

The Kei Apple

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The Kei apple (**Dovyalis caffra**) is a fruiting plant which can be grown in many parts of California. This moderately hardy evergreen subtropical is native to the Kei River region of South Africa, but is well adapted to our subtropical climate, withstanding temperatures of 20°F. apparently without injury. It has been grown for many years in the Mediterranean region— Prance, Algeria, Italy—and Northwestern Australia, and in Florida and California.

The plant is commonly known as the Kei apple in most parts of the world, although it is called the umkokola by South African natives. It is related botanically to the ramontchi or Governor's plum (**Flacourtia Ramonchi**) and to the ketembilla or Ceylon gooseberry (**Dovyalis hebecarpa**). The genus **Dovyalis** is known in older literature under the name **Aberia** (e.g. **Aberia caffra**, etc.). All of these fruiting plants belong to the **Flacourtiaceae** or Placourtia family.

The Kei apple is a vigorous-growing shrub armed with long, stiff, sharp thorns. It makes an excellent hedge plant, for it has a reputation as a "perfect terror to evil doers, be they beast or humans." The leaves are small oblong-ovate, often borne in small clusters on short lateral branches at the base of the spines.

The plants are regularly dioecious, the flowers being unisexual—the staminate (male) flower borne on one plant, the pistillate (female) on another plant. Because the two types of flowers are produced on different plants, cross-pollination is required. Thus it is necessary to provide staminate plants for the pistillate or fruiting plants. One cannot be certain as to the sex of the plant until it produces flowers or unless it is propagated—by cuttings, layering or budding— from a plant of known sex. When seedlings are grown, several should be planted together with the idea of removing all but a few or perhaps one of the male plants when the sexes can be determined. One male plant will provide sufficient pollen for 20 to 30 female plants.

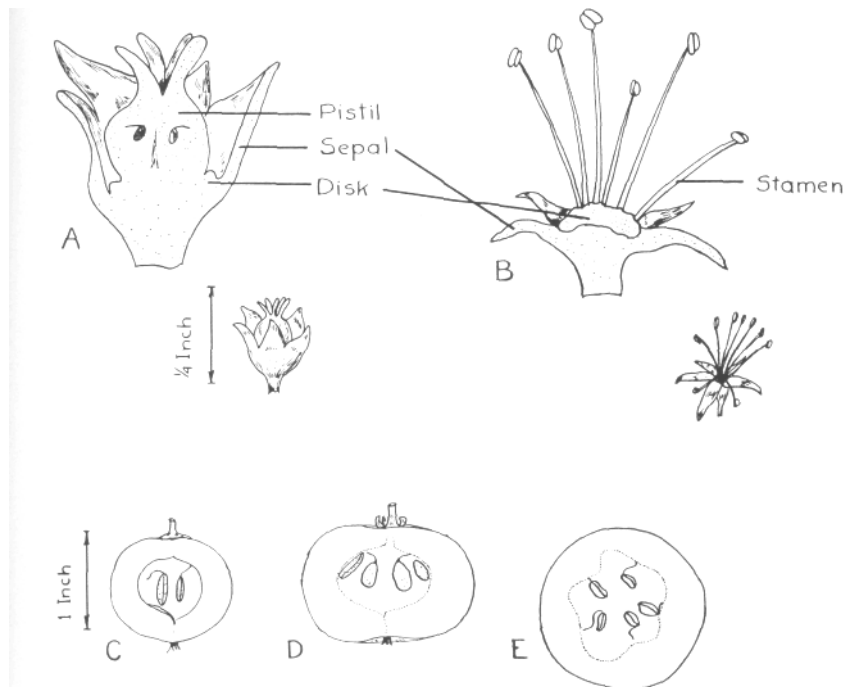


Figure 1. Kei Apple (*Dovyalis caffra*)
 A—Pistillate (female) flower. B—Staminate (male) flower. (A and B—same scale). C—Longitudinal section through round type fruit. D, E—Longitudinal and cross section through oblate fruit (C, D, E—same scale).

The yellowish, cream-colored flowers of the Kei apple are small and inconspicuous. They are without petals and are borne in the leaf axils of the younger branches. Pistillate flowers (fig. 1-A) are borne singly or in small clusters, whereas the staminate flowers (fig. 1-B) are often found in small clusters on short lateral spurs.

The fruit is, botanically, a berry from 1 to 1½ inches in diameter, oblate or round in form, having a thin, yellow, glabrous skin and a yellow, melting, juicy pulp. Within the pulp are 5 to 15 flattened, pointed seeds. The fruit is highly aromatic, with an odor suggesting fresh apricot, and is highly acid unless fully ripe. When somewhat immature the fruits have been used for pickles and when fully ripe they can be made into jam or jelly. The Kei apple fruit has considerable jellifying power, for a small amount of it will cause good jelling of other fruit juices which do not jell well.

While the Kei apple is not exacting in its requirements and will withstand considerable drouth, it does, however, respond to good care, especially when grown in a humus-rich soil. As a hedge it should be planted at about 3 to 5 foot intervals, but if specimens are desired for greater production of fruit the plants should be spaced at 12 to 15 feet. Some specimens have been observed which produce very heavy crops nearly every year. An average crop for a small plant about five feet tall was noted to be about 16 pounds.

In California the Kei apple blooms in April and May and matures its fruit in October and November.

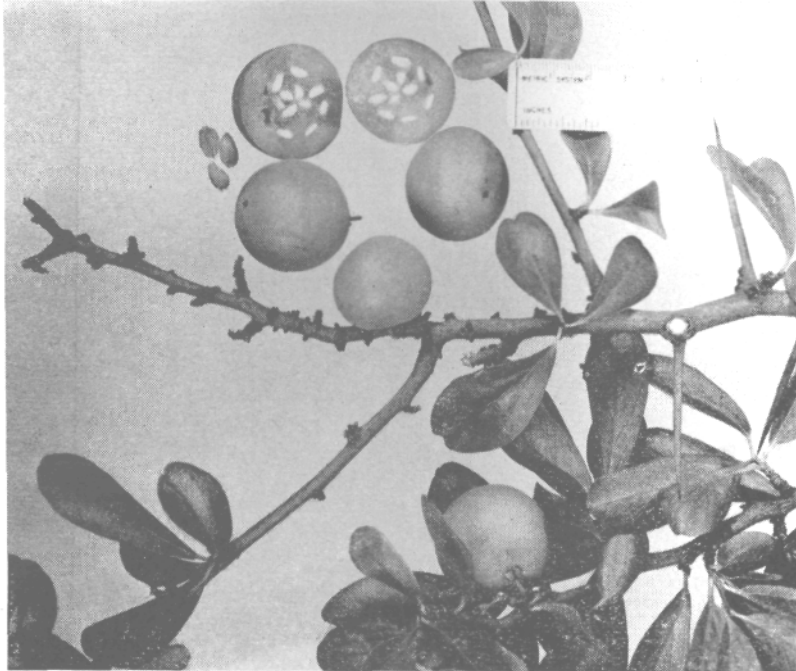


Fig. 2. Detail of branchlet with fruit. Note large spines.

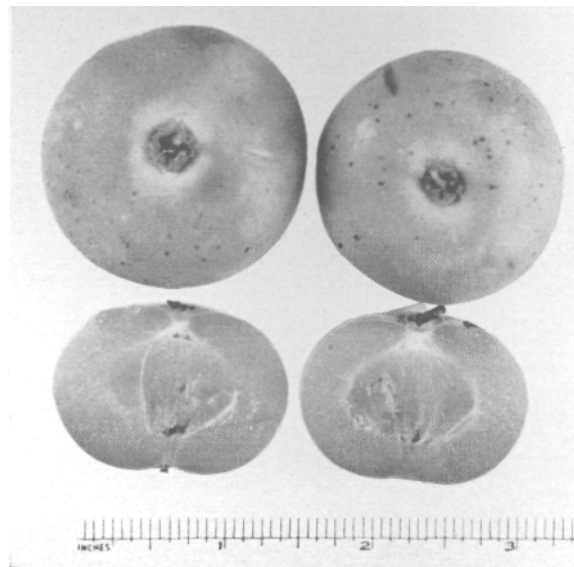


Fig. 3. Oblate form of Kei apple fruit.