

LD
5655
A761 7
M1197
no. 74
SPECIAL
COLLECTION

Virginia Polytechnic Institute, Blacksburg. Agricultural Extension Service.
MR-74.

CAROL M. NEWMAN LIBRARY
VIRGINIA POLYTECHNIC INSTITUTE
BLACKSBURG, VIRGINIA

R-74 (Revised 5/2/47)

GROW YOUR OWN TOMATO PLANTS

Prepared by the Horticulture and Plant Pathology Departments

L. C. Beamer and S. B. Fenne

Location of Plant Bed: Select a well drained, loose and friable soil that has not grown tomatoes or related crops for the five years preceding. A southern exposure, well protected from winds, is important in producing early plants. The bed should be located where it will not receive drainage water from an old tomato, tobacco or potato field.

Preparation of Plant Bed: In the fall plow under a liberal application of well-rotted manure and disk or mix well with the soil before seeding in the spring. Care must be taken not to use manure that may have come from animals fed on cull tomatoes, or that may have had tomato vines or refuse added to it. After plowing, apply 35 pounds of a 4-12-4 fertilizer to each 1000 square feet of plant bed. Where manure is used and generally on any good soil, a 4-12-4 fertilizer would be better than a 5-10-5 for plant growing.

Selection of the Seed: Use high quality, certified seed of wilt-resistant varieties. If it has not been treated by the dealer, soak the seed in a 1-2400 solution of New Improved Ceresan for 10 minutes, and then dry without washing. To prepare this solution, mix 1/3 level teaspoonful of New Improved Ceresan in 1 gallon of water.

Planting the Seed: The seed should be sown as soon as danger from frost is past. Plant in rows 12 to 16 inches apart, sow thinly or not more than 2 seeds per inch of row. The seed should be planted about 1/4 inch deep and the soil lightly packed, then covered with 1/2 inch or less of woods mold or rotted sawdust. When grown in hotbeds and transplanted to cold frames, spacing 4" x 4" is desirable.

Spraying or Dusting the Plant Beds: It is very important to spray or dust young tomato plants to control flea beetles and other insects. Spraying or dusting is also a very important aid in controlling blackleg or collar rot and leaf spot. Make the first application as soon as the plants come through the soil and repeat the applications at 3 to 4 day intervals, or as often as necessary to keep the plants covered. A mixture containing both an insecticide and a fungicide is necessary. If you prefer to dust, use a 15-70-15 copper-lime-calcium arsenate mixture or one of the insoluble copper compounds in combination with rotenone or calcium arsenate. If you prefer to spray, use a 2-2-50 Bordeaux mixture with 2 pounds of lead arsenate. For small amounts use 4 ounces of bluestone and 4 ounces of hydrated lime to 3 gallons of water, and to this mixture add 4 ounces of lead arsenate. Ready prepared copper spray materials may be purchased at seed stores; however, usually an insecticide must be added to kill flea beetles, potato bugs, etc.

Handling the Plants: Great care must be exercised in removing the young plants from the bed, so that the roots are not damaged and so that the stems are not scratched or bruised. The very slightest injury to the tomato stem serves as a source for blackleg or collar rot infection. Use a trowel or pitch fork to lift the plants; never pull them up. It is very undesirable to remove plants from a bed more than once, because the second and third pullings will be badly diseased by collar rot. Keep the roots from drying.

Setting the Plants in the Field: Set the plants in the field as soon as possible after pulling, and take great care not to bruise or otherwise damage them. Setting the plants in very wet soil frequently increases collar rot because when the soil is caked around the stem it provides ideal conditions for the disease to develop. The soil should be firmed around the roots, but left loose around the stems.

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS, State of Virginia, Virginia Polytechnic Institute and the U. S. D. A. cooperating.