reduced cost of production and grower preference for mosaic-free brambles will become increasingly important factors in bramble plant merchandising. We therefore encourage nurserymen who now grow brambles, or who contemplate growing them, to consult with their State Agricultural Experiment Stations concerning production of mosaic-free brambles.

The question may well be asked: "How long will mosaic-free stocks from indexed sources remain mosaic-free and vigorous in a nursery?" We have reason to be optimistic, because in a recent study, the USDA grew 12 mosaic-free raspberry varieties in 14 field locations in 9 eastern states for 1 to 2 years. No mosaic was detected in the stocks in nine of these locations at the end of the test, and the overall mosaic infection rate was about 3 percent. The rate of infection differed among varieties. We expect the infection rate to be prohibitively high in certain locations if mosaic-free raspberries are planted near infected material.

For nurserymen interested in growing essentially mosaic-free brambles the following general 4-point program is suggested:

1. Choose a few of the leading bramble varieties popular in your area, and find a basic source of indexed stock through your Agricultural Experiment Station.

2. Select nursery land well adapted to growing bramble plants and isolated from commercial brambles, particularly red raspberries. Isolation of 1000 feet has been used successfully in several pilot trials in the eastern United States. Destroy all the wild brambles around the planting, particularly wild red and black raspberries and wineberries. Fumigation of the land is advisable to control meadow and dagger nematodes, to promote vigorous root growth, and to eliminate potential virus-carrying nematodes.

3. Grow the planting for plants only, and do not fruit it. In this way the plants can be pruned for maximum sucker or tip production. A good systemic insecticide recommended by your county agent can be used to reduce chances of the spreading of mosaic by aphids.

4. Rogue off-type plants routinely, but plan to replace the stock after several years when plant production begins to decline. Inexpensive portable 12 x 24 foot screenhouses in which mosaic-free mother plants can be maintained for propagation are now on the market for about $200. Ultimately, however, a continuing source of indexed mother plants, and a service to index sample plants should be made available to the nurseryman from his State Agricultural Experiment Station or State Department of Agriculture.

Apple Variety Trends in Mid-Atlantic States

The York Imperial apple continues as the leading variety in the Middle Atlantic region, according to A. H. Thompson, of the University of Maryland, in Fruit Notes of the University of Massachusetts. Delicious is also being planted heavily. The outstanding non-spur sports of Delicious in this area are Ryan Red, Topred, Red Prince, Red Queen and Hi-Early. The best spur-types, Starkrimson, Redspur and Wellspur, show more chlorophyll than the non-spur sports, and remain inferior in quality until Christmas or later. There is also a great interest in Golden Delicious in this region.