

Plum Culture in Northern Manitoba

By W. J. Boughen, President Dauphin Horticultural Society

The fact that the northern brow of the little old Riding Mountain, looking down on Dauphin is a veritable multitude of small, wild plum orchards scattered here and there among the poplars, should, in those who love this delicious fruit, arouse hopes, and even confidence, of having at no distant date a plum orchard of one's own upon almost every farm in our three sister provinces.

It is not only possible, but very probable, that such could be an accomplished fact, did the people generally realize as I do, what has been done and what is a-doing along the lines of plum culture in the last ten years, that is, in producing plums of hardiness and merit suitable for general planting. We don't live near the mountain, but a hearty invitation over the 'phone, to come over and spend a week-end and go hunting for wild plums was eagerly accepted.

We arrived at our host's in time that night for supper and later on in came some of our neighbors who also had responded to Ward's jovial invitation. The intention was to go on the morrow, where horse could hardly travel, with a bag on shoulder looking for the wild plums and lugging our burden down again to Wards.

In the morning we were away in the dewy, pea-yine shoulder high. Wet? well, I guess so, but what would you have? This was no city man's week-end; these were all four farmers and Grain Growers and of such is the Grain Growers' Association.

Out for sport, with plum jam in the final analysis was the aim of three of our party, and the vision, or day dream of the fourth was the rows of young seedling plum trees ready for ennobling by graftage.

Just here it might be as well to advise all who try to grow plums from the pit never to let the pits get dry.

Those pits planted the day after I got home gave the only satisfactory stand of small plum trees. The ones that get dry will likely come up the second year.

Native Stocks Best

The best plum trees for these provinces are ones that are grafted or budded on native stocks. These have the constitutional vigor, gained by possibly thousands of years of natural selection in this very keen climate. They will be adapted climatically and also used to the plant food to be derived from our soils. I never could hear of plum trees growing wild north of this, but if this is the far north of the wild plum, then nothing better for roots or trunks of plum trees are obtainable.

There are several things the prospective planter of plums should know; one is, that one tree, or in fact, many trees of one variety will bear no fruit, or next to none, if no other varieties are planted near enough to pollinate the flowers. Plum flowers of American plums are perfect, that is, they contain both male and female organs, but still are not fertilized by their own pollen. We have a bunch of wild plums that never bore more than two or three per annum till I grafted a scion of A. P. Stevenson's "Mammoth" in them, then we had both wild ones and "Mammoths". That graft had two plums the second year, thirty-two the next year, and over one hundred plums the fourth year. They are some plums, too; bright red, with bluish bloom, firm and sweet; one and three eighths of an inch wide by one and three quarter inches high. A photo of four placed behind a foot rule shows the four to be five and a half inches wide. The Mammoth variety was originated by A. P. Stevenson, of Dunstan, Manitoba, and is therefore hardy and inured to our climate perfectly. It ripens the first week in September. If Mr. Stevenson never originates another fruit, he is entitled to something better than the "Iron Cross" for this.

Varieties of Plums

Another good, hardy plum is the "Cheney." It is red in color, thin skinned and large. We have three rather large trees isolated behind a bush, which are big enough to bear a bushel of fruit, but usually bear only a sample. We have put some grafts in them of other varieties and expect fruit in the near future. The "Aitkin" is a hardy native plum and is the earliest of the pure American varieties to ripen. It blooms very early at the

probably the earliest plum yet obtained and of excellent eating quality.

The "Compass Cherry," or plum, as it should be called, only it has a long stem, is another Sand Cherry hybrid, and the trees do well here, bearing fruit when not planted alone.

There are many other varieties I might enumerate. I have probably thirty varieties on trial and there are some kinds hardy in tree whose fruit never ripen. "Wolf" is the name of one such. It is very prolific when



A house that needs trees to make it truly homelike.

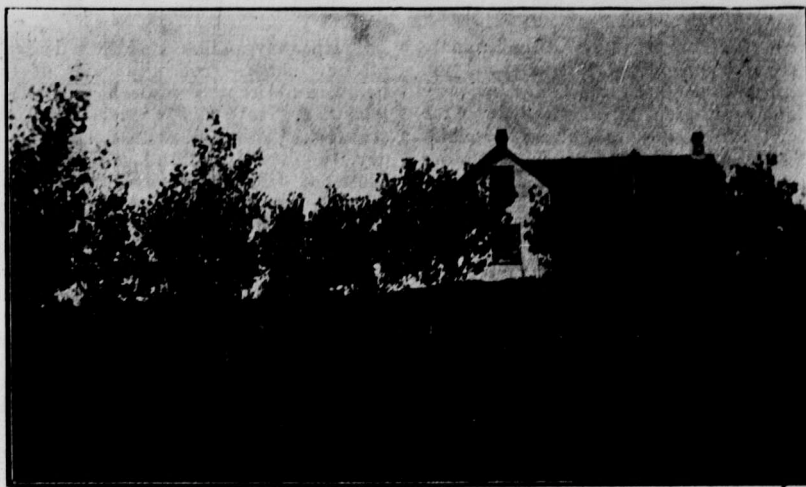
same time as the wild ones. Another point I should have mentioned before is this: In order to effect proper pollination of the flowers, get varieties that bloom at the same time as nearly as possible. These two points I have mentioned are absolutely essential to successful plum culture. Don't forget them or slight them, if interested. You may get a few plums with only one tree or one kind of tree, but you will never get a full crop unless other kinds of plums are fairly close. Neither plums nor wheat are a success without a full crop.

Other good plums for trial are some of Prof. Hansen's hybrids, crosses between the Sand Cherry, or Rocky Mountain Cherry, a dwarf plum properly speaking, which grows wild on sandy ridges in a good many places in Manitoba, and some good Japanese varieties

grafted on the Manitoba wild plum, but a green plum is of no use for anything.

Mix Varieties When Planting

I plant plums spaced 10x12 feet and grow raspberries in the same row or perhaps currants and gooseberries. We grew celery between rows of one bunch this year and it was alright. When planting raspberries, fill every other row with plums or crabs every ten feet. Plant a little deeper than they stood in the nursery. You will notice a crook in the young tree near the ground. This crook is where it was budded, and if you plant it six inches deeper it may put out roots above the graft, and will be the better for it. Be careful to mix varieties when planting. A good way to make a plum orchard here is to get wild, young plum trees where obtain-



Home of Thomas Treble, Huronville, Sask., showing six years' growth of trees.

bearing large plums. These are wonderfully prolific, and fairly hardy here and both bloom late about the same time, ripening their fruits early. Their names are "Sapa" and "Opata." They are small compared to "Mammoth," but are very early to ripen. "Sapa" is a cross-bred Sand Cherry by Sultan, a red-fleshed Japanese plum, and is likewise red or dark in flesh and skin. "Opata" is the Sand Cherry crossed with "Burkank's Gold Plum," and is red skinned and green fleshed, it being

able and plant them one spring, very early, cutting the tops back almost to a mere stem so as to allow for the injured root system, at the same time trimming square off with a sharp knife all injured roots. The next year you can graft them with good varieties off a few tame ones bought partly with that end in view. Use only one-year-old wood, that is the last season's growth.

Instructions for Grafting

There are many formulae for graft-

ing wax. The one I use is Resin, four parts; Beeswax, two parts, and Tallow, one part. Melt in a can, boiling not being necessary. When thoroughly mixed grease your hands with tallow, pour some of the melted wax in a pail or dish of cold water and pick out of the water and pull like taffy, till it looks about the same color as pulled taffy. Keep in pieces or sticks that are not too thick thru to be easily softened when needed for grafting. Cut your stock or tree to be grafted off square on one of its limbs or top, and, except on small trees, do not cut off the whole leafing top at one grafting until you are sure your scions (or grafts) are growing. Perform this operation early in the spring before the buds begin to swell. Use a sharp cutting saw or other tool and split your stock in the centre an inch and a half or two inches deep, according to size, then take your scion, cutting it wedge-shaped, about an inch or more long, leaving about three buds above. Also cut the wedge-shaped scion a little flaring on the side that will be placed outside and insert your stock, holding cleft open a little with your knife. See that the Cambium layers, or green inner barks, are touching one another. With somewhat greasy hands wind around with softened wax so as to exclude air and water, and the operation is done. Practice will make perfect. The best book you can get on Plum Culture is to be had free for the asking. It is Bulletin No. 43. Plum Culture, and District Lists of Plums suitable for Canada, with descriptions of varieties, by W. T. Macoun, Dominion Horticulturist, Central Experimental Farm, Ottawa. A post card addressed as above will bring it. Some few years ago, Buchanan's Nursery, near Winnipeg, sold three tons of plums, thus proving they can be grown here on a commercial scale, and as for the demand for plums, in the year 1914 Canada imported no less than 123,958 bushels, valued at the point of production, as worth \$2.72 per bushel, and sold to the consumer probably for over twice that price. These plums cost Canada \$317,322 plus freight or express, plus duty and plus considerable else.

I offered a dealer twenty per cent. for selling my fruit and he dubiously remarked, "We reckon to make one hundred per cent. on fruit." I could not find statistics for these three provinces, but it is likely that two-thirds of this \$300,000 worth came here and the consumers of each province probably paid over \$100,000 each for imported plums, not reckoning any that were "Made in Canada." This shows the extent of the field open to the plum orchardist. The market is the best obtainable, the boasted home market. Plums are merely a question of "what varieties?" Let us save this \$300,000 to our country as soon as possible.

LITERATURE FOR HORTICULTURISTS

The annual volume just issued by the Manitoba Horticultural and Forestry association is somewhat unique. In former years it was the plan of the association to publish an annual report. During the past year the association undertook to present its members with an eight-page bulletin once a month, dealing in each issue with timely topics in regard to tree, shrub, fruit or flower growing. At the same time extra copies of these monthly bulletins were reserved to be bound at the end of the year, together with a business report into an annual volume.

The year 1914 has been by all means the best year the Association has ever had, the paid-up membership being now over the 200 mark.

The secretary of the association is Prof. F. W. Brodrick, Manitoba Agricultural College, Winnipeg, who will be glad to communicate with anyone as to membership or other horticultural matters.