Registration would then designate specific propagation-clones of a given cultivar. Certification would assure the identity of the propagation-clone and the conditions under which it was propagated. An additional category could be utilized to indicate *performance-tested* clones to apply to those that have been used successfully in commercial production under specified conditions. Coupled to this testing procedure, specification of the location and conditions for maintaining the propagation block may be needed, and a limit to the number of repropagations to avoid changes of BF-susceptibility with time. Methods of detecting and measuring BF-susceptibility are needed.

Changes in propagation potential are not unique to the BF problem. Changes from juvenile to non-juvenile material, for example, can produce differences among trees propagated from them (8). Nelson (12) reports that certain newly developed apple rootstocks which rooted readily in initial stock blocks were difficult to root when propagated in commercial nurseries, probably through loss of juvenility. The opposite effect occurs with nucellar-originated citrus cultivars, which require sufficient repropagations to outgrow the undesirable characteristics of the juvenile phase (4). In pecan, non-juvenile trunks have been found more susceptible to freeze injury than juvenile (13).

A propagation-clone may be considered comparable to a pure line in seed-propagated cultivars and results in a high degree of uniformity in performance of progeny plants. This accounts for the high percentage of BF trees appearing in tests of 'Nonpareil' clone 3-8-1-63.

Nursery sources, on the other hand, may be comparable to a line or multi-line (6), i.e., mixtures of pure-lines, since propagation stock may come from many separate trees differing in BF-susceptibility. This accounts for the sporadic appearance of BF in many commercial orchards, particularly in central and northern California, and the incidence of BF in some commercial test lots reported in this paper.

The build-up of BF in commercial source materials can be accounted for by narrow selection practiced in the initial phase of establishing a propagation stock block, which could result in inadvertent selection of a BF-susceptible propagation-clone. Because of potential induction of BF-susceptibility by high temp (9), collection of propagation materials from the central and southern San Joaquin Valley and the northern and western Sacramento Valley and/or its maintenance in these locations may carry a certain risk of eventually producing BF trees.

Literature Cited

1. Anonymous. 1968. Regulations for registration and certification of stone fruit. Calif. Dept. of Food and Agric., Sacramento, CA.
2. Campbell, A. I. 1973. Clonal variation in Cox's Orange Pippin. *In* Fruit present and future. *Roy. Hort. Soc.*, London. 2:75-80.
3. Fridlund, P. R. 1976. IR-2 the interregional deciduous tree repository, p. 16-22. *In* Virus diseases and noninfectious disorders of stone fruits in North America. USDA Agr. Hand. 437.
4. Frost, H. B., J. W. Cameron, and R. K. Soost. 1967. Diversity among nucellar-seedling lines of Satsuma mandarin and differences from the parental old line. *Hilgardia* 27:201-222.
5. Gilmour, J. S. L., F. R. Horne, E. L. Little, Jr., F. A. Stafleu, and R. H. Richens. 1969. International code of nonmenclature for cultivated plants. *Regnum Vegetabule* 64:1-32.
6. Hartmann, H. T. and D. E. Kester. 1975. Plant propagation: principles and practices, 3rd Ed., Prentice Hall, Englewood Cliffs, N.J.
7. Hellali, R., D. E. Kester and K. Ryugo. 1976. Seasonal development of symptoms of noninfectious bud-failure in almond (*Prunus amygdalus* Batsch). *J. Amer. Soc. Hort. Sci.* 101:494-497.
8. Kester, D. E. 1976. The relationship of juvenility to plant propagation. *Proc. Int. Plant Prop. Soc.* 26:71-84.
9. _____ and R. N. Asay. 1978. Variability in noninfectious bud-failure of 'Nonpareil' almond. I. Location and environment. *J. Amer. Soc. Hort. Sci.* 103:377-382.
10. _____, and R. Hellali, and R. N. Asay. 1976. Temperature sensitivity of a "genetic disorder" in clonally propagated cultivars of almond. *HortScience* 11:55-57.
11. _____, L. Tabachnik, and J. Negueroles. 1977. Use of micropropagation and tissue culture to investigate genetic disorders in almond cultivars. *Acta Hort.* 78:95-101.
12. Nelson, S. H. 1977. Importance of safeguarding juvenility in new fruit tree clonal rootstocks. *The Plant Propagator* 23(2):4-5.
13. Sparks, D. and J. A. Payne. 1977. Freeze injury susceptibility of non-juvenile trunks in pecan. *HortScience* 12:497-498.
14. U.S. Dept. Agr. 1976. Virus diseases and noninfectious disorders of stone fruits in North America. USDA Agr. Handb. 437.
15. Wilson, E. E. and C. L. Stout. 1944. A bud-failure disorder in almond trees. *Calif. Dept. Agr. Bul.* 33:60-64.
16. Wood, M. N. 1925. Almond varieties in the United States. *U.S. Dept. Agr. Dept. Bul.* 1282:1-142.

ERRATA

In the paper entitled, Influence of plant spacing on yield of muscadine grape by W. T. Brightwell and M. E. Austin (*J. Amer. Soc. Hort. Sci.* 100(4):374-376. 1975), the figure in Table 2, Year 1955, 20.1 square meters, 435 plants/ha should read 9.8a instead of 26.8a and the avg for the same column should read 29.0ab instead of 29.6ab.

* * *

In the paper, Effect of growth regulators on branching, flowering, and fruit development of ornamental pepper (*Capsicum annuum* L.), by M. Khademi and M. Khosh-Khui (*J. Amer. Soc. Hort. Sci.* 102(6):796-798. 1977), the description for Figure 1 should read . . . C_1 is control and C_2 to C_4 represent 300, 600, 900 ppm ethephon, 400, 800, 1200 ppm BA, and 50, 100, 150 ppm IAA, respectively.

* * *

In the paper, Ethylene in fruits of blackberry and rabbiteye blueberry by John A. Lipe (*J. Amer. Soc. Hort. Sci.* 103(1):76-77. 1978), the ethylene concentration in the text expressed as mg/liter should be μl/liter or ppm.