

Field observations indicated that rabbits fed upon certain clonal rootstocks preferentially (table 2). EM II rootstock sustained the least feeding damage while EM IX and M-26 were frequented much more often. While EM IX and M-26 have a low growth characteristic, almost recurving in nature, there were ample lateral branches on all clonal stocks extending down the trunk to within 4" of the soil. Most feeding damage was observed on the trunks. Table 3 indicates the severity of damage to the rootstocks. It is interesting to note that rootstocks fed on most frequently were also the ones on which feeding was the most severe.

Pear Breeding in Ohio

A pear breeding program was initiated in 1966 by the Department of Horticulture of the Ohio Agricultural Research and Development Center at Wooster in cooperation with the U.S.D.A. The work is being directed by W. A. Oitto, of the U.S.D.A. The basic objectives are to obtain pear varieties of high quality, resistant to fireblight, and adapted to Ohio conditions.

High quality European pear cultivars are being crossed with selections from earlier programs which show exceptional quality and apparent good resistance to blight. The latter selections are the result of crossing European pear cultivars with blight resistant species such as *Pyrus serotina* (sand pear), *P. ussuriensis* (Ussurian pear) and *P. calleryana* (Callery pear).

Some 1200 seedlings were planted at Wooster in 1966. New seedlings will be added each year (1000-2000) until a total of 12,000 have been planted. A planting of cultivars will also be maintained for evaluation, and as a source of breeding material.

When facilities for mass inoculation of seedlings become available at Beltsville, all progenies will be screened for

fireblight, and only resistant seedlings will be planted in the orchard at Wooster.

Notes from Research Report of Summerland Research Station, 1961-64

Apple rootstock studies at Summerland, B. C. indicate that the best possibilities for high density plantings in commercial orchards are provided by the semi-dwarfing rootstocks, EM VII, EM 26, MM 106, and possibly EM IV. However collar rot is a severe problem with MM 106, and to some extent with EM VII.

Compact apple mutants have been obtained by exposing dormant scions to X-rays, gamma rays, or thermal neutrons. Trees obtained from these mutants have exhibited shorter internodes, more fruit spurs, fewer vegetative shoots, slightly smaller leaves, but larger leaf area per unit of shoot length than the parent varieties. The fruit of most, but not all, of the mutants have been undesirable in shape—oblate, assymetrical, grooved, or small.

Fruit variety evaluation studies have shown the best varieties to be as follows:

Apple: Highest colored Delicious sports—Harrold Red, Starkrimson, Hi-Early Red, Hapke and Imperial. Best McIntosh sports—Summerland, Rogers, Imperial, Reid, Geneva. Most promising varieties maturing before McIntosh—Quinte, Tydeman's Early.

Nectarine: Early varieties (Redhaven peach season)—N.Y. 884, N.J. N23; main season—N.Y. 1017 and Nectared.

Peach: For fresh market—Early Redhaven. For canning—Golden Jubilee, Fairhaven; clingstone—Fortuna.

Grape: New varieties for wine—Bath, Seibel 9549 and 9110, Foch, New York Muscat and Buffalo.