



Abiu Tree Growing Guide for South Florida

Hey folks, I'm Jason Pepe from Pepe's Fruit Trees here in sunny South Florida. Over the years, I've grown, propagated, and sold countless tropical fruit trees, and the Abiu (*Pouteria caimito*) is one of those underrated stars that deserves a spot in your backyard. It's a tropical delight with sweet, caramel-like fruit that's perfect for fresh eating or mixing into desserts.

This manual draws from my hands-on experience, reliable sources like the University of Florida's extension guides, and insights from growers in similar climates. I'll keep it practical, focused on what works in South Florida's heat, humidity, and occasional cold snaps. Let's get you set up for success.

Scientific Name:

Pouteria caimito (Ruiz & Pav.) Radlk.

Common Names:

Abiu, yellow sapote (English); amarilla, madura verde (Colombia); cauje, luma (Ecuador); temare (Venezuela); caimito, caimo, cauje, abiurana, abi, abio, abieiro (Brazil).

Synonyms:

Achras caimito Benth., *Guapeda caimito* Pierre, *Labatia caimito* Mart., *Lucuma caimito* Roem & Sch., *P. Leucophaea* Baehni.

Relatives:

Includes bully tree (*P. multiflora*), caimito (*Chrysophyllum cainito*), caimitillo (*P. speciosa*), canistel (*P. campechiana*), cinnamon apple (*P. hypoglauca*), curiola (*P. torta*), fruteo (*P. pariry*), green sapote (*P. viridis*), macarancluba (*P. ramiflora*), mamey sapote (*P. sapota*), lucmo (*P. obbovata*), lucma (*P. macrophylla*), nispero montanero (*P. macrocarpa*), satin leaf (*C. oliviforme*), and sapodilla (*Manilkara zapota*).

Family: Sapotaceae (sapodilla family).

Origin and Description:

The abiu is a denizen of the headwaters of the Amazon. It grows wild on the lower eastern slopes of the Andes from southwestern Venezuela to Peru. It is often cultivated around Iquitos, Peru. In Ecuador, it is common in the Province of Guayas and the fruits are sold in the markets of Guayaquil. It is much grown around Pará, Brazil; less frequently near Rio de Janeiro, and to a limited extent at Bahia. In Colombia, it is fairly common in the regions of Caquetá, Meta and Vaupés and it abounds in the adjacent areas of Amazonas, Venezuela. It has been growing for many years in Trinidad. The tree typically reaches 30-40 ft (9-12 m) in Florida, though it can hit 115 ft (35 m) in its native tropics. It forms a dense, pyramidal or rounded crown with willow-like secondary branches that droop under fruit weight. The trunk has rough gray to brown bark that exudes white latex when cut—typical of the Sapotaceae family. Leaves are alternate, oblong to elliptic, 4-8 in (10-20 cm) long and 1¼-2¾ in (3-6 cm) wide, with a glossy green top and sometimes hairy underside. Flowers are small, white to greenish, hermaphroditic (both male and female parts), with 4-5 cylindrical petals. They appear singly or in clusters (up to 280 per branch) in leaf axils, opening in the morning and lasting about two days. Pollination is likely by flying insects—no need for hand-pollination in most cases. The fruit is round to oval, sometimes pointed with a nipple, 1½-4 in (4-10 cm) long, with smooth, bright yellow skin when ripe. Inside, it's translucent white pulp with a creamy, jelly-like texture and sweet flavor reminiscent of sapodilla or caramel custard. Each fruit has 1-5 oblong brown seeds. Unripe fruit is gummy with latex, so pick only when fully yellow. In South Florida, the season runs August to October, but with our climate, you might see multiple flushes. Trees live productively for about 20 years, with yields varying—some seedlings produce little, others up to 400 lbs (182 kg) annually on mature trees.

Climate Requirements for South Florida:

Abiu loves hot, humid tropics with even rainfall, which matches much of South Florida's weather. Optimal temps are 68-95°F (20-35°C). It's drought-tolerant once established but needs protection from dry winds—plant windbreaks if you're in an exposed spot. Cold is the big limiter here: Young trees die below 32°F (0°C),

mature ones at 29-31°F (-0.5 to -1.6°C). In South Florida, that means planting in the warmest microclimates, like south-facing spots sheltered from north winds. I've lost young trees to rare freezes, so cover them with frost cloth during cold fronts.

Abiu needs full sun for best growth and fruiting in mature trees—no shade tolerance like some relatives. However, young plants are best grown in some filtered light or light shade to prevent sunburn and stress, transitioning to full sun as they mature.

Soil and Site Selection

Go for fertile, well-drained soils and maintain pH in the acid range of 6-6.5 for optimal growth. Abiu can grow in slightly alkaline soils above 7, however, that may result in iron deficiencies indicated by chlorotic (yellowing) leaves. The iron deficiency can be corrected by adjusting the soil pH or the application of chelated iron. pH can be adjusted by amending the soil with sulfur and maintaining a good layer of mulch and other organic matter.

In South Florida's sandy or rocky soils, amend with organic matter to improve drainage and fertility. High-pH alkaline spots (common in Miami-Dade rockland) can cause iron deficiency—watch for yellowing leaves and treat with chelated iron. Plant at least 25 ft (7.6 m) from other trees, buildings, or power lines to allow for spread. Keeping them away from power lines and other structures is wise but remember that heat radiated from a masonry wall can provide some warmth in winter. **It's okay to plant abiu trees as close as 8 feet from center for cross pollination!**

Choose flood-free areas; if your yard floods after summer rains, build a 2-3 ft high mound (4-10 ft diameter) of native soil.

Invasive potential? None reported.

Propagation

In South Florida, Abiu is most commonly propagated by seed due to the limited availability of grafted varieties. Seedlings are practical and widely available from local nurseries, usually beginning fruit production in 3-5 years after planting. Once extracted from the fruit, abiu seeds do not remain viable for more than a couple of days and should therefore be planted as soon as possible into clean, well-drained media. Seedling trees show considerable variation in fruit quality

and yield, but many turn out productive with good flavor. While grafted or budded trees onto seedling rootstocks can fruit in 1-2 years and offer more consistent traits, specific superior varieties (e.g., 'Gray', 'Z-2', 'Z4', 'Caribou', or Australian selections like 'E4') are harder to source locally and may require ordering from specialized growers or out-of-state suppliers. If you can find a grafted one, it's worth it for reliability, but for most folks starting out, go with seedlings—they're easier to get and still rewarding. Air-layering is another option for cloning superior trees if you have access to one. A good idea is to grow young Abiu trees in containers until they reach five or six feet in height before planting in the ground—this allows better control over soil, moisture, and protection from elements during establishment. To avoid circling roots, which can girdle the tree later, grow them in fabric grow bags; these promote air pruning for healthier root systems. However, be sure not to let the bags dry out, as fabric grow bags lose moisture faster than plastic containers—monitor and water more frequently.

Planting

Buy healthy 3-gallon container trees (2-4 ft tall) from reputable growers. Most will be seedlings, but check for any grafted stock. Plant in spring after the last cold risk.

Steps:

Remove a 3-10 ft diameter grass ring.

Dig a hole 3-4x the container diameter, 3x as deep.

Backfill with native soil.

Plant at the same depth as in the container.

Water thoroughly and mulch 2-3 in deep (keep away from trunk).

For rocky South Florida soil, use a pick or auger to break bedrock. Stake if windy, but remove after a year. Abiu trees are most productive with cross pollination. While other sources suggest 20 plus feet apart, the distance between the trees is best as close as possible. So I recommend 9-10 feet! Plant at least two trees as close as 8 feet apart for top results.

Care and Maintenance

Irrigation

Water new trees every other day for the first month, then 1-2 x/week for 2-3 months. Established trees (3+ years) need water during dry spells (5+ days without rain)—twice weekly. In South Florida's rainy summers, ease off; focus on winter dry periods. Drip irrigation works great for even moisture without overwatering.

Fertilizer

Use a balanced program to avoid deficiencies. For South Florida, follow this table based on UF recommendations:

Tree Age (Years)	Times/Year	Ammonium Sulfate or Similar (lbs/tree/application)	Organic Mix (6-6-6-2, cups/tree/application)
1	6	0.1-0.2	2-4
2	5-6	0.15-0.3	4-6
3	4-6	0.3-0.6	6-9
4	4-6	0.45-0.9	9-15
5	4-6	0.5-1.0	15-20
6+	4-6	0.75-1.0	20-30

Apply minor elements (iron, zinc, manganese) as foliar sprays 4-6x/year from spring to fall. For organic options, use compost or manure quarterly. In my experience, quarterly apps of 6-6-6 NPK keep trees vigorous in Kona-like setups, but adjust for your soil.

Pruning

Train young trees to 3-5 main scaffolds in the first 2-3 years. Keep mature trees at 8-12 ft (2.4-3.7 m) tall for easy harvesting—prune selectively after harvest to remove upright or crowded limbs. Light annual pruning promotes new growth; heavy pruning during dormancy if needed. In South Florida, prune post-season (Oct-Nov) to avoid wind damage.

Mulching and Weed Control

Mulch with 2-3 in of organic material (wood chips, leaves) to retain moisture and suppress weeds. Keep mulch 8-12 in from trunk to prevent rot.

Pests and Diseases

Abiu has few pests in South Florida, but watch for:

- Scales (pink wax, green, negra, *Ceroplastes rubens*, *Coccus viridis*), mealybugs, aphids (*Toxoptera aurantii*, *Aphis gossypii*).
- Thrips, fruit spotting bugs, twig borers, webbing caterpillars.
- Fruit flies (*Bactrocera dorsalis*, *Ceratitis capitata*)—bag fruit or use traps.
- Diseases: Algae leaf spot (*Cephaleuros virescens*), fruit spot (*Colletotrichum gloeosporioides*), fungus (*Cylindrocladium pteridis*), dieback (*Lasiodiplodia theobromae*), sooty mold from scales.

Control with organic sprays like neem oil or approved insecticides (e.g., endosulfan for thrips). Birds love the fruit—net trees if needed. No major hazards reported, but latex can be sticky.

In my groves, scale is occasional; hit it early with horticultural oil. Healthy trees resist most issues.

Harvesting and Yield

Pick when skin turns light green to full yellow—dark golden means overripe. Fruit matures 100-130 days from flowering, with multiple crops possible. Use clippers to avoid damage; store at 50°F for 7-14 days.

Yields vary: Seedlings might give 400 lbs/year on good trees. Harvest August-October here, but irrigation can extend it.

Uses

Eat fresh—scoop pulp to avoid latex (grease lips if gummy). Add to salads, sherbets, jams, yogurt, or ice cream. It's a vitamin powerhouse: High in calcium, phosphorus, A, C, thiamine, riboflavin, niacin.

Medicinally, pulp soothes coughs/bronchitis; latex as vermifuge or on abscesses (traditional Brazilian use). Wood for construction.

Final Tips from Jason

Seedlings are the way to go for most in South Florida right now—they're affordable, rare but available, and can still produce great fruit with a bit of luck on the genetics. If you snag a grafted one, bonus! In containers, use 7-10 gallon pots for dwarfs.

Questions? Hit me up at Pepe's Fruit Trees. Happy growing!

<https://www.pepesplants.com>

Sources: University of Florida IFAS Extension (HS300), Fruits of Warm Climates (Julia Morton), University of Hawai'i CTAHR (F_N-24), Sub-Tropical Fruit Club of Queensland, Manual of Tropical and Subtropical Fruits (Wilson Popenoe), and my 35+ years in the biz.