

Varieties for Manitoba

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UP to the present comparatively little has been done in apple growing in the west. The varieties grown are confined almost exclusively to the hardier Russian sorts. Of summer and early fall, the following varieties are recommended: Duchess of Oldenburg, well known; Charlamoff, a variety highly recommended by the Minnesota Hort'l Society for western planting, resembling Duchess, but a little later; Barovinka, another variety resembling Duchess; Blushed Calville, a variety resembling in appearance Yellow Transparent; and Teofesky is grown to some extent in the west.

Of late fall and winter varieties, Hibernial is recommended as being the best on account of its great hardiness. The trees are productive and the fruits of fair quality. Wealthy may be grown in some parts of the province, but is scarcely hardy enough for western planting. Patten's Greening, a variety recently introduced and highly recommended by Minnesota hort'l societies, is frequently mentioned. Anism and Simbriske, Nos. 1 and 9, are also recommended.

Crabapples seem to be standing western climate very well, and a number of varieties are grown. Transcendent, Hyslop, Martha, Whitney, Virginia, and Tonka grow well and give fairly good returns.

Tree planting on the plains is quite a different proposition from planting in Ontario or the east. Little can be done without first providing suitable wind-breaks for protection of the trees against the cold, searching winds which sweep over the west. The form of the tree also must be greatly modified to enable it to withstand the rigorous winds which prevail in the west. The trees are headed back in order to develop a low, bushy form which seems to enable them to winter much better than where the trees are allowed to develop a wide open top.

Plum culture is attended with but a moderate amount of success. A few of the heady sorts can be grown and ripened under western conditions. The following varieties are recommended for western planting: Cheney, Aitken, Wyant, Forest Garden, Surprise, and Bicksley. The best results are obtained by growing in protected locations and by keeping the trees well headed back.

Bush fruits, such as currants, raspberries and gooseberries, may be grown with good success with ordinary cultivation and moderate winter protection. The following is a good commercial list: Red raspberries: Shipper's Pride, Loudon, Ironclad, Cuthbert, Philadelphia, Kenyon, Turner, Marlboro; black raspberries, Gregg, Older, Ohio; yellow, Golden Queen; red currants,

Stewart, Cherry, Versailles, Victoria, Raby Castle, Red Dutch, Fay's Prolific; black currants, Black Beauty, Black Champion, Crandall, Black Naples; white currants, White Grape, White Dutch; gooseberries, Gothland, Houghton, Downing, Smith's Improved, Champion.

Strawberries, when given proper cultivation and careful mulching, give good returns and are one of the most profitable fruit crops that western farmers can grow. The old and well-tried varieties seem to be most in favor. The following list will give a good idea of the kinds grown: Strawberries, Sharpless, Bederwood, Crescent, Wilson, Brandy-wine, Senator Dunlop, Glen Mary, Warfield, and Haverland.

Renovating an Old Orchard

I am trying to work over and fix up an orchard. It is a comparatively young orchard, but has been neglected, neither pruned nor sprayed; hence, there are quite a number of pests infesting it. A number of trees have patches on them resembling dry whitewash. It may be a scale of some kind. These spots vary from one and a half inches to three inches long, and one and a half inches to two inches wide, mostly on the trunks. Would it be advisable to apply whale oil soap or Bordeaux mixture? I never saw an orchard where so many of the trees had spurs from one and a half inches to three inches long all along the main branches. These should be cut off should they not? They are very thick and have numerous annual rings on them. The orchard is 10 or 12 years old.—H. W. S., Lancaster, Ont.

With regard to the neglected orchard at Lancaster, I might say that one of the best ways of invigorating the trees is by pruning, so that I should advise the thorough pruning of the trees, not by the removal of many large branches—as in the colder parts of the country this is not a wise practice, as disease may set in—but thinning out the smaller branches from the outside of the tree. If possible, the sod should be broken up and the orchard put under a good state of cultivation. I fancy that the patches which are said to resemble whitewash must be due to lichens or fungous growth on the trees. I would advise giving the trees a thorough spraying early in April with a lime wash, made in the proportion of one pound of lime to a gallon of water, and sprayed on the trees from top to bottom, making two applications, the second as soon as the first becomes dry. This will have a very beneficial effect on the trees, cleaning them up in good shape. In addition to the lime-wash, the trees should be thoroughly sprayed with Bordeaux mixture and Paris green, beginning just before the flower buds open, but if the lime-wash is not used, Bordeaux mixture should be applied just as the leaf buds are breaking. Whale-oil soap need not be

used unless there are aphids on the trees. Long spurs on the main branches should not be removed, as these are the ones which bear the fruit. The ring-like appearance on the spurs is quite natural on old spurs. If possible, manure should be plowed under when breaking up the sod.—Answered by W. T. Macoun, Horticulturist, C.E.F., Ottawa.

The Apple Aphid

Last year the apple aphid did much damage in my orchard. Both fruit and foliage were injured by them. I sprayed several times with Bordeaux mixture, which was not intended to affect the aphid but to keep diseases in check. Please tell me how best to combat this pest?—H. B. S., Shediak, N.B.

This pest has been very abundant in New Brunswick and Nova Scotia orchards for the past two years, and is capable of doing much injury by sucking the juices from the young buds and the leaves. There are three effective remedies: (1) Tobacco and soap wash, made by dissolving two pounds whale-oil soap, or four pounds ordinary soap, in two or three gallons of a strong decoction of tobacco stems or leaves, and adding water to make 50 or 60 gallons. (2) Whale-oil soap solution, one pound to six gallons of water. (3) Kerosene emulsion solution, prepared by dissolving half a pound soap in a gallon of hot water, then adding two gallons coal oil and churning violently until a thorough creamy emulsion is obtained. In the application use one part of this emulsion to 12 parts of water. It is advisable that the first application, by spraying, should be made just as the buds are opening, and the second and third applications at intervals of two or three weeks.—Answered by Prof. W. Lochhead, Macdonald College.

Transplanting Currants

Is it advisable to transplant currant bushes?—S. H. M., Montreal.

Currant bushes are hardy and bear transplanting well. It is not profitable or advisable, however, to transplant old bushes or those that are overgrown. If your bushes are comparatively small or have been kept regularly pruned, they may be transplanted easily and without danger. When doing so, have the holes that are to receive them prepared in advance and see that the roots on removal are covered with wet sacking or other material to keep them moist and not exposed to the wind. Should the bushes be beyond their prime, it would be better to take cuttings of the young growth and propagate new bushes.

Pruning in early spring, before growth begins, induces wood growth.

Shrivelled trees may be made plump before planting by burying tops and all in earth for several days.