

in blossom. Slag at the rate of five hundred pounds an acre may be substituted every few years for the acid phosphate with advantage. It should be sown in the fall.

The great importance of thoroughly spraying, so far as the elimination of number threes is concerned, can scarcely be over-estimated. While pruning, cultivating, fertilizing, and thinning all have an important bearing upon the production of first-class fruit, these are of little value where spraying has been neglected or carelessly done. In making dilutions of lime-sulphur, the hydrometer should be used. Winter strength is 1.03, summer strength for use on foliage, 1.009.

Arsenate of lead at the rate of two and one-half pounds to forty gallons should always be used in spray for foliage, both on account of its fungicidal value as well as its insecticidal value. It should first be reduced in water and then added to the dilution while the agitator is in vigorous motion. A good power sprayer is almost a necessity in an orchard, producing upwards of six hundred barrels of apples. It should have a mechanical agitator, the blade propeller type is the best, and be able to maintain a constant pressure of about two hundred pounds on four-disc nozzles.

Spray for scab and bud moth a little before blossoms open; for scab, codling moth, etc., when two-thirds blossoms have fallen; for scab, codling moth, green apple worm, etc., ten days after blossoms have fallen; for scab, fly speck spot, young bud moth that defaces apples, etc., when the apples are a little larger than crabs.

Spray thoroughly; cover every part of the trunk, every limb, every twig, every leaf.

THINNING

Thinning is now a recognized part of orchard work. Its object is first the removal of spotted, deformed, and worthless specimens, and second, the further reduction of the fruit so that remaining specimens may grade as number one. This work should be commenced soon after the June drop, and may be continued two or three weeks. The degree of thinning will depend upon the variety. The general rule is to leave only one fruit to each fruit spur, and then, if necessary, continue the thinning till the apples are from four to six inches apart, depending upon the variety. Of course it means work, but it also means number one apples instead of cider apples. Therefore, it pays a handsome profit. The time lost in thinning is largely made up in the greater ease in picking and grading.

Studies on the Montreal Market Muskmelon

Prof. Wm. Stuart, Burlington, Vt.

(Continued from June issue)

THERE are two distinct types of melons under cultivation, one of which is roundish oblate, the other more or less oblong, the first type being slightly deeper ribbed than the latter. These two do not seem to be separated out by the growers, in fact, when the question was put to a grower as to which type he selected for seed purposes his reply was almost invariably that he selected from both, provided the qualities of netting, solidity, thickness, and flavor of flesh were satisfactory. As none of the growers interviewed made a practice of hand fertilization of melons intended for seed purposes, it is not at all certain that either of these types is fixed.

SEED SAVING

Interesting information regarding seed saving was obtained from one of the growers. This party removes the seed melon from the vine at about the time it begins to separate from the stem, and keeps it in an ordinary room temperature in a dry place until it is fully ripe. Then, to avoid the loss of the melon, a two inch square section is cut out, the seeds shaken out, the removed section refitted into place, and sealed in with a gum label, after which process it is ready for shipment. The

party to whom the shipment is consigned, being advised that seeds have been removed from one or more melons in certain packages, is on the lookout for them, and loses no time in placing them in the hands of the consumer. The grower receives full price for such melons and thus secures without loss to himself his future seed supply.

Seed from the earliest ripening melons are generally used for first crop plantings in the belief that an earlier ripening crop will be secured from the offspring of such seed. Attention is also paid to the selection of seed melons borne as near to the base of the plant as possible. Selection in this case is made on the assumption that in the offspring a greater proportion of the fruit will be borne near the base of the plant, a very desirable attribute, especially in the case of frame grown melons.

MELON PACKAGE

The style of package most commonly employed by the commission dealer in shipping melons to distant markets is that of a large wicker basket closely resembling what in some sections is termed a clothes basket. These baskets just hold a dozen melons, the melons being closely packed in rather short, fine-stemmed hay. The basket is ship-

ped without cover and no attempt is made to fasten the melons in place, the express company being held responsible for their safe delivery.

The only exception to this method of shipment noted by the writer was in the case of a grower who shipped his product direct to the consumer. A strong wooden case of sufficient depth to admit of a single layer of melons and of sufficient size in length and breadth to hold a dozen was used with satisfactory results. If an abundance of hay is employed the melons reach the consumer without bruise or injury of any sort.

Munson System of Training Grapes

W. T. Macoun, Dominion Horticulturist, C. E. F., Ottawa

In Munson's "Foundation of American Grape Culture" there is described the Munson three-wire trough trellis system of training grape vines. Can you inform me whether this system is in use to any extent, and if there are any disadvantages in it from the point of view of a Canadian vine-grower? His system appears to me to be founded on good common sense, but as I have never seen any vineyards in which it is in use, I would like a little information from some outside source before considering it further.—A. F. W.

The Munson system of training grape vines is not used to any extent in Canada. The system may be described briefly as follows: Posts are put in the ground about twenty-four feet apart, with from four and one-half to five feet of the post above ground. A three-eighth inch hole is bored in each post about four feet from the ground and six inches from the top of the post to admit the lower wire. Crossarms of two by four inch wood (one by four is sufficient except for end posts) and two feet long are held to the side of the post near the top by wire, without nailing.

Within an inch of each end, and one inch from the upper side, of the cross piece is bored a three-eighth inch hole. Number eleven galvanized wire is run through the holes and securely fastened, thus making a three-wire overhead trellis. Only the wire through the post need be put on at first. A single cane is allowed to grow, and this is fastened to the lower wire when it reaches the desired height. Before the next spring this is cut back about two-thirds. It will soon reach the wire this season, and two canes are trained out, one in each direction, along the middle wire. The next year, and in future, there will be four arms, two in each direction, along the lower wire.

The new growth grows over the wires and hangs down, and it is claimed for the system that the summer pruning is very light.

The fruit is a little easier to pick on the Munson trellis, but not sufficiently so to offset other things. Cheapness in growing grapes is desirable, and on this account it is not likely that the Munson system will be generally used in Canada for some time.