'Shelly': A New Mango Cultivar

U. Lavi, D. Kaufman, and D. Sharon

Agricultural Research Organization, The Volcani Center, P.O. Box 6, Bet Dagan 50250, Israel

S. Gazit

The Hebrew University of Jerusalem, Faculty of Agriculture, P.O. Box 12, Rehovot 76100, Israel

E. Tomer

Agricultural Research Organization, The Volcani Center, P.O. Box 6, Bet Dagan 50250, Israel

'Shelly' (formerly BD-14/63) was selected from a cross between 'Tomy Atkins' and 'Keitt' at the Agricultural Research Organization (ARO) Bet Dagan experimental orchard. It was selected as a colorful, late-bearing, high-quality mango (*Mangifera indica* L.).

Origin

In Spring 1985, a 'Tomy Atkins' (mother parent) tree was caged with a 'Keitt' tree under a net in the presence of a beehive in the Ben-Ya'acov orchard in Pardes-Hana, Israel. More than 300 seedlings of this cross were planted in Spring 1986 at the ARO Bet Dagan selection plot. 'Shelly' was selected in 1989, its first year of fruiting. DNA fingerprint analysis (Adato et al., 1995) of 'Shelly' confirmed its origin.

Description

'Shelly' is a late-ripening cultivar. Its harvest season in the central coastal plain of Israel is the end of September to mid-November. The tree is small, ≈ 2 m in height at 5 years, and spreading in habit. Young leaves are reddish-brown. Mature leaves are lanceolate with acute tips and wavy margins. The average leaf length is ≈ 25 cm and the average width is ≈ 6.2 cm. Petiole length is ≈ 2 cm.

The inflorescence is conical, ≈ 20 cm long, and is densely flowered. The inflorescence stem is red and puberulous, with leafy bracts. The flower is pentamerous, ≈ 0.5 cm in diameter. The flower disk is swollen and broader than the ovary. There are one or two (more often one) fertile stamens per flower. The flowering season begins in late March.

Fruit are round with no beak or sinus. Shape at the stalk end is shallowly sunken and

the apex is rounded (Fig. 1). Average fruit mass is ≈ 500 g (ranging from 350 to 700 g). The skin of the mature fruit is of medium thickness and smooth, and its color is orange with a red blush. The flesh is orange, with a juicy, firm texture, and scarce fibers. The flavor is mild and slightly sweet. Mature fruit have remained firm and attractive up to 30 days after picking, at room temperature (≈ 22 to 25°C). We have not detected any disease or insect susceptibility (trees are treated routinely against powdery mildew). 'Shelly' per-

forms well in the coastal plains, the inner valleys, and the southern plains of Israel, all of different temperature and humidity, ranging from arid to temperate. Preliminary data suggest that the yield of 'Shelly' is well above average. 'Shelly' differs significantly from its female parent ('Tomy Atkins') and its male parent 'Keitt' and potential competitor in the late season (Table 1).

The above description is based on the International Board of Plant Genetic Resources' (IBPGR) descriptor list for mango (IBPGR, 1989). 'Shelly' has been distributed to several mango orchards in various parts of Israel.

Availability

'Shelly' is being patented, and budwood can be obtained from the ARO, the Volcani Center, P.O. Box 6, Bet Dagan 50250, Israel.

Literature Cited

- Adato, A., D. Sharon, Y. Hillel, S. Gazit, and U. Lavi. 1995. Application of DNA fingerprints for identification and genetic analysis of mango (*Mangifera indica*) genotypes. J. Amer. Soc. Hort. Sci. 120:259-264.
- International Board of Plant Genetic Resources. 1989. Descriptors for mango. Intl. Board for Plant Genetic Resources, FAO, Rome.

Fig. 1. Fruit of 'Shelly'.

Table 1. Comparison of important fruit traits between 'Shelly' and its parents.

Cultivar	Harvest season	Avg mass (g)	Shape	Skin color	Flavor
Shelly	Late September to mid-November	500	Rounded, and unsymmetrical	Orange and red	Mild, good
Tomy Atkins	Mid-August to mid-September	380	Egg-like, and rounded	Red and yellow	Mild, fair
Keitt	Mid-October to mid-December	740	Egg-like, and elongated	Green	Mild, very good

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