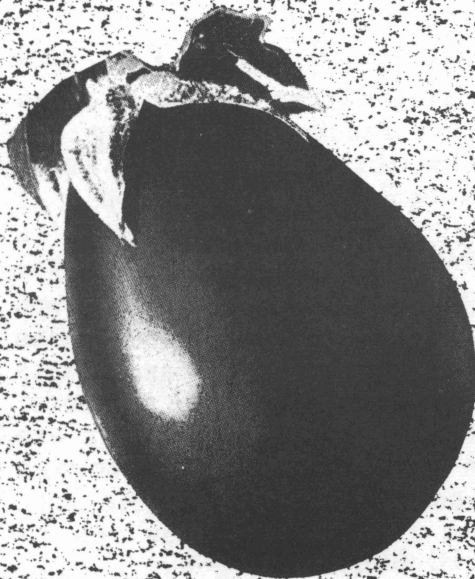


L-270

GROWING

Eggplant

IN THE LOWER
RIO GRANDE VALLEY



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GROWING EGGPLANT IN THE LOWER RIO GRANDE VALLEY

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Eggplant is closely related to Irish potatoes, tomatoes and peppers. Florida, the principal grower of eggplant, produces several hundred carloads most years. Shipments are the heaviest in November, December, April, May and June.

Eggplant yellows, fruit rot and limited market demand are the principal factors affecting the production of this crop in the Lower Rio Grande Valley.

SOIL REQUIREMENTS

Soil that produces good crops of tomatoes and potatoes can be used in growing eggplant. The young plants are not as easy to start as tomatoes, but normal disease-free plants are highly productive under average Valley conditions.

CLIMATIC REQUIREMENTS

Since the eggplant is tender to frost, it must be grown during the frost-free season. Planting should be so timed that the crop will be ready for market in October, November and December, or April and May. During the fall season, 150 days usually are required from seeding to harvesting; but this time

can be shortened 30 days if the spring crop is directly seeded.

VARIETIES

Black Beauty is the most popular variety, although it is not as resistant to certain diseases as Florida High Bush or Fortmeyers Market.

ROTATIONS

Since eggplant is related to potatoes, peppers and tomatoes, it should not follow these crops. Rotation with "grass" crops should aid in the control of root knot, root rot, yellows and certain insects.

SOIL PREPARATION

Preparation of the soil for eggplant is about the same as for most row crops---double disking. listing and fertilizing, relisting and irrigating. Fertilizer should be applied with a lister planter and the soil irrigated before planting the seed or transplanting the seedlings.

FERTILIZERS

It is not customary to fertilize eggplant under average Valley conditions, but heavy fertilization is required where the crop follows corn, sorghum or other "grass" crops. Nitrogen concentrates to supply about 80 pounds of nitrogen per acre (400 pounds cyanamid or 225 pounds ammonium nitrate) should be broadcast over the residue of the previous crop before the land is disked.

A water furrow application of 20-80-0 or 0-80-0 is suggested when the land is listed in preparation

for planting, where nitrogen has been added to soil when residue was turned under. If nitrogen has not been added to the residue, then 40-80-0 or 60-80-0 should be applied in the water furrow.

PLANTING AND TRANSPLANTING

The fall crop is started usually in outdoor seedbeds which are easily irrigated. The land is listed into 18-inch rows, and a single row or drill of seed is planted on top of each bed. The seed are planted about 8 weeks before transplanting time (September 1).

A half pound of seed should produce enough plants to set an acre of land where the spacing is 18 x 36 inches. A pound of seed should be used where the crop is directly seeded, as is customary with spring tomatoes.

Young eggplant seedlings are somewhat delicate, and more care should be exercised in transplanting than usually is accorded crops such as cabbage.

WATER REQUIREMENTS

Older plants appear somewhat resistant to drouth, but young transplants need frequent light irrigations until they are well established. Since the important crop usually is transplanted and grown during the rainy fall season, irrigation is relatively unimportant during normal years.

CULTIVATION AND WEED CONTROL

Cultivation and some hoeing are needed to control weeds while

the plants are young, but mature plants smother out most types of weeds and grass. Cultivation usually should be discontinued after the plants reach a height of 2 feet.

EGGPLANT YELLOWS

This virus disease is the most important factor affecting the production of eggplant. Prevention is the only control since diseased plants never recover. Seedbed plantings should be dusted every 5 to 7 days with dusting sulfur or a 10 percent DDT-sulfur mixture. Sulfur presumably controls or repels insects which may spread this sapborne disease.

ROOT KNOT, ROOT ROT, SOUTHERN BLIGHT

These soilborne diseases are controlled best through crop rotation, soil sterilization or 8 weeks fallow prior to planting. Plowing at successively greater depths during the fallow period appears to be an effective way of reducing the incidence of root knot.

FRUIT ROT

This disease attacks the foliage, stems and fruits. It is particularly destructive during periods of wet weather. Control measures seldom are practiced, but any of the insoluble copper dusts should afford some protection.

INSECTS

Insect pests attacking eggplant are flea beetles, cucumber beetles, white flies, red spiders, aphids and fleahoppers. Leafminers, potato beetles and pepper weevils

occasionally damage eggplant. Control measures for these pests are given in the Valley Vegetable Guide for Controlling Insects.

PICKING

Eggplant fruits are ready for market when they are large enough to meet local market requirements, usually when they are about half-grown. In fully ripened fruit, the flesh is tough and the seed are hard. Since the fruit are easily bruised and scratched, they should be handled carefully, preferably with gloved hands. They should never be pulled from the vines. Close clipping or cutting reduces losses from stem punctures. Prompt removal to the packing house to avoid sun and wind damage is strongly advised.

CRATING

The standard pepper-eggplant crate (11 1/4" x 14" x 22") is the ideal container, but bushel baskets are used when crates are unavailable. Each fruit should be wrapped in paper to avoid bruising.