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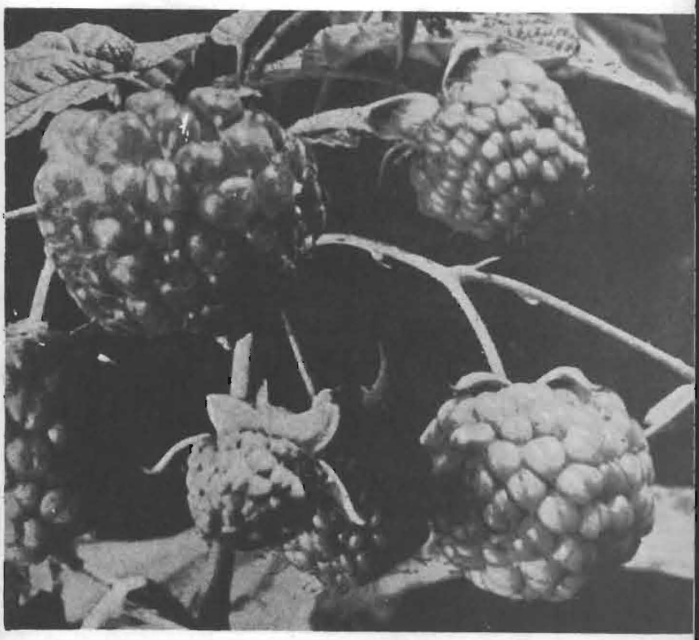
Raspberries for NORTH DAKOTA



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RASPBERRIES FOR NORTH DAKOTA

RASPBERRIES are an important source of fruit for jam, sauce, and fresh fruit for the family table. Growing conditions such as cold winters and hot dry summers are not conducive to good growth and production. The home gardener can enjoy reasonable success with raspberries most seasons. A few growers with large plantings sell excess fruit, some on a "pick your own" basis. This eliminates the labor needed for harvesting the fruit.

RED FRUITED VARIETIES

Latham - one of the most commonly grown commercial varieties. The plants are productive, with large, bright berries of good quality. Latham lacks in hardiness and should be given winter protection or planted in well protected sites.

Chief - an early ripening variety that produces medium to large fruits. The plants are productive and the fruits are easy to pick. Chief is recognized for its hardiness. This variety is becoming difficult to obtain in the nursery trade but is well worth growing.

Boyne - a recent introduction from the Morden Experimental Farms, Morden, Manitoba, that has performed well under test in North Dakota. It is one of the hardiest varieties, vigorous and productive. The large berries are of good quality.

Killarney - another recent introduction from the Morden Experimental Farms, Morden, Manitoba, that is hardy but slightly less vigorous and productive than Boyne under North Dakota conditions. The large berries have excellent quality.

EVERBEARING VARIETIES

The so-called "everbearing" or "fall bearing" varieties produce fruit on the new growth as well as on the one year old growth. A summer crop can be obtained from the one year old growth, and the new growth could produce a fall crop. With North Dakota's short season, usually one crop is possible. If the canes are cut off at the ground level each spring, a satisfactory fall crop can be harvested.

For Trial

The varieties Durham, September, and Fallred are suggested.

BLACK FRUITED VARIETIES

Black raspberries are not as popular in North Dakota as the red fruited types. They are not as hardy and should be given some winter protection. In addition to fruit color, the black raspberries differ from the reds in the method of propagation. New red raspberry plants are produced by suckers. New black raspberry plants are produced by bending over the long willowy canes and covering the tips with soil. A new plant results when the cane tip takes root.

Black Hawk - This is one of the hardiest black fruited varieties. Black Hawk produces large fruit of good quality.

For Trial

The varieties John Robertson and Cumberland are suggested.

PLANTING

Set raspberry plants in early spring. Cut the canes to within six inches of the ground for best results. Spacing for raspberry plants depends on the system of training you plan to use and on the type of cultivating equipment you own.

Raspberry plants can be set in hills and cultivated on all four sides or set in rows and cultivated on two sides. For planting in hills, space the plants far enough apart each way so you can cultivate between them. (Check the plants in each direction).

For planting in hedge rows, space the rows far enough apart to cultivate with available equipment. Set plants 3 to 4 feet apart within the row. If you plan to cultivate with a garden tractor, six feet is the minimum distance between rows. The use of farm tractors requires greater distances between rows for cultivation.

WEED CONTROL

Raspberry plantings should be cultivated thoroughly and frequently. If weeds and grasses get a start, they are difficult to control.

Herbicides can be used as weed control aids in raspberry plantings. The use of herbicides supplements cultivation and does not replace it.

Herbicides are most useful in controlling weeds within rows or hills, where hand hoeing otherwise would be necessary. The middles between rows and hills should be cultivated regularly even though herbicides are used near the raspberry plants.

PRUNING

Pruning is one of the most important parts of raspberry culture and it is very often neglected or improperly done. Proper pruning of raspberries makes fruit picking easier and the individual fruits will be larger. Also, the shortened canes are not as likely to break under a load of fruit.

In the hedge row system, spring pruning should consist of thinning the canes to 6 inches apart or 8 to 10 canes per 2 feet of row. Keep in mind the row should be only 18 inches wide. The remaining canes should be tipped or headed back to 3 to 3½ feet tall. This spring pruning should be done in the early spring before any growth takes place.

In the hill system, the spring pruning consists of selecting 6 to 10 canes and removing all others. The selected canes should be tipped to 3½ to 4 feet in height. At this time the canes should be tied to the stake in the hill system.

In midsummer, after the raspberries have finished fruiting, all canes that bore fruit should be removed. These old canes will die the following winter since the canes of raspberries live only two years. The first year the canes grow from a shoot starting from the root. The second year the cane fruits and dies. These canes that fruited compete with the young canes for moisture and nutrients. They also harbor insects and diseases. Burn all the refuse removed in pruning.

WINTER PROTECTION

Raspberries grown in exposed or difficult sites and the more tender varieties should be given some winter protection. This can be done successfully by bending the canes over and throwing a shovel of soil on the cane to hold it down on the ground. The bent over canes should then trap snow, which gives good protection. This usually results in less winter killing and a better fruiting response the following summer.

INSECTS AND DISEASES

Red spider mites are the most common insect pests of raspberries in North Dakota. The mites are tiny sucking insects found under the leaves. The damage appears as small light colored spots on the leaves. There may also be a cupping of the leaves. (For recommended controls see Circular A-299 "Fruit Insect and Disease Control Guide" for the home gardener).

The most serious diseases of raspberries in North Dakota are virus diseases referred to as mosaics. They cause a cupping of the leaf, yellow green mottling, loss of production and loss of quality in the fruit. This may be partially avoided by starting with new plants from a reliable, regularly inspected nursery. Raspberry plants from a neighbor's old "patch" often are infected.

Certain other insects and diseases may cause trouble. Send a sample of insects to the Department of Entomology, NDSU, Fargo, North Dakota, for identification and controls. Send your samples of diseases to the Department of Plant Pathology, NDSU, Fargo, North Dakota, 58102.

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