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Growing Tomatoes in Cool Summer Areas

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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.

During the past several years, tomato varieties collected from the northern part of the United States and throughout Canada have been tested in Idaho for earliness and quality. Tests were conducted at U-I Agricultural Research and Extension Centers at Moscow and Sandpoint. A few of these tomatoes, including 6 Sub-Arctic varieties, have proven useful for cooler, short-growing season areas.

Because these varieties are generally small-fruited and tend to have weak vines, a breeding program was initiated at the University. Five improved varieties from this program will soon be available to the home gardener.

Varieties

Several ultra-early tomatoes are now available commercially. We recommend that you try as many of these as possible to determine which is most adapted to your needs and conditions.

The Sub-Arctic Tomatoes

Sub-Arctic tomatoes are a unique tomato type developed in Ontario, Canada. 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 a height of about 10 inches 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 1½ inches), longish round, red with dark shoulders and mildly acid. They are a good salad tomato and are good eaten out-of-hand.

Six varieties of Sub-Arctic tomatoes are available:

Sub-Arctic Delight — The first of the Sub-Arctics, this 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.

Early Sub-Arctic — 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 Early Sub-Arctic, Midi has larger fruit. The plant is somewhat larger than Early Sub-Arctic. The fruit are of good quality.

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

Sub-Arctic Cherry — This is a small cherry tomato. The plant is a low bush. The fruit are of excellent quality for salads.

Sub-Arctic Maxi — This is the largest of Sub-Arctics. It is also somewhat later but has done well at Moscow as a main crop variety. It is good for canning.

University of Idaho Tomatoes

The University of Idaho is releasing 5 ultra-early tomato varieties, all adapted to cool summer areas. They were bred at Moscow and tested at both Moscow and Sandpoint R and E Centers.

Bonner — This variety is named for Bonner county. It matures at the same time as Sub-Arctic Maxi and is of excellent quality. Fruit are 2 to 2½ inches in diameter.

Latah — Named for Latah county, this variety is a few days earlier than Bonner and has smaller fruit. Fruit are 1½ to 2 inches in diameter.

Shoshone — Named for Shoshone county and the Shoshone Indians, this is the earliest of the 5 University of Idaho tomatoes. The plant and fruit are similar to Early Sub-Arctic but this variety is better adapted to northern Idaho. Fruit are 1½ to 2 inches in diameter.



Bonner Tomato



Latah Tomato



Shoshone Tomato



Kootenai Tomato



Sandpoint Tomato



Sub-Arctic Cherry Tomato

Kootenai — This variety was named for the Kootenai Indians and Kootenai county. It ripens with Sub-Arctic Maxi. The plant is compact with thick rigid stems and has the largest fruit of the 5 U-I tomatoes. Fruit are 2 to 3 inches in diameter and are solid.

Sandpoint — This variety was named for the city of Sandpoint. It is a dwarf, compact tomato. It ripens just after Sub-Arctic Midi but has larger fruit. Sandpoint has also been tested at Parma where it seems well adapted to the area's warm conditions and ripens in 40 to 45 days. It appears to be resistant to curly top virus disease. Fruit are 2 to 2½ inches in diameter.

Other Early Varieties

Immun Prior Beta or IPB — This variety originated in Europe 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 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.

Farthest North — This is an ultra-early variety. It has cherry-sized fruit which ripen over a very short period of time.

Pixie Hybrid — This very early hybrid tomato ripens with Sub-Arctic Maxi. It has medium sized fruit and is good for canning.

Growing Early Tomatoes

Success with early tomatoes depends on starting with sturdy, healthy plants and using good cultural practices. Too often, overgrown, stunted and weak tomato plants are set into the garden. These plants require 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 soil 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 soluble fertilizer that can be applied in the water.

Good, sterile soil mixes for germinating and growing plants can be obtained from local greenhouses. Some of the packaged soil found in stores is poor quality and should be avoided. You can make your own mixture from equal parts of peat, perlite and vermiculite. Add 1 tablespoon of lime per gallon and moisten with water containing a soluble fertilizer. Fertilize weekly or more frequently if needed.

When frost danger is past, transplant the tomatoes to the garden. Since these early tomatoes are small plants, 12 to 18 inches between the plants is adequate spacing. Use a shingle or a milk carton with the ends cut out to protect the plants for a few days from wind and direct sun. 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 is warmer. In open areas, use a black plastic mulch held down by rocks or soil. The plastic mulch prevents moisture loss from the soil, keeps weeds down to a minimum and warms the soil.

Water the plants thoroughly and regularly. If plastic mulch is used, each plant should be watered by placing the hose through the plastic. Irrigation requires time for the water to soak into the soil. Apply the water slowly for 3 to 4 minutes.

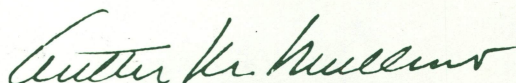
For a real taste treat, allow the fruit to ripen completely on the vine. They will ripen faster on the vine than on the window ledge and will have better flavor and quality. Tomatoes for canning should be fully ripened on the vine. Never preserve overripe fruit. Be sure to use up-to-date canning procedures. If you have any questions about procedures, contact your local Extension home economist.

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 of the new University of Idaho tomato varieties should be available for 1979. The other varieties are available from: Lowden's Plants and Seeds, Box 10, Ancaster, Ontario, Canada; Gurney's Seed Company, Yankton, SD; Stoke's Seeds Inc., Buffalo, NY; Mountain Seed, Rt. 1, Box 271, Moscow, ID.

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