

Brief Description of Banana Cultivars Available from the University of Hawaii Seed Program

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Tissue Culture Banana Plants Available through the Department of Plant & Environmental Protection Sciences and the UH Seed Program

 <p>Koon-Hui Wang</p> <p>Zebrina (TZEB) AA</p>	<p>AA</p>  <p>Koon-Hui Wang</p> <p>Pisang Mas/ Sucrier (TSUC) AA</p>	 <p>Tissue Cultured banana in magenta box</p> <p>Cultivar names in this poster are followed by codes assigned by the UH Seed Lab. A and B are ploidy levels of banana.</p>	<p>ABB/BBB</p>  <p>Koon-Hui Wang</p> <p>Saba #1 - Dippig (TSA1) ABB/BBB</p>	 <p>Koon-Hui Wang</p> <p>Saba #2 - Compact (TSA2) ABB/BBB</p>
 <p>Koon-Hui Wang</p> <p>Williams (TWIL) AAA</p>	 <p>Picture by Frank Rust & Angela Kepler</p> <p>Philippine Lakatan (TLAK) AA/AAA</p>	<p>AAB</p>  <p>Koon-Hui Wang</p> <p>"Dwarf Apple" /Santa Catarina (TAPP) AAB</p>	 <p>Koon-Hui Wang</p> <p>Tall Brazilian (TALL) AAB</p>	<p>ABB</p>  <p>Koon-Hui Wang</p> <p>Ice Cream (TICE) ABB</p>
<p>AAA</p>  <p>Koon-Hui Wang</p> <p>Chinese (TCHI) AAA</p>	 <p>Koon-Hui Wang</p> <p>Dwarf Red (TRED) AAA</p>	 <p>Picture by Angela Kepler</p> <p>"True Apple"/ Amorosa/Manzano "Lady Finger"/ (TLAD) AAB</p>	 <p>Koon-Hui Wang</p> <p>Mysore (TMYS) AAB</p>	 <p>Koon-Hui Wang</p> <p>San Juan/ Largo (TLAK) ABB</p>
 <p>Picture by Angela Kepler</p> <p>Valery (TVAL) AAA</p>	 <p>Koon-Hui Wang</p> <p>Bluefields (TBLU) AAA</p>	 <p>Picture by Angela Kepler</p> <p>Putalinga Kula /Tonga (TKUL) AAB</p>	 <p>Picture by Angela Kepler</p> <p>Putalinga Hina /Tonga (THIN) AAB</p>	 <p>Koon-Hui Wang</p> <p>Pisang Awak/ Ducasse (TPAW) ABB</p>

These pictures were prepared by Koon-Hui Wang, Cerruti R²Hooks, Angela Kepler and Frank Rust.
To place an order for banana plants, please call 808-956-2429 or 808-956-2455 for Eden Perez or
247-0421 ext 107 for Jari Sugano.

Williams

AAA



'Williams' is one of the most commonly grown commercial Cavendish banana varieties (supermarket banana). Fruit size is 6-8" long \times 1.5 - 2" in diameter. Fruits are somewhat sausage-shaped but with a curve. Fruit tips are not fully rounded, with flower residues remaining attached. This is a typical dessert-type banana.

Plants grow relatively tall (as compared to the 'Dwarf Brazilian' or "Dwarf Apple" banana). Trunks (pseudostem) vary from green to greenish-yellow to quite dark. Knobby stalk below the fruit (rachis) is less "messy" as compared to 'Dwarf Chinese'. They are "messy" because the flower bracts tend to remain on the rachis right just above the male flower bud and not fall off.

Locals in Hawaii like to use 'Williams' or 'Dwarf Chinese' to make pasteles, a Puerto Rican delicacy using grated green bananas with a meat filling, all wrapped in a banana leaf packet and boiled.

Chinese

AAA



'Chinese' is also known as 'Chinese Dwarf' banana. Main characteristic is its dwarf growth, only 4-8 ft tall at maturity. However, it produces large bunches that almost touch the ground. Growers often prop up the plant with sticks due to the heavy bunch size. Size and shape of fruits are very similar to that of 'Williams'. Local likes to use 'Chinese' or 'Williams' to cook pasteles.

Both 'Chinese' and 'Williams' are very susceptible to banana bunch top virus (BBTV) and are not recommended for planting in BBTV-infested areas.

Pasteles prepared from 'Chinese' banana.

Bluefields

AAA



Koon-Hui Wang

'Bluefields' (Synonyms: 'Gros Michel') was once the world's most popular banana but was decimated by Panama disease caused by a fungus, *Fusarium*. Although 'Bluefields' is rarely found in Hawaii and other parts of the world now, it produces rich, extra-sweet (without tartness) fruits with rich yellow pulp. Fruits are relatively large (7-9 inches) with tips well filled but slightly tapered. Its bunch is in perfect symmetry, fruits are consistently grown in upward curve, and it produces very large bunches (up to 150 lbs, > 200 fingers). Its long shelf life, and ability to transport well make it once the most popular banana before the outbreak of Panama wilt.

Mature plant grows up to 5-20 feet. It responds well to good fertilization and warm temperatures, producing heavy bunches. However, these heavy bunches cause the plant to topple over, and may require supports to hold the plant up.

Valery

AAA



Picture by
Frank Rust
& Angela Kepler

'Valery' produces high quality fruit, often 10 inches long, fairly round-tipped, pointing upwards, and arranged evenly in a cylindrical bunch. Their delicious fruits are exceptionally sweet (but not tart like "apple" bananas). Along with 'Grand Naine', they are the principal commercial banana varieties from Latin America known commercially as Chiquita™. It can produce very large, heavy bunches (up to 150 lbs with > 200 fingers). It was initially introduced to replace 'Bluefields', a variety highly susceptible to Panama wilt disease.

However, it is now rarely grown in Hawai'i. Mature plant is 10 -16 feet (considered medium in height), but readily topples over when bearing huge bunches. Therefore, farmers need to prop up the plant with sticks and this will require extra spacing. It also requires high amounts of fertilizer and sprays to combat black leaf streak fungi. Moreover, it is very susceptible to spiral nematodes and root rot diseases.

Cuban Red

AAA



‘Cuban Red’ is easily identified. It has a pinkish/purplish or dark red trunk and maroon leafstalks (petioles). Fruit bunch is small to medium in size with well-spaced hands. From first emergence to ripeness, color of fruits changes from chocolate to green-maroon, purplish-green, and finally to deep pink, dull maroon-green or orange-gold, and they often split. When fully ripe, fruits are plump, short-tapered at the tips, 5-6 inches long. Its fruit skin is very thick (0.22 inches). The fruit has distinctive taste, liked by most people when fruit is slightly firm. It can be cooked when firm but turns mushy when ripe. The pinkish-yellow fruit indicates a reasonably high level of Pro-Vitamin A. Mature plant can grow up to 18-28 feet tall.

Dwarf Red

AAA



“Dwarf Red” is a mutant of ‘Cuban Red’ and is only 7-8 ft tall. It resembles ‘Cuban Red’, with pinkish or brighter red leafstalks (petioles), chocolate-colored immature fruits, and pinkish-yellow mature fruits (5-7 inches long), but bunches are slightly larger. It has a slightly messy flower axis below the fruits due to dying flowers that do not fall off. This is unlike the messy flower axis in ‘Santa Catarina’ and ‘Chinese Dwarf’ where the flower bracts do not fall off. Its fruits can be eaten cooked or raw but they have a strange taste when overripe. Just like other bananas in the Red Group, it also has thick fruit skin. Fruit pulp is pinker than the ‘Cuban Red’.

“Dwarf Red” is an attractive edible ornamental. It has good wind resistance, and considerably less debris to chop up after harvest. It is very suitable for small backyards.

Philippine Lakatan AAA or AA



'Philippine Lakatan', also known as 'Berangan' in the Philippines, was first introduced to Hawaii from the Philippines. It is easy to confuse this name with the Jamaican 'Lacatan' which is another Cavendish banana. Similar to other Cavendish bananas such as 'Bluefields', 'Chinese' and 'Williams', 'Philippine Lakatan' produces large bunch with 9-10 hands of fruit. Fruits arranged cylindrically, pointing upwards. Fruits are medium in size (5-8 inches long) with round-tapered tip. The fruit is very sweet like Cavendish-types, but with a richer, home-grown taste. Skin is quite thin, peels easily, with firm textured pulp.

Mature plant is tall (10-18 feet) and elegant. Trunk is yellow-green with reddish color. One disadvantage of growing this cultivar is that it is extremely susceptible to BBTv. It also requires regular fertilizing and is sensitive to low soil pH.

**“Dwarf Apple”
/Santa Catarina
AAB**



Koon-Hui Wang



Also known as ‘Dwarf Brazilian’, this banana typically grows less than 10 ft . Very commonly grown in Hawaii and can be found readily in the local market . Fruits are slightly curved, bright yellow with a “bottle-nosed tip”. It is most commonly consumed like a dessert banana with sweet, apple-tinted flavor.

Research at University of Hawaii shown that this cultivar is less prone to transmission of banana bunchy top virus (BBTV) by aphids than ‘Williams’ . If you can grow only one kind of dessert banana, this is highly recommended. It has a sturdy trunk and is wind resistant. Fruits are exactly the same size, shape, and taste as the tall ‘Hawaiian Apple’. Easily distinguished from ‘Hawaiian Apple’ by its “messy rachis” , i.e. persistent bud bracts and floral relicts on the rachis below the fruit (in ‘Hawaiian Apple’, the rachis is completely bare).

**“True Apple”/
Amorosa/
Manzano/
“Lady Finger”
AAB**



Picture by Frank Rust
& Angela Kepler

‘Manzano’ means “apple” in Spanish. It produce dessert type bananas that taste like “Hawaiian Apple” bananas. However, their fruits don’t have the bottle-nosed fruit tips like ‘Hawaiian Apple’. The thin skin tend to split as the fruit ripens. If eaten prematurely, the white flesh is almost chalky and rather astringent. When the fruit are soft and overripe, it will have a full, sweet-acidic flavor. It is one of the Filipinos’ favorite bananas. It was introduced into Hawai’i from the Philippines by immigrants in the early 1900s.

Flower bud emerges horizontally, but eventually turns vertical due to fruit weight. Fruit small (3-6 inches long), well filled with no angularity, short-tapered tip from which extends a wiggly projection like a burnt match (remains of the flower’s female style), pulp taste deliciously sweet-tart but needs to be eaten when over-ripe. Flower bud is long and spindle-shaped. The leafstalk (petiole) and trunk are pinkish in color.

Mysore

AAB



Koon-Hui Wang

'Mysore' is a very popular variety in India but is rare in Hawai'i. It is relatively easy to grow since it is wind- and drought-resistant with minimal damage from corm weevils, nematodes, and the fungal diseases, Panama Wilt and Black Sigatoka.

Fruits of 'Mysore' are small (3-4 inches), thin-skinned, curved, with a small bottlenecked tip. Fruit pulp is cream to pale yellow, sweet, with a slight apple-like tartness, making it a dessert banana. The bunch is compact, cylindrical, with fairly evenly arranged fruits.

Mature plants vary from very short to quite tall (6-16 feet). One obvious characteristic of 'Mysore' is its pinkish to coppery newly unfold "cigar" leaf. Other leaves may also have this waxy-pink color on their undersides along with its pink leaf midribs.

Largo/ San Juan

ABB



Koon-Hui Wang

'Largo' plantains resemble 'Dippig' except that fruits are less crowded on the bunch, bigger (6-8 inches long, 2 inches diameter), and when ripe, have a cream-colored fluffy texture like the 'Ice Cream' banana. When soft, they make good dessert banana, but they are typically used for cooking.

Mature plant is 11-15 feet tall, with a very long fruit stalk and sparse between hands of fruit. The yellow-green trunk with few brown markings is an unique characteristic of this cultivar. It was introduced to Hawaii from Mexico in 1908.



Koon-Hui Wang

Ice Cream

ABB



The immature fruit looks dull, silvery-blue, and waxy but it will mature into a pale bluish-yellow fruit. Both the immature and mature stage can be used for cooking, but they develop an astringency after cooking. When fully ripened and soft, the flesh turns fluffy and sweet, hence the name 'Ice Cream.' It has white flesh with black incipient seeds, unusual for a dessert banana.

The plant can grow up to 10-15 ft tall, tend to leans over as soon as fruit forms. The trunk is very green with fine black outlines on the leafstalk edges.

Pisang Awak/ Ducasse

ABB



'Pisang Awak' literally means "your banana" in Malay. Fruits are quite small, averaging 4.5 inches long (the size of 'Ice Cream' bananas). Fruit skins are light waxy green when immature, pale yellow and slightly waxy when ripe. These distinctive colors are often enough to identify 'Pisang Awak' fruits. Its fruit tip has a small bottleneck, resembling "apple" bananas except that the fruits are more angular and retain dead floral relicts at their tips like 'Chinese' or 'Williams'. The long, black, matchstick pistil resembles 'Manzano'! Fruit pulp of 'Pisang Awak' is whitish, very sweet, and fairly light-textured. It is excellent for cooking and eating raw as a dessert banana.



The plant grows 10-17 ft tall, it is drought resistant, good for planting in dry areas. It is also wind resistant and relatively disease-free.

Saba #1 Dippig ABB/BBB



'Dippig', a type of 'Saba', was likely introduced into Hawai'i from the Philippines in 1906. It is the most important cooking banana in the Philippines with great taste. Immature fruits are waxy green, rapidly ripen to golden-yellow color. Fruits tend to ripen simultaneously in discrete blocks of one or two hands rather than individually. Fruit shape straight, plump, strongly ridged longitudinally, highly angular, squashed together sideways, average 6 inches long X 1.5 inches in diameter, with blunt tips. The bunch is composed of straight, closely appressed fruits but is less compact than 'Saba #2 Compact'. The bunch stalk is relatively short.

'Saba #1' is quite tall (14-16 feet), with a very large male flower bud. Its bud bracts do not remain on the rachis as in Cavendish bananas. Filipinos cook the male flowers & buds in salads & stews.

Saba #2 Compact Opu-'ulu ABB/BBB



'Compact' is another type of 'Saba' banana. In some communities, it is known as Opu-'ulu ("fat belly like a breadfruit"). It is another Filipino import, very popular in the Philippines. This is a cooking banana, tasty but not as tasty as 'Dippig'. Ripe fruits are small and chunky, 2.5-3 inches long. The bunch stalk is relatively short. Note that the bunches are extremely compact, with dozens of small angular bananas tightly grown together. Fruit tips are blunt.

This 'Saba' is very tall, 17 to >20 ft in height. Trunks have a unique green color with yellow washes. Leafstalks are waxy pale green and the male flower bud is large. Flower bracts do not remain on the rachis as in the Cavendish bananas. Filipinos also cook the male flowers & buds as above.

Reference

Kepler, A. K. & F.G. Rust (in press) **Living with Bananas in Hawai'i: Then & Now**. University of Hawai'i Press. ca. 1200 pp., 800 illustrations.

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