The following are just some of the various situations wherein gardeners may find possible hazards lurking among their gourds and zucchinis.

1. Using a knife:
   a) Pruning and suckering
   b) Cutting potato seed pieces, separating root clumps, or cutting cassava canes
   c) Cutting strings, plastic, or opening bags
   d) Harvesting vegetables such as cabbage, lettuce, celery, okra, and eggplant. Consider using snips rather than a knife where possible.
   e) Slicing watermelons - always cut down toward the table

2. Using other sharp instruments:
   a) Hoeing - wear heavy shoes
   b) Mole traps - don't set where children might play with them, and be careful to avoid the tines when you set the trap.
   c) Pitchforking - this is one of the sharpest tools, so be extra careful.
   d) Staking - never use sharp pointed stakes such as rods for row ends or plant support; someone might stumble or fall onto one.
   e) Sharp tools - always keep them sharp but be especially careful when filing or grinding.

3. Leaving tools on the ground or in the garden
   a) Rakes - turn tines down, even temporarily.
   b) Hand tools - left in the garden may be stepped upon when the
weeds grow up around it.

c) Hoes - step on one, and you could get bonked in the snoot.

4. Improper physical work
   a) Stooping - kneel or bend your knees to pull weeds or work at the soil level to avoid back strain
   b) Lifting - always follow the rules for proper lifting. Be especially careful with heavy bags of fertilizer, lime, mulch, and compost. Remember, watermelons, squashes, and pumpkins may weigh over 50 pounds each.
   c) Spading - learn to use your leg as a lever to turn sod or shoveling.
   d) Push-plowing - be sure you are strong enough physically to push a wheel hoe before attempting it.
   e) Chopping and use of grubbing hoe - both are physically demanding, and could lead to cutting injury.

5. Land Clearing
   a) Thorny vines and palmettos - stalks of the common palmetto are very thorny with saw-toothed edges which can rip your hands when grasped. Likewise, the thorny smilax vines are difficult to remove without gloves.
   b) Stump removal - have the proper equipment or seek professional help.

6. Mechanized equipment
   a) Roto-tillers and shredders - use precautions. Always turn off engine before unfouling.
   b) Garden tractors - are you skilled enough to use them without accident?

7. Power lines - never locate your garden beneath low-hanging power lines or where you might touch them with a water line or long handled tool.

8. Venomous pests
   a) Snakes - watch out for them. Don't dig around under mulch with bare hands, especially around foundation of house where coral snakes like to hide. Keep weeds down in and around the garden. Turn vining vegetables, such as cucumbers, with a stick to search for fruit.
   b) Ants -
   c) Spiders - black widows like old tin cans which you might find useful in your garden chores.
   d) Bees and wasps - they hang around blossoms.
   e) Squash bugs - when squashing a squash bug, never get your eyes too close, as the juice may squirt you in the eye with great discomfort.
9. Use of pesticides, fertilizer, and lime
   a) Read labels and follow directions
   b) Wear protective clothing gear such as rubber gloves and eye goggles.
   c) Avoid windy days
   d) Store in original labeled containers
   e) Keep away from children and other irresponsible people and animals.
   f) Turn head aside when releasing pressure from tank.
   g) Lime and sulfur - being dusty, they can blow into your eyes. Wear goggles and gloves.

10. Eating vegetables
    a) Unknown types - always know the vegetable you are eating. Few vegetables are poisonous, but what you think is safe may be something else. Never eat a wild mushroom.
    b) Unwashed vegetables - always wash the vegetable before you eat it, especially if it has been sprayed.

11. a) Lightning - seek shelter
     b) Heat - don't work too long in the boiling sun.

Make gardening fun and safe.
(Stephens - Veg. 84-9)

B. The Fourth Annual Florida Master Gardener Advanced Training

The fourth Annual Florida Master Gardener Advanced Training course was held August 29 and 30 in the Reitz Union. Certified Master Gardeners from 22 counties participated in the program with registration numbers totalling 167. Ten specialists from IFAS offered classes on topics ranging from Integrated Pest Management to Native Plants. Emphasis was placed on hands-on material during the second day of concurrent sessions. Tours to various horticultural and botanical labs and of interest areas were given following the classes. An awards ceremony and bar-b-que prepared by the U.F. Poultry Science Club was held on August 29 in the Livestock Pavilion. Various department chairmen and extension directors attended the program. Dean Woeste distributed the awards and spoke to the Master Gardeners on the subject of their responsibility as official Extension representatives.

A highlight of the conference was Dr. Bill Becker in a bathing suit demonstrating the wrong way to mow the lawn for his "Safety" program. Although it was not planned, it was exactly what was needed to open eyes at the 8 a.m. session. Additional training sessions in other areas of the state are currently being discussed.

(K. M. Delate - Veg. 84-9)
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