

would not have been inhibited by large cluster counts nor did large fruit set lead to larger amounts of fruit drop or small fruit size. Neither would small fruit numbers seem to have improved fruit size detectably.

### Summary

In 1984, yield variation in both experiments was mainly due to variation in the number of fruit harvested (Tables 5 and 6). In 'Delicious' 65% of the total yield variation (sum of squares) was explained and 7.6% of the total was due to strain differences in numbers of fruits harvested (Table 5). In 'Golden Delicious' 96.9% of the total yield variation (sum of squares) was explained and 17.4% of the total was due to strain differences in numbers of fruits harvested (Table 6).

In 1985, yield variation in all three experiments was mainly due to variation in the number of flower clusters (Tables 5, 6 and 7). In 'Delicious' and 'Golden Delicious' 65.9% (Table 5) and 71.5% (Table 6) of the total yield varia-

tion (sum of squares) was explained by differences in the number of flower clusters, but there were no significant differences among strains in either of the two groups. In 'McIntosh' 68.1% of the total yield variation (sum of squares) was explained by differences in the number of flower clusters but 19.3% of the total was due to strain differences in numbers of flower clusters (Table 7).

### Literature Cited

1. British Columbia Ministry of Agriculture and Food. 1986. Tree fruit production guide for interior districts for commercial growers. Victoria, B.C., Canada.
2. Eaton, G. W., P. A. Bowen, and P. A. Jolliffe. 1986. Two-dimensional partitioning of yield variation. *HortScience* 21: 1052-1053.
3. Fear, C. D., and P. A. Domoto. 1986. The 'Delicious' apple. *Fruit Varieties J.* 40:2-4.
4. Fisher, D. V., and D. O. Ketchie. 1981. Survey of literature on red strains of 'Delicious.' Washington State University College of Agriculture Research Center, Bulletin 0898.
5. Looney, N. E., and W. D. Lane. 1984. Spur-type growth mutants of McIntosh apple: a review of their genetics, physiology and field performance. *Acta Horticulturae* 146:31-46.

## Book Review

*Plant Breeding Reviews* Volume 4, Edited by Jules Janick, contains 407 pages and is available for \$54.00 from AVI Publishing Company, 250 Post Road East, P.O. Box 831, Westport, Connecticut 06881. The latest volume is dedicated to Dr. Henry M. Munger who released 68 cultivars and inbreds of 8 different vegetables during his productive career. Included in the 11 chapters of this issue is a discussion of the following: Pollen, Pistil, and Reproduction Function in Crop Plants, Mobile Elements in Maize, Somaclonal Variation in Alfalfa, Cell Selection for

Crop Improvement, Oil palm Improvement via Tissue Culture, Breeding Soybeans for Drought Resistance, Breeding Common Bean for Yield in Mixtures, Inheritance of Tomato Fruit Quality Components, Breeding Sweet Potatoes, Breeding Blight-Resistant Chestnuts. The authors are to be commended for pulling together the references on these subjects and summarizing the information in a concise manner. This book has many topics of interest to the breeders in our society who are interested in crop improvement.