

roots. When recultured in media containing 0.05 - 0.1 ppm of NAA and 0.0 - 0.05 ppm of kinetin, 50% of the remaining plantlets were induced to root and developed into acceptable complete plantlets.

When the roots began to elongate, plantlets were recultured individually in flasks in the medium alone, or in a medium containing 0.01 ppm of NAA. When the roots elongated to about 8 cm, plantlets were transferred to unglazed pots containing a 2:1:1 sterilized mixture of sandy loam, peat, and sand. Each pot was covered with 10 x 31 cm plastic (0.076 mm thickness) bag to assist plantlet acclimation to a 27°C glasshouse environment. About 80% of the plants survived.

**Cytological studies.** Root tips and flower buds were used for cytological examinations. The root tips were pre-treated with 0.002 M 8-hydroxyquinolin for 1 hr. The tissue were fixed in alcohol-acetic acid solution (3:1) for 2 hr at room temp. The aceto-carmin smear and Feulgen squash techniques were used to make chromosome counts. Cytological examination showed that all the plants obtained from stem segments cultures were diploid,  $2n=20$ . No polyploid plants were found, indicating this propagation method effectively maintains the normal diploid chromosome number.

#### Literature Cited

- Andreassen, D. C., and J. H. Ellison. 1967. Root initiation of stem tip cuttings from mature asparagus plants. *Proc. Amer. Soc. Hort. Sci.* 90:158-162.
- Gorter, C. J. 1965. Vegetative propagation of *Asparagus officinalis* by cuttings. *J. Hort. Sci.* 40:177-179.
- Hasegawa, P. M., and T. Murashige. 1972. Propagation of asparagus (*Asparagus officinalis* L.) through apex culture. *HortScience* 7:210. (Abstr.)
- Malnassy, P., and J. H. Ellison. 1970. Asparagus tetraploids from callus tissue. *HortScience* 5:444-445.
- Murashige, T., and F. Skoog. 1962. A revised medium for rapid growth and bioassays with tobacco tissue cultures. *Physiol. Plant* 15:473-497.
- \_\_\_\_\_, M. N. Shabde, P. M. Hasegawa, F. H. Takatori, and J. B. Jones. 1972. Propagation of asparagus through shoot apex culture. I. Nutrient medium for formation of plantlets. *J. Amer. Soc. Hort. Sci.* 97:158-161.
- Steward, F. C., and M. O. Mapes. 1971. Morphogenesis and plant propagation in aseptically cultured asparagus. *Bot. Gaz.* 132:70-79.
- Takatori, F. H., T. Murashige, and J. I. Stillman. 1968. Vegetative propagation of asparagus through tissue culture. *HortScience* 3:20-22.
- Wilmar, C., and M. Hellendoorn. 1968. Growth and-morphogenesis of asparagus cells cultured in vitro. *Nature* 217:369-370.

# CULTIVAR RELEASES

## 'Eden' Peach<sup>1</sup>

Robert C. Lamb<sup>2</sup>

New York State Agricultural Experiment Station, Geneva

'Eden', a white-fleshed, freestone peach [*Prunus persica* (L.) Batsch.] with high productivity and good quality was released in Sept. 1972. It was named for a town in Erie County, N. Y.

#### Origin

'Eden' was selected in 1949 from a progeny of 9 seedlings of 'Champion' x 'Raritan Rose'. The cross was made in 1940 by Professor Richard Wellington and tested as N. Y. 1466. It was distributed by the New York State Fruit Testing Cooperative Association, Inc., Geneva, from 1961-1966.

#### Description

The tree of 'Eden' is rather vigorous and very productive. Blossom buds are slightly less resistant to low temperatures than are those of 'Redhaven' and 'Triogem' (Table 1). The chilling requirement is similar to that of 'Redhaven'. Leaf glands are reniform. The blossoms are nonshowy and small. 'Eden' is not resistant to

perennial canker, but appears to be rather tolerant; at least trees with cankers do not die as a result of it.

The fruit of 'Eden' ripens August 25th on the average at Geneva, N. Y., about 7 days after 'Redhaven' and 'Raritan Rose' or 5 days before 'Redrose'. 'Eden' is medium to large, in size averaging 6.7 cm (2.7 inches) in diam, and roundish in shape. It is 60% covered with bright red over creamy white ground color and is quite attractive. The skin is thin, medium tough and adherent, with dense, short pubescence.

'Eden' has nearly smooth textured, moderately firm, flesh which is creamy white with a little red at the pit. Flavor is sweet and rich. The canned product is satisfactory although the flesh browns quickly on exposure to air. The pit is free, small, nearly oval in shape, and the surface is corrugated and pitted.

#### Availability

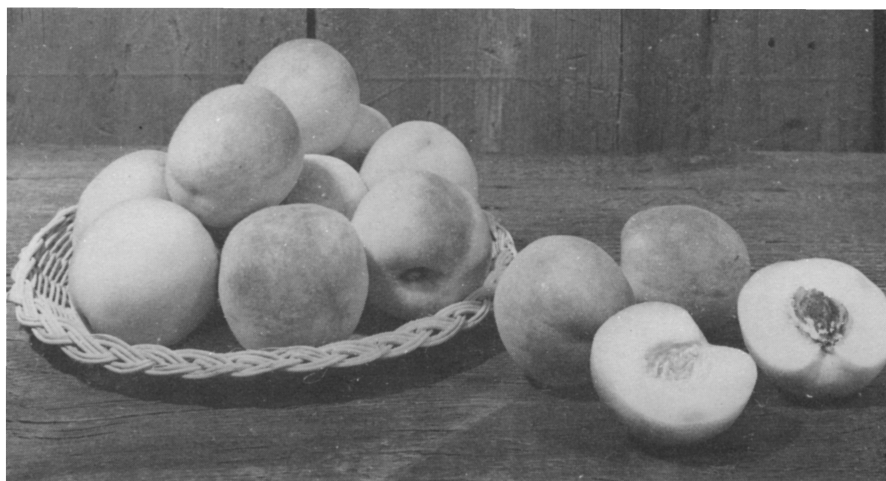
Limited numbers of trees of 'Eden' will be available in the Fall of 1973 through the New York State Fruit Testing Cooperative Association, Inc., Geneva. Dormant scions and budwood are available from the same organization.

<sup>1</sup>Received for publication January 18, 1973. Approved by the Director of the New York State Agricultural Experiment Station for publication as Journal Paper No. 1998.

<sup>2</sup>Department of Pomology and Viticulture.

Table 1. Blossom bud survival of 'Eden' as compared to other cultivars, Geneva, N.Y.

Cultivar	Blossom bud survival (%)							Avg.
	1961	1962	1963	1965	1966	1970	1972	
Brighton	7	3	7	42	58	83	59	37
Eden	30	19	59	50	69	84	59	53
Redhaven	58	17	47	88	83	72	84	64
Triogem	80	16	37	43	78	86	69	57



'Eden' peach