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Brighton and Eden— two new peach varieties

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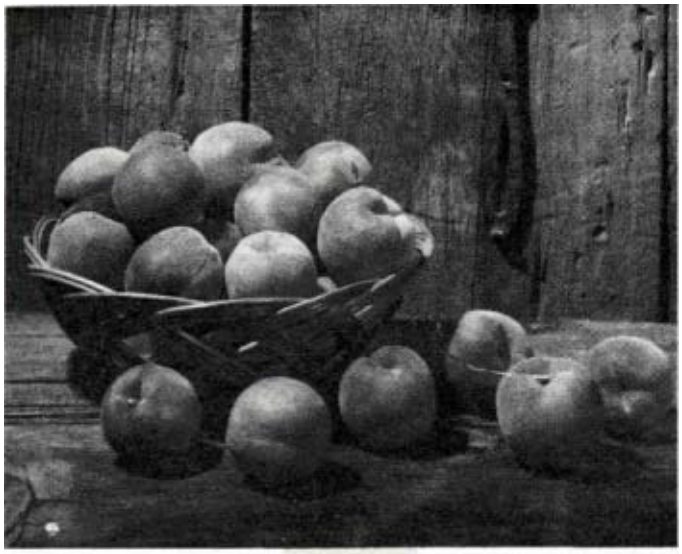
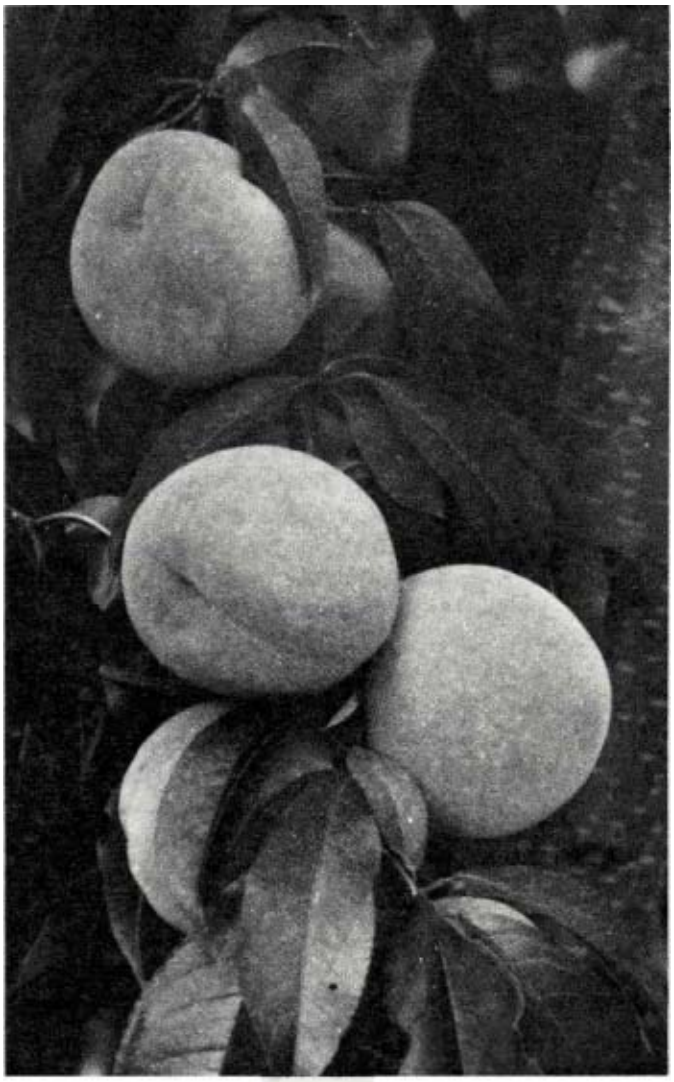


Brighton Peach



Eden Peach

New York State, on the northern edge of the peach growing area, needs improved varieties of peaches.

The best commercial varieties, presently available, are too subject to injury by low winter temperatures to bear full crops every year in most of the fruit growing areas of the State. For this reason, the primary objective of the peach breeding program at the New York State Agricultural Experiment Station is increased resistance to low winter temperatures; that is, increased hardiness. The situation is further aggravated by a disease caused by the fungi, *Valsa cincta* and *V. leucostoma,* commonly known as perennial canker. This disease frequently gains entry through winter-injured twigs and crotches. In 3 or 4 years, it can kill the tree or seriously reduce its bearing area. No good source of resistance to this

disease is known, but with increased hardiness, the potential infection sites can be reduced.

Hardiness is, in fact, a complex of many things; i.e., resistance of the blossom buds to low temperatures, resistance of the woody tissues to low temperatures, maturity of the shoots in the fall, and rest period, and so is very difficult to measure. However, by counting blossom bud survival in severe winters or after artificial cold stress in a freezing chamber, blossom bud resistance to cold of a variety can be characterized. It is planned to develop a technique for measuring wood hardiness of seedlings in a new large freezing chamber as well.

With this hardiness, we must combine all the other characteristics of the best peach varieties: productivity, large fruit size, attractive appearance, smooth shape, firm smooth flesh, non-browning flesh, high flavor, and freestone.

In recent years, more emphasis has been put on the use of very hardy varieties as parents, such as North Caucasus No. 3, Minnesota Seedling, and some very hardy Chinese peaches. These are all small, white-fleshed varieties so that at least two generations will be necessary before any commercially acceptable peaches can be obtained. There is, however, a backlog of selections from more conventional lines of breeding under test. The two new varieties that are being introduced now are from this material. These varieties, Brighton and Eden, are not as hardy as we would like, but many years of testing have shown them to be clearly superior to existing varieties.

BRIGHTON PEACH

Brighton, which was tested as New York 2622, was selected from a progeny of Sunhigh x Redhaven. The cross was made in 1949, and 40 seedlings were planted. It first fruited in 1953. It was propagated by the New York State Fruit Testing Cooperative Association, Geneva, N. Y. in 1962 and has been available for test since that time. It has received favorable comments from a number of growers in New York State as well as from places as far away as Georgia and France.

The fruit of Brighton ripens at Geneva, N. Y. on August 8 on the average. This is one day earlier than Sunhaven. The fruit is medium in size, averaging 21/2 inches in diameter. It is roundish in shape, but in some years, the apex is slightly mamelonate. It is 90 per cent bright red over yellow ground color and is very attractive. The pubescence is short. The skin of Brighton is rather adherent and tough enough to stand handling well.

The flesh is yellow, medium firm, and ripens uniformly. It is juicy and smooth in texture. The flavor is sweet and rich. Brighton is one of the highest quality peaches in its season. The sweetness develops while the flesh is still quite firm, and it retains its good quality as the flesh softens. The flesh turns brown very slowly on exposure to the air. The pit is semi-cling as are all varieties in this season. The pit is oval in shape, plump, and pointed, and the surface is relatively smooth.

The tree of Brighton is moderately vigorous. It is as productive as Sunhaven. The blossom buds are as hardy as Sunhaven. The leaf glands are reniform. The blossoms are non-showy and rather small. Brighton is not resistant to perennial canker but it appears to be rather tolerant of it.

EDEN PEACH

Eden was tested as N. Y. 1466. It was selected from a progeny of nine seedlings of a cross of Champion x Raritan Rose. The cross was made in 1940. It was selected in 1949. This variety was made available by the New York State Fruit Testing Cooperative Association, Geneva, N. Y. in 1961 and was removed from their catalog in 1966 because of a shortage of peach rootstocks and the small market for white-fleshed peaches. However, this peach has continued to be one of the most productive varieties, and it has received many favorable comments from growers who have tested it. For this reason, it was decided to name and introduce it, even though there is little interest in white-fleshed peaches. It was felt that it is too good to have it just disappear and that it should be introduced so that it might find its own level.

The fruit of Eden ripens August 25 on the average at Geneva, N. Y. This is a week after Redhaven and Raritan Rose and 5 days before Redrose, so it fills a gap between two other white-fleshed varieties. Eden is medium to large in size, averaging about 2-5/8 inches in diameter. It is roundish in shape. In color, it is 60 per cent bright red on a creamy white ground color. It is quite attractive. The pubescence is rather dense and short. The skin is thin, medium tough, and adherent.

Eden has thick, nearly smooth-textured flesh that is moderately firm. The flesh is creamy white with a little red at the pit. The flavor is sweet and rich. Eden cans well, although the flesh does turn brown on exposure to air. It is freestone. The pit is small, nearly oval, plump, and the surface is pitted and corregated.

The tree of Eden is rather vigorous and very productive. The blossom buds are equal to Redhaven in hardiness. The leaf glands are reniform. The blossoms are non-showy and rather small. Eden appears to have considerable tolerance to perennial canker, but it is not highly resistant.

Eden has been consistently rated the best white-fleshed peach in its season and is highly recommended to home gardeners and roadside stand operators who have a market for this type of peach.