field testing. The tree support problem is not of great consequence, since most high density systems are supported. However, the large trees that often result from micropropagation may preclude their widespread use in high density plantings, unless genetically dwarfed cultivars become available for future use. Precocity is essential to recover the initial high cost of high density plantings and to take advantage of the high fruit prices of new cultivars. Perhaps cultural methods can be divised to overcome potential delays in bearing.

Literature Cited

1. Cobianchi, D., F. R. Salvador, W. Faedli, O. Inserno, A. Liverani, L. Rivalta, and A. Minguzzi. 1988. Preliminary field observations on *in vitro* propagated trees. Acta Hort. 227:514-515.
2. Couvillon, G. A. 1985. Propagation and performance of inexpensive peach trees from cutting for high density peach plantings. Acta Hort. 173:271-282.
3. Faust, M. and H. W. Fogle. 1980. Potential changes in fruit growing resulting from use of tissue culture. Proc. Conference on Nursery Production of Fruit Plants Through Tissue Culture—Applications and Feasibility. USDA Science and Education Agricultural Research Results ARR-NE-11. pp. 102-106.
4. Freund, R. J. and R. C. Littell. 1981. SAS for Linear Models A Guide to the ANOVA and GLM Procedures. SAS Institute, Inc. Cary, North Carolina. 231 pp.
5. Gyuro, R., M. Gondor-Pinter and K. A. Dib. 1986. The effect of rootstock on the productive surface of apple trees. Acta Hort. 160:83-96.
6. Quamme, H. 1987. Orchard renovation to high density—rootstocks. Proc. Ninth Annual British Columbia Fruit Growers' Assoc. pp. 27-31.
7. Rosati, P. and D. Gaggioli. 1987. Field performance of micropropagated peach rootstocks and scion cultivars of sour cherry and apple. Acta Hort. 212:379-390.
8. Rosati, P. and D. Gaggioli. 1989. Orchard response of micropropagated sour cherry and apple cultivars. Sci. Hort. 39:201-209.
9. Webster, A. D., V. H. Oehl, J. E. Jackson, and O. P. Jones. 1985. The orchard establishment, growth, and precocity of four micropropagated apple scion cultivars. J. Hort. Sci. 60:169-180.
10. Zimmerman, R. H. 1986. Propagation of fruit, nut, and vegetable crops—overview. In: Zimmerman, R. H. et al. (eds.). Tissue Culture as a Plant Production System for Horticultural Crops. Martinus Nijhoff Publishers. The Netherlands.
11. Zimmerman, R. H. 1989. Orchard growth and fruiting of micropropagated apple trees. J. Amer. Soc. Hort. Sci. (paper submitted for publication).
12. Zimmerman, R. H. and G. L. Steffens. 1989. Management of self-rooted tissue-cultured, apple trees: I. Orchard establishment and early growth. Acta Hort. (in press).

Fruit Varieties Journal 44(4):192-193 1990

1990 Prunus Breeders Meeting

DAVID H. BYRNE AND TERRY A. BACON[1]

The prunus Breeders Meeting this year was held on May 25-26th and hosted by David Byrne and Terry Bacon of the Department of Horticultural Sciences, Texas A&M University at College Station, Texas. Prunus researchers/breeders from ten U.S.-based breeding programs in 9 states (Alabama, Arkansas, California, Florida, Georgia, New York, South Carolina, Texas and West Virginia) and from ten other countries (Australia, Brazil, Canada, China, France, Hungary, Italy, Mexico, Thailand and Yugoslavia) participated in the conference.

[1]Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843-2133.

The Stonefruit breeding program at Texas A&M University emphasizes the development of peach, plum, and apricot cultivars adapted to the medium chill (400-650 chill units) and subtropical (<200 chill units) fruit growing regions. In these zones, the wide variability in effective chilling received causes extreme fluctuations in peach fruit quality (shape, color, and firmness) and the progress in the selection for quality stability was discussed. Many of the cultivars grown in this zone, frequently (especially years with mild winters) show larger, softer tips and less red over color than when grown in zones which have longer, and colder winters. These effects were seen in the fruit of 50 cultivars and selections that were displayed. The active research on rootstocks tolerant to alkaline soil, embryo and ovule culture, and Prunus genetics were explained and discussed.

The crops discussed included apricots, cherries, peaches (fresh market and canning clingstones), nectarines, and plums. Ongoing Prunus work on host-plant resistance, the components of fruit quality, new tree growth types, new production trends, rootstocks, ovule and embryo culture, isozyme variability, restriction fragment length polymorphisms, transformation systems and fruit softening gene isolation was reviewed.

Future meetings are tentatively scheduled to be held in Raleigh, North Carolina at North Carolina State University (July, 1991 before the ASHS meeting), in Visalia, California (August, 1992 hosted by USDA in Fresno and SunWorld in Bakersfield) and in Gainsville, Florida (May, 1993).

Figure 1. People attending The Prunus Breeders Conference.
Front row, left to right. Roy Rom (AK), Alberto Pinto (Brazil), Robert Anderson (NY), Suzanne Rogers (TX), Mari Loehrlein (CA), Curt Rom (AK), ShiYan (China), Tom Gradziel (CA), Kim Strong (TX), Wayne Sherman (FL), Salvador Perez (Mexico).
Back row: Petar Misic (Yugoslavia), David Byrne (TX), Ralph Scorza (WV), Joe Norton (AL), William Newall (SC), Danielle Bassi (Italy), Neil Miles (Canada), Bruce Topp (Australia), Zoltan Szabo (Hungary), Bruce Mowrey (CA), Dick Okie (GA), A. Lambertin (France).
Missing from picture: Tom Beckman (GA), Unaroj Boonprakob (Thailand), Terry Bacon (TX), Calvin Lyons (TX), Charles Graham (SC).