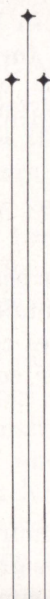


Growing
CANTALOUPES



**Under
Irrigation**



Growing CANTALOUPE UNDER IRRIGATION

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CANTALOUPEs are produced commercially principally in the irrigated sections of South and West Texas. Some commercial acreage is grown without irrigation in East Texas. Highest prices are received for the early crop that ripens during May when competition from Arizona and California is comparatively light.

LIMITING FACTORS

Late freezes, and rains late in the season are the principal factors limiting cantaloupe production in Texas. Foliage diseases cause serious damage when humid weather conditions aid their development.

SOIL REQUIREMENTS

Cantaloupes are not exacting in their soil requirements. Good-quality melons are grown on soils ranging from light sandy loams to clays. Most of the commercial acreage is grown on alkaline soils.

VARIETIES

PMR No. 45 is the most popular variety because of its good shipping quality and uniformity. PMR No. 6 has less desirable market quality and is grown to only a limited extent. It is resistant to both strains of powdery mildew while PMR No. 45 is resistant to only one strain. Neither variety is resistant to downy mildew. Rio Gold and Rio Sweet are resistant to downy mildew but these varieties have not received shipper acceptance.

ROTATION

A root-knot resistant crop should precede cantaloupes to reduce the damage from these nematodes. Sorghum and Sudangrass are resistant to root-knot nematodes and fit well into the rotation with cantaloupes.

SOIL PREPARATION

Land should be graded to an even, gentle slope so that water can be applied to soak the soil thoroughly without wetting the top portion of the beds. The land is then listed into rough beds 36 to 40 inches apart. Two of these beds are pushed together with grader blades or especially constructed bed shapers to make large, high beds 72 to 80 inches apart from center to center.

FERTILIZERS

Fertilizer practices should be based on the soil fertility levels determined by a soil analysis. Any fertilizer recommendations not based on soil needs must be of general nature. The normal amount of nitrogen used ranges from 40 to 120 pounds per acre, while phosphate applications vary from 60 to 100 pounds of phosphoric acid per acre. All of the phosphate and about half of the nitrogen are applied deep in the beds before planting. The remaining nitrogen is applied as a side-dressing after the plants begin to bloom. For general recommendations about fertilizer, see the appropriate fertilizer leaflet for your area, available from county agricultural agents.

PLANTING

The safest procedure is to plant about 1 week before the average date of the last kill-

ing frost. However, many growers plant much earlier and replant if the early crop is destroyed by freezing temperatures. Relatively few growers use plant protectors because of the high costs involved.

The amount of seed required to plant an acre of land to cantaloupes varies from 2 to 4 pounds, depending on whether single or double-row planting is used.

Cell-type planters which drop the seed in hills and place it $\frac{1}{2}$ to 1 inch below the surface of the soil normally are used to plant the crop. The distance between "hills" varies from 1 to 3 feet. After the plants are well established, they should be thinned to one or two per "hill." Closer spacings usually result in more medium to small-size fruits.

WATER REQUIREMENTS

The highest quality melons are produced during dry weather when downy mildew is not a problem. Irrigation is needed to grow cantaloupes in the semi-arid parts of the State. Prior to planting, the land should be soaked to a depth of 2 to 3 feet. After the first fruits are set, additional moisture is required. The soil probably should be wet thoroughly about 4 weeks prior to harvest.

CULTURAL PRACTICES

Cultivation and some hoeing is needed while the plants are young. Considerable hand pulling of weeds may be necessary after the vines cover the ground.

A selective herbicide, Alanap, has been used by some growers. When properly ap-

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plied under the right conditions, this herbicide controls weeds successfully.

Most cantaloupe growers move the vines out of the water furrows, and turn the fruit to prevent the areas in contact with moist soil from cracking.

DISEASES

Downy mildew is likely to cause serious losses if showers occur. The disease first appears on the leaves in the form of numerous yellowish angular spots, which later turn brown and eventually kill the leaves. Results from dusting often have been disappointing for the control of downy mildew.

Powdery mildew appears as white patches of mold on both sides of the leaves. Normally, PMR No. 6 is resistant to this disease and no control program is needed. PMR No. 45 may be attacked by one strain of powdery mildew and spraying or dusting will be required.

INSECTS

Aphids, leaf miners and melon worms are the principal pests of cantaloupes. Detailed information on controlling these pests is given in L-255, "Guide for Controlling Insects of Vegetable Crops," which is available from your county agricultural agent.

HARVESTING

Fruits should be harvested only from vines in good condition, since fruits from dead or weak vines are of poor quality. Most growers harvest at the three-fourths to full-slip stage, or after the melons have developed a slightly yellowish undercolor. Such fruits must be handled carefully and shipped under refrigeration.

MARKETING

Consumer preference leans toward medium-size melons (36's) which are well netted and have a yellow undercolor. Fruits customarily are packed in standard cantaloupe crates. They usually are sold to the shipper on a pack-out basis with the culls being returned to the grower. The principal causes of rejection are oversize, under-size, off-shape, poor netting, cracking around the stem end and cracking where the melon lay on the ground.