

A Garden Compass Re-Publication

...by Dave Wilson Nursery





Is Your Avocado a "Type A" Personality?

By Tom Spellman

The English word "avocado" is a corruption of the Spanish word "aguacate" that dates back to the Spanish conquest of Mexico in the 16th and 17th centuries.

For the Aztecs, who called it "ahuacoquahuitl," avocados were considered a staple food.

Avocados are botanically classified "Persea" and have been divided into three distinct horticultural races: Mexican, Guatemalan and West Indian, all named for their presumed points of origin.

Cultivated for thousands of years by the native inhabitants of Mexico, the Mexican avocado is the first to flower and is considered to be the most tolerant of extreme weather conditions.

In California it is not uncommon to have bloom from January to early

spring. The Mexican-type fruit are commonly small in size, vary from round to pear-shaped and mature approximately six to ten months after flowering.

Avocado's grand entrance to California

Anaheim Avocado came during the mission era and can be attributed to the foresight and good taste of the Spanish padres who brought avocados with them on their travels, along with now ubiquitous citrus, figs and grapes. The spread of avocado cultivation went hand in hand with the citrus boom of the late 19th and early 20th centuries when avocados were often used as wind brakes and boundary markers for citrus orchards.

This naturalized breeding ground is the happenstance that birthed many of today's leading cultivars, which were merely the result of random cross-pollination occurring naturally in the wind rows.

The Guatemalan avocado is the last to flower, usually in late winter to mid-spring. Guatemalan avocados are the largest and have a relatively small seed. Some can reach up to 2 pounds in size. Its fruit will take from nine to 18 months to mature and will often overlap next years bloom.

The West Indian avocado is the least hardy in California; however, these avocados do well on the coast and in the banana-belts of the inland foothills. Despite the name, *West Indian*, their point of origin is more likely the west coast of Central America. West Indian avocados are the most salt tolerant and are lower in calories than the Mexican or the Guatemalan.

Avocados are members of the aromatic laurel family (Lauraceae), and their flowers are unique. They have been misunderstood and misrepresented as being either male or female, when in fact each flower



Anaheim Avocado (Guatamalan - Type A)

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Ounce for ounce, avocados have about 1.5 times the potassium of a banana.

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Bacon Avocado (Mexican -Type B)

Avocados require a little more "TLC" than the average fruit tree

has both a male and a female stage. They have two distinct categories: Type A and Type B.

The Type A flower blossoms on the morning of its first day, functioning as "female," and after a few hours it closes. On the afternoon of the second day, the flower reopens, functioning as "male." After a few hours, it closes permanently.

The Type B flower opens the afternoon of the first day, functioning as "female," then closes, reopening the morning of the second day, functioning as "male" before it closes permanently.

These flower characteristics hold true under tropical conditions where the minimum temperatures are consistently above 70°F (21°C).

Zutano - (Mexican - Type B) -

In California, where the low temperatures typically fall below 70°F during the blooming season, the daily schedules of "male" and "female" flowers become irregular and overlap considerably.

For this reason, all avocados should be considered self-fruitful.

Under orchard conditions, it has become common practice to plant two or three trees of alternate flower type per acre to act as cross-pollinators. For example, a rancher with a grove of **Type A Hass** trees may plant a few **Type B Zutanos** throughout his orchard.



Avocados require a little more "TLC" than the average fruit tree or shrub. They have a tender, brittle root system and every precaution should be taken when transplanting from the nursery container. Do not lift or carry avocado trees by their main trunk—move only by grasping the container.

For best results, avocados should be planted in a sunny location in a fast-draining, sandy soil. Young trees should also be protected from severe winds and freezing temperatures. Dig holes twice as wide as the root ball and make sure to maintain the same soil level as in the nursery container.

Mounding the plant 1 inch to 2 inches above the soil level can help you to avoid planting too deep. The backfill soil should also be sandy and free from large soil clods and rocks. Tamp backfill soil lightly and irrigate immediately.

Mulching out 2 feet from the tree, 3 to 4 inches deep, is very beneficial. Raised bed plantings also work well to keep the root ball above the native grade and help to protect against root rot. Consider this where drainage is a problem.

Phytophtora cinnamomi is the fungus that causes avocado root rot, so if you have lost an avocado tree in the past, it is not a good idea to replant in the same location. Remember—sandy, fast-draining soil is a key to success.

Mulches can be very beneficial in growing healthy avocados. Mulch provides an airy organic layer were the tree roots will grow and take nutrients. Mulch also helps to hold in soil moisture while keeping the soil temperatures down. Most important, it provides an environment that encourages the growth of beneficial soil microbes that are essential in maintaining a healthy soil. Healthy soils can suppress and inhibit Phytophtora cinnamomi root rot.

Young avocado trees are also susceptible to sunburn damage. When transplanting a young nursery tree to a sunny location, the bare, green trunk should be wrapped with a tree protector or painted with a nursery tree whitewash. Whitewash can be thinned by 50 percent with water. Sunburn on young trees can cause permanent damage and scarring. As trees mature and grow, they will become self-shading.

Avocado Varieties

VARIETY	Flavor	Color	Oil	Season	Size	Flower	Parantage	Hardiness
Anaheim	Good	Green	12%	Summer	18-32 oz	Type A	Guatemalan	Tender to 30°F
Bacon	Good	Green	16%	Oct. to Jan.	8-14 oz	Type B	Mexican	Very Hardy to 24°F
Fuerte	Excellent	Green	18%+	Nov. to March	8-16 oz	Type B	Guatemalan Mexican	Average to 27°F
Gwen	Excellent	Green	18%+	April to Aug.	8-16 oz	Type A	Mostly Guatemalan	Average to 28°F
Hass	Excellent	Black	20%	Feb. to Oct.	7-14 oz	Type A	Mostly Guatemalan	Average to 28°F

or shrub. They have a tender, brittle root system and every precaution should be taken when transplanting from the nursery container.



Wurtz (Little Cado) Avocado (Guatamalan - Type A)

Avocados grow best where temperatures seldom drop below freezing, 32°F. For this reason, coastal and hillside plantings are the commercial preference.

Avocados are also susceptible to damage from hard, cold winds during the winter and spring. These severe winds, often called Santa Ana's in Southern California, can damage flower set and young fruit. They can also damage the avocado's brittle branch structure.

Commercial plantings are prevalent throughout Southern California's coastal and inland valleys, extending up the coast to Monterey Bay and the hills around Gilroy, and inland to the western slopes of the Sierra foothills.

But home orchardists have proven that avocados are more versatile than once considered.

Avocado links from - - -

Calif. Avocado Commission
1. - More Variety Info.

University of California:

Avocado Information Site

<u>California Rare Fruit Growers:</u>
<u>Avocado Fruit Facts</u>

California Avocado Society

Jim	Very Good	Green	18%	Nov. to Feb.	8-12 oz	Type B	Mostly Mexican	Very Hardy to 24°F
Lamb Hass	Very Good	Black	18%	May to Nov.	8-16 oz	Type A	Mostly Guatemalan	Average to 28°F
Mexicola	Good	Purple	20%	Sept. to Nov.	4- 8 oz	Type A	Mexican	Very Hardy to 20°F
Mexicola Grande	Good	Purple	18%	Aug. to Oct.	4-12 oz	Type A	Mexican	Very Hardy to 22°F
Nabal	Very Good	Green	16%+	June to Oct.	12-24 oz	Type B	Mostly Guatemalan	Tender to 30°F
Pinkerton	Excellent	Green	20%	Dec. to April	8-24 oz	Type A	Mostly Guatemalan	Average to 28°F
Reed	Excellent	Green	20%	May to Nov.	12-18 oz	Type A	Guatemalan	Tender to 30°F
Stewart	VeryGood	Purple	18%	Oct. to Dec.	6-12 oz	Type A	Mexican	Very Hardy to 24°F
Wurtz (aka Little Cado)	Good	Green	16%	May to Sept.	6-12 oz	Type A	Guatemalan	Average to 28°F
Zutano	Good	Green	16%	Oct. to Feb.	8-16 oz	Type B	Mexican	Very Hardy to 24°F

Landscape Trees, Orchard Trees & Nutrition

For landscaping purposes, it has become a common practice to plant two or more alternating flower types in the same hole or on close spacing. This also allows one to plant varieties with different ripening seasons to stagger and extend the harvest season.

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Commercial plantings are prevalent throughout Southern California's coastal and inland valleys, extending up the coast to Monterey Bay and the hills around Gilroy, and inland to the western slopes of the Sierra foothills. But home orchardists have over the years proven that avocados are more versatile than once considered.

I have personally seen trees thriving 100 miles north of Sacramento and throughout California's San Joaquin Valley. I have even seen trees in Las Vegas, Nevada and Phoenix, Arizona, where talented gardeners continue to stretch the adaptation zone for avocados.

Back in the 1980s, avocados were given a bad rap for their high fat content. They were thought to be bad for the heart. What people didn't realize was that avocados were and are predominantly monounsaturated fat, high in oleic acid, which has proven to reduce LDL, or bad cholesterol.

Ounce for ounce, avocados have about 1.5 times the potassium of a banana, and diets high in potassium are proven to reduce the risk of stroke.

Avocado oil has been proven to be beneficial to the skin and hair.

Avocados contain vitamin A, vitamin B-6, vitamin C, vitamin E, niacin, folate, magnesium and riboflavin among other great-for-you nutrients.

The California Avocado Commission estimates that even with those stellar statistics, each American eats only about two avocados per year. That means that I eat about 50 times more than the average American—no wonder I feel so good! Some of you have a lot of catching up to do.

Tom Spellman, a well-known Southern California nurseryman, is the Southwest sales manager for Dave Wilson Nursery.

