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Planting and Tending Recommendations for Black Cherry

Where to plant: For optimum growth plant in deep, fertile, moist, but well drained sandy loams or loams. Seedlings will also grow in soils ranging from sand to stoney tills. However, tree growth on these sites will be slower than on the loams.

Where not to plant: On clays and clay loams and all excessively dry or poorly drained soils.

Site preparation: In August before spring planting spray 4.7 L/ha ($\frac{1}{2}$ U.S. gal/ac) of Roundup over the total plantation area. One week after spraying plow and disk or rototill the sprayed area. On sites where mechanical site preparation is not possible or desirable, spray 4.7 L/ha ($\frac{1}{2}$ U.S. gal/ac) of Roundup in August on strips at least 1.2 m (4 ft) wide or in circular spots with a diameter of at least 1.2 m (4 ft).

Species mixtures: On intensively managed, highly productive sites, it is generally most economical to plant only the most valuable species. Such plantations may best be compared with fruit orchards. On less productive sites and for purposes other than that of high quality timber production, it might be most desirable to plant black cherry in mixture with sugar maple, red oak, white ash, basswood or other hardwood species suitable for the soil and drainage conditions of the planting site.

Black cherry should not be grown in mixture with conifers, because the conifers provide an ideal habitat for rabbits which will browse the tops and gnaw the bark of the hardwood seedlings. In plantations with even relatively low rabbit populations the browsing and bark gnawing will prevent most hardwood seedlings from producing stems of acceptable size and quality.

Spacing: There is no ideal spacing for planting all species on all sites. Spacing is therefore determined mostly by a compromise involving the growth requirements of the species, the purpose of the planting, the wishes of the plantation owner and the economics of plantation establishment and tending. It is known that trees grown at wide spacings generally grow faster in diameter while trees grown at narrow spacing generally produce stems of better form, but spacing has little effect on height growth.

At present a spacing of 3 m (10 ft) between rows and 1.5 m (5 ft) within rows is recommended. This spacing requires planting 2200 trees/ha (870 trees/ac). It allows the passage of a medium-sized tractor between rows of trees for chemical or mechanical weed control, promotes reasonably early canopy closure to shade out the competing vegetation, and allows for possible mortality and trees of poor form.

Planting stock: 1+0 or 2+0 seedlings.

Time of planting: In spring as early as site conditions permit but never later than the middle of May.

Method of planting: Machine planting or spade planting using the wedge method.

Weed control after planting: Shortly after planting spray 3.3 kg/ha (3.0 lb/ac) of Princep Nine-T over the total area, strips or spots prepared for planting. In October of the first and second year or April of the second and third year after planting spray 4.5 kg/ha (4.0 lb/ac) of Princep Nine-T over the same areas. Where necessary continue spraying after the third year until the trees have outgrown the weed competition.

Fertilization: Fertilization at time of planting is not recommended since it is generally ineffective. If the tree leaves look yellowish 4 to 8 years after planting and annual leader growth is less than 50 cm (20 in.) broadcast 300 kg/ha (270 lb/ac) of ammonium nitrate over the total area together with 4.5 kg/ha (4.0 lb/ac) of Princep Nine-T, or control weed competition by some other method. Never apply fertilizer without also controlling the weeds.

Rodent control: On sites with dense rabbit populations it may be necessary to protect the young trees from browsing by intensive hunting, by fencing the total plantation area, by spraying the seedlings each autumn with a repellent, or by placing wire screens around individual seedlings. Where stem girdling by mice is a problem, eliminate weeds or place plastic tree guards around the stem.

Pruning: During the first three years after planting prune one side of forked leaders or individual branches annually to improve stem form. Thereafter remove the lowest branches every 3 to 5 years. However, always leave a crown of two-thirds to one-half of the total height of the tree.

F. W. von Althen

Copies of this leaflet can be obtained from the Centre's Information Office.

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Additional information on hardwood planting is contained in "A guide to hardwood planting on abandoned farmland in southern Ontario" by F. W. von Althen.

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