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Reducing the Cost of Production*

Prof. H. A. Surface, Harrisburg, Pa.

oOD fruit land is generally cheaper than rich or more level farm land that may be less desirable for fruit production. Proper fruit soil produces trees of good size, and fruits of best quality and in large quantity; thus reducing the relative cost of production. Proximity to market or shipping station, to reduce the cost of hauling, is an essential factor.

Where there is good air drainage or local elevation, spring frosts do not so often injure blossoms or tender buds or fruits, and thus there are more frequent and larger crops, resulting in relative cost reduction.

Well drained soil means healthy, vigorous trees. Wet soil means poor trees, and worst of all, apple tree diseases, such as root rot, collar blight, and others. Instead of a good income from a fine crop on healthy trees money must go to replace dead ones, or there will be very serious loss that comes from leaving vacant places in the orchard. Wet orchards should be well drained; but the economy of dynamiting is yet to be proven in 'general, for we know where it has been very unsatisfactory.

Good varieties are quoted constantly in price above poor kinds. Compare today's quotations on Stayman Winesap, Rome Beauty or Baldwin, with those of Ben Davis, Smith Cider or Shockley.

Adapted varieties give finer fruits and larger yields than those not adapted to the region, and of course as these sell more easily and for higher prices, they help to reduce the relative cost. A very important economic consideration is that it pays all commercial growers of a community to put their efforts into growing perfectly only those varieties (often but one or two) that are decidedly best there.

Healthy young trees from reliable nurserumen mean ready vigorous growth without stunting by transplanting, and large early crops, if properly handled. Trees not true to variety ordered may mean years of loss.

Plant at sufficient distance, and on the square system. The writer now plants all permanent apple trees forty feet apart and all others at twenty. This permits profits from inter-cropping, cultivating

"Karract from an riddraw delivered before the members of the Niagara Peninsula Pruit Growers' Association. each direction, and the development of large trees with full crops.

Low-headed tops cheapen the cost of production by reducing the work of pruning, spraying, thinning and picking; and prevent 'eavy loss by wind falls, as well as mulch their own soil.

Reduce the necessity for expensive commercial fertilizers by growing legume cover crops. The writer uses chiefly erimson clover with buckwheat and harvest the latter. One orchard gave eighty-four bushels of buckwheat this year. In another the crimson clover was sown with cow horn turnips, and we now have a good stand of the former, with over one hundred dollars worth of excellent turnips, without detriment to the young trees.

Nitrogen, the expensive element in commercial fertilizers, is not needed where the legumes are grown in an orchard. We need buy only muriate of potash and acid phosphate, and need but little of these where orchards are comparatively young and occasionally cultivated.

Pruning can be done at any time of the year, if not too severe; and necessary severe pruning can be done at any time during the dormant season. Thus it is a "filler" job that can be done with economy when more important work is not pressing.

For cover crops we grow our own seed between the cultivated tree rows in the young orchards, and in any orchard that will not produce fruit that year.

A uniform head of symmetrical trees helps to maintain the income by insuring fruit where otherwise there would be vacant spaces.

Plant varieties to ripen in succession, and thus keep the pickers engaged.

We make all our own spray materials, saving time and expense by preparing stock solutions during bad weather.

We spray as many times as are necessary, but no more. This is four (or at most, five) times in the year for pomes, and three times for drupes.

Owing to our low-headed trees the thinning is done easily and quickly, mostly from the ground, and chiefly by



A Revenue Producing Orchard in the Georgian Bay District

This orchard, owned by Wm Reckie, Camperdown, Ont., has been sprayed, printed and fertil fixed it consists principally of Gravenstein, Snow, Spr. Baldwin and Spitz varieties. At the time the photograph was taken Mr. Reckie expected it to preduce two hundred barrels an acre.