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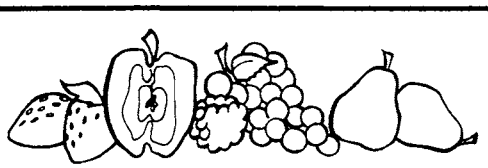
FRUIT GROWERS' LETTER



February 1980

BERRY GROWERS' SCHOOL SET FOR MARCH 16 AND 17

A meeting of interest to both strawberry and raspberry growers will be held March 16-17 in the Holiday Inn, Roseville, Minnesota, and at the Earle Brown Center, St. Paul Campus of the University of Minnesota. Speakers will include a Wisconsin commercial berry grower and faculty and extension specialists from the Universities of Minnesota, Illinois, Wisconsin, and USDA.

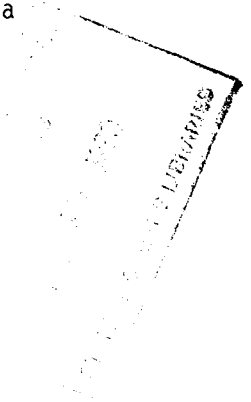
Program

Sunday, March 16 - Holiday Inn Roseville

P.M. Leonard Hertz, presiding
6:00 Dinner (on your own, off the menu)
7:30 Growing Strawberries for PYO in Wisconsin - Tom Miller

Monday, March 17 - Earle Brown Continuing Education Center (St. Paul Campus)

A.M. David Wildung, presiding
8:00 Registration and coffee
9:30 New Strawberry Varieties and Recent Developments - Gene Galletta
10:15 Getting Customers to the Farm - Bill Courter
11:00 Raspberry Varieties for PYO - Elden Stang
11:30 The RPAR Process - Howard Deer
11:45 Grower Discussion - Carroll Johnson, presiding
12:15 Lunch (on your own)
P.M. John Lange, presiding
1:15 The USDA Strawberry Breeding Program - Gene Galletta
2:00 Do You Know Who Your Customers Are? - Bill Courter
2:45 Coffee break
3:00 Weed Control in Strawberries and Raspberries - Elden Stang
3:30 Pest Control - Leonard Hertz
4:00 Adjourn



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SUCCESS WITH GRAPES

Grapes can do well in Minnesota if suitable sites are chosen and the varieties are well adapted to this climate. Choose a spot with full sunlight such as a southern slope or the south side of a windbreak.

Plant grapes in a sandy loam soil with a high amount of organic matter. Set the plants a little deeper than they were in the nursery and firm the soil around the roots, spacing the plants and rows about eight feet apart.

Hardy grape varieties such as Beta need pruning before growth starts each spring. Failure to prune produces a jungle of old canes and limits fruit production. Less cold-hardy varieties, such as Concord, should be pruned in the late fall before being laid down for winter protection. A new variety, Edelweiss, will often survive without protection, and is considered hardier than Swenson Red, another new variety.

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PRUNING PEAR TREES

Start training young pear trees at planting time and then, once established, prune only lightly. Because the branches of most pear varieties tend to grow upright and compact, they should be spread when young, using wooden "spreaders" about 12 inches long. Place the "spreaders" in the branch angles and force the branch to grow to a new, more desirable angle. Pear trees are slow to begin bearing fruit. As the trees reach five or six years of age, tying down or bending the upright branches aids the start of fruit buds.

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MINNESOTA-WISCONSIN APPLE SCHOOL TO BE HELD IN LACROSSE, WISCONSIN

The Minnesota-Wisconsin apple growers will meet at the Apple School on March 5 and 6, 1980, at the Hoffman House, Midway Motor Lodge, LaCrosse, Wisconsin. This meeting will cover a full two days and will include speakers from Michigan, Wisconsin, and Minnesota. There will be in-depth discussions on apple pests, weed control, apple packaging, orchard nutrition, tree losses in 1979, as well as several other topics.

Registration will begin on Wednesday morning (March 5) along with coffee and rolls. For further information contact Leonard B. Hertz, Department of Horticulture, University of Minnesota, St. Paul, MN 55108.

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POLLINATION IN RASPBERRIES

Although most varieties are self-fruitful, bees and other insects are essential for optimum pollination of raspberries.

Pollen transfer by insects is necessary for maximum production since the male parts which are in close contact with the female parts of the flower do not release their pollen when the female parts become receptive. The release of pollen proceeds in succession from the outermost male flower part inwards. Late in the life of the flower, if complete pollination has not already been brought about by insects, some self-pollination may result. The degree of self-fruitfulness seems to vary with varieties. Incomplete pollination results in reduced yields, berries containing fewer drupelets, and berries of poorer quality.

Even though many types of insects are attracted to the flowers because of their attractive nectar and pollen, only bees are of real consequence in transferring pollen effectively. In areas where berries are produced commercially, there may not be enough bumble bees and other wild bees to provide mass pollination needed for maximum crop production. Honey bee colonies can be moved to such fields if needed. (*Horticultural News*, N.J.)

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TENORAN HERBICIDE AGAIN AVAILABLE FOR COMMERCIAL STRAWBERRY GROWERS

The herbicide, Tenoran, is again available to commercial strawberry growers for the 1980 growing season. Tenoran is an effective herbicide for use in the establishment year of a strawberry bed. It will give good control of most broadleaf weeds. Control of grassy weeds is only fair. Tenoran can be used both as a preemergence and postemergence herbicide. Weed control trials have shown that the most effective time to use Tenoran is postemergence to the weeds. At that time, the broadleaf weeds should be less than 2 inches high (less than 4 leaves) and grassy weeds less than 1/2 inch tall (1 to 2 leaves). Applications can be made after planting and in late fall.

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CONTROL OF APPLE ROOT SUCKERS WITH NAA

Sucker growth from the rootstock can become a serious problem. Dense sucker growth is costly to remove by hand, grows back within a season, necessitating annual removal, and can provide excellent cover for mice as well as a haven for disease and insect pests.

Suckering is not a problem limited only to vigorous trees. While some clonal apple rootstocks, especially M7, may sucker excessively, all deciduous fruit trees have the potential to sucker.

Field studies have shown that optimum control of vigorous sucker growth is obtained when suckers are cut out during the dormant period. Later, in midsummer, the leafy sucker regrowth is thoroughly sprayed with a 1 percent NAA solution. This treatment both kills sucker growth and prevents regrowth that season. Regrowth in the following season is greatly reduced as well, although some sucker development may occur, necessitating another application. To date annual retreatment with NAA has had no deleterious effects on tree growth or productivity. The trunks of the trees can be sprayed without risk. Do not allow spray drift into the canopy of the tree. Phytotoxicity and damage to fruit will result. (Summarized from *American Fruit Growers* magazine)

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ROOTSTOCKS FOR RED AND GOLDEN DELICIOUS

Minnesota apple growers are aware that Red Delicious and Golden Delicious are two of the most cold-tender varieties grown. This seems to be true for both spur types and red strains. Consequently, orchard site selection is one factor which could improve production. Selection also of the most compatible and precocious rootstock will help.

Malling 26 is suitable for a wide range of soils and often can be managed as a free-standing tree with spur 'Delicious.' The precocity of M26 is excellent and with a tree spacing of 10-12' x 20', production per acre is good.

Malling 7 has a good record of production and is especially suited for the spur 'Delicious.' This combination comes into bearing at an early age, and this is an aid in early spreading of branches. Both M26 and M7 used under 'Delicious' make rather open spreading trees for better light exposure and stronger spur development and easy tree management.

Malling Merton 106 has several faults, but it is very precocious with all varieties, including 'Delicious.' On an average orchard site, it will need more room to grow, about 172 trees per acre (14' x 18'). M106 is well known to be susceptible to "collar rot" on the heavier, not so well drained soils, so it should be used only on the best sites and soils.

Malling 111 rootstock is very vigorous with only about 25 percent dwarfing. Although it is not as precocious as M106, it is well anchored, productive, and is adapted to a wide range of soil types.

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Leonard B. Hertz

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Extension Horticulturist

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