



University of Idaho
 College of Agriculture
 Cooperative Extension Service
 Agricultural Experiment Station

Current Information Series No. 267
 March 1975

LIBRARY
 APR 17 1975
 UNIVERSITY OF IDAHO

Early Tomatoes

A. A. Boe J.A. Benson
 Department of Plant and Soil Sciences

If you grow vegetables, a highlight of your gardening year comes with the first ripe tomato. As with all garden vegetables, a tomato's maturity date depends partly on its genetic makeup and partly on climatic conditions. Thus a variety that ripens in 60 days in a warm climate may not ripen at all in the cooler regions of the Intermountain West.

Tomato varieties have been tested at Moscow and Sandpoint for earliness and quality the past several years. Tomato varieties were collected from the northern part of the United States and throughout Canada for use in these trials. A few varieties from this collection have proven useful for cooler, short-growing season areas. These varieties are described in this publication along with some information on early tomato culture.

Varieties

The Sub-Arctic Tomatoes

Sub-Arctic tomatoes were bred in Ontario, Canada, and are a unique tomato type. They were tested and perfected in west central Alberta which attests to their hardiness and adaptability to a short growing season and cool climate.

These are small tomato plants, usually with a spread of 12 to 18 inches and about 10 inches tall when mature. The plants branch very early and the branches blossom at the same time as the main stem. This gives many fruit of similar age that will ripen uniformly. Each plant will have several ripe fruit at one time. The fruit are small (1 to 1 1/2 inches), longish round, red with dark shoulders and mildly acid. They make a good salad tomato and are good eaten out of hand.

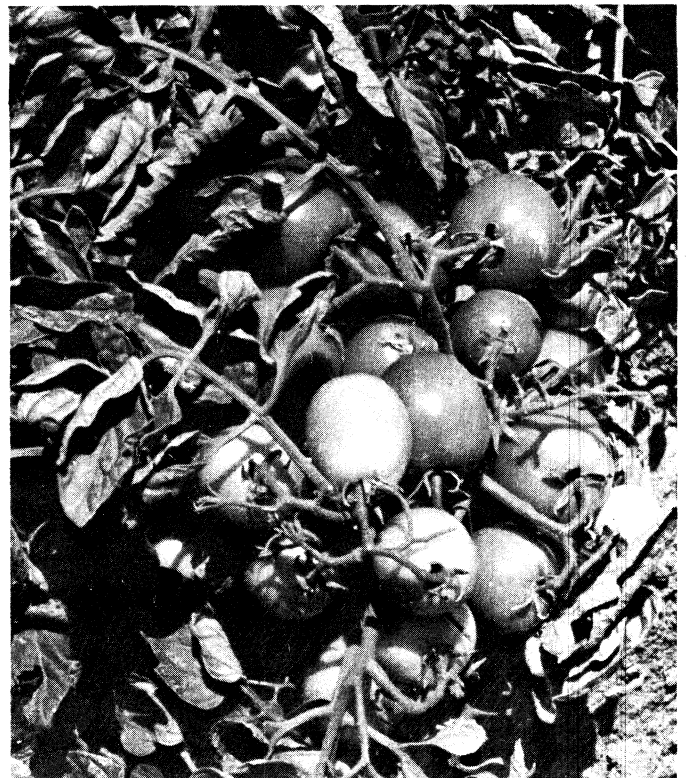
Four varieties of Sub-Arctic tomatoes are available.

Sub-Arctic Delight. This was the first of the Sub-Arctics. It is a very small plant that sets many small fruit. It begins to ripen between July 20 and August 1 at Moscow and Sandpoint and continues to ripen until frost.

Sub-Arctic Early. About the same as Sub-Arctic Delight but with fewer and larger fruit that ripen more uniformly.

Sub-Arctic Midi. Only 3 to 5 days later than Sub-Arctic Early, Midi has larger fruit. The plant is somewhat larger than Sub-Arctic Early. The fruit are of good quality.

Sub-Arctic Plenty. This variety is 5 to 7 days later than Sub-Arctic Early and is usually ripe at the Moscow Station by August 1. The first fruit may be nearly 2 inches in diameter and are a bright red. Each plant will have several ripe fruit at a time.



A productive early tomato in the University variety trials.

S
 53
 E322

Imun Prior Beta or IPB

This tomato variety originated in Norway and is extensively grown in some of the high mountain valleys of South America. The plants are viny and indeterminate, growing to 24 inches tall. The leaves resemble potato leaves. Each plant bears but a few fruit, 2 to 2½ inches in diameter. The fruit are acid and only fair for salads and eating fresh, but are good for canning. The fruit begin to ripen between July 20 and August 1 at Moscow and Sandpoint.

Rocket

This tomato variety has a very small, indeterminate vine only 15 to 18 inches tall. The vine has few leaves and sets only a moderate number of fruit. The fruit are a deep crimson red, often irregular in shape, about 2 inches in diameter and very mild in flavor. This is a good variety for fresh consumption but is probably not safe for canning unless acid is added.

Swift

This variety was developed at Swift Current in Saskatchewan. The plants are indeterminate, small and very compact. Each plant bears 6 to 8 tomatoes of moderate to large size — up to 3 1/2 inches in diameter. Its quality is good. The fruit ripens about August 1 at Moscow.

Scotia

This is another Canadian tomato. This variety is grown extensively in eastern Canada. The plants are 24 inches tall, indeterminate and somewhat spreading. The fruit are very uniform and about 2 1/2 inches in diameter. The fruit begin to ripen after August 10 in Moscow. Scotia is a good quality tomato that may be of commercial interest for local market or green wrap.

Culture of Early Tomatoes

Growing good early tomatoes depends on good cultural practices and sturdy, healthy plants in the beginning. All too often tomato plants that are set into the garden are overgrown, stunted and weak. This causes the plant to use an unduly long time to recuperate and get down to the business of producing fruit. The best plants for setting into the garden are young, vigorous, actively growing plants. They should never be in blossom.

If you grow your own plants, sow the seeds in a good but not too fertile mixture 5 to 6 weeks before you plan to

place them in the garden. In cooler regions this is usually about April 15. When the plants get their first true leaf, **transplant** them to peat pots or a container from which the plant can be removed without disturbing the roots. Use a good potting soil when transplanting. Grow the plants in a coldframe or greenhouse where adequate light is available. Make sure that the plants continue to grow. A small quantity of fertilizer may be needed. Use a fertilizer low in nitrogen and high in phosphorus such as 10-20-10 or 10-20-20.

When frost danger is past, transplant the tomatoes to the garden. Since these early tomatoes are all small plants, a spacing of 12 to 18 inches between the plants is adequate. Protect the plants for a few days from wind and direct sun by a shingle or a milk carton with the ends cut out. Do not overfertilize either before or after planting. When fertilizing in the garden use a fertilizer for tomatoes. It will be relatively low in nitrogen. Do not fertilize after the fruit are full size.

In cool areas where heavy soil predominates, tomatoes will do best on the south side of a building where the soil will be warmer. In open areas use a black plastic mulch held down by rocks or soil. The plastic mulch prevents moisture loss from the soil and keeps the weeds down as well as warming the soil.

The plants should be thoroughly watered regularly. If plastic mulch is used each plant should be watered by placing the hose through the plastic.

For a real taste treat allow the fruit to ripen completely on the vine. They will ripen faster on the vine than on the window ledge and will be of better flavor and quality. Tomatoes for canning should be fully ripened on the vine. Because many new varieties of tomatoes are low in acid, add 1 tablespoon of vinegar or lemon juice and 1 teaspoon of salt to each quart before cooking.

Green fruit can be harvested before the first killing frost and placed in a warm place for ripening. Ethylene gas, which is produced by ripe fruit, will induce ripening. Place the green tomatoes in a basket or box with a few ripe fruit (tomatoes, apples or bananas) and cover with several layers of newspapers. Leave the container covered for 48 to 72 hours, then place the green fruit in the light. The green fruit can also be prepared like eggplant or used to make relish.

Seeds for the varieties listed are available from Lowden's Plants and Seeds, Box 10, Ancaster, Ontario, Canada.