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[Home](#)[Organizations](#)[Fruit](#)[Vegetables](#)[Growing Info](#)[Links](#)[About](#)

Dragon Fruit (Pitaya) - *Hylocereus undatus* and other species and hybrids



Pitaya Growing in the Florida Landscape *pdf 8 pages*

Pitaya Publication from CTAHR

Pine Island Nursery **Dragon Fruit Viewer** *ext. link*

Pitaya Varieties Available in Florida

2010 Year of the Dragon Fruit from California Rare Fruit Growers *pdf*

Strawberry Pear from Fruits of Warm Climates

Dragon Fruit Tips from the Sub-Tropical Fruit Club of Qld Inc.

Season: June to November

Salt : Moderate to Highly Tolerant

Wind: Tolerates Windy Conditions

Cold: Damaged at 32F of long duration

Fig. 1

Other Information

There are no varieties in the proper sense, but there are many clones which can differ in the stem type, colour, fruit shape, skin thickness and scale expression. There are however two different species, *H. undatus* which has white flesh and *H. polyrhizus* which has red flesh. There are also several other fruiting cactus genera that are called 'pitaya'. ²

Hylocereus undatus (red-skinned fruit with white flesh), *Hylocereus ployrhizus/ Hylocereus costaricensis* (red-skinned fruit with red flesh), *Hylocereus guatemalensis* (bright pink-skinned fruit with white flesh), *Hylocereus poloyrhizus X undatus*, *Selenicereus megalanthus* (yellow-skinned fruit with white flesh)

Common Names: English: Strawberry pear, dragon fruit, night blooming cereus. Spanish: pitahaya, tuna, nopal, pitajaya

Family: Cactaceae

Origin: Tropical America; southern Mexico, Pacific side of Guatemala, Costa Rica and El Salvador; Venezuela, Colombia, Ecuador, Curacao, Panama, Brazil and Uruguay.

Description: Pitaya are fast growing, perennial, terrestrial, epiphytic, vine-like cacti. They have triangular (3-sided, sometimes 4- or 5-sided), green, fleshy, jointed, many-branched stems. Each stem segment has 3 flat, wavy wings, (ribs) with corneous margins and may have 1-3 small spines or be spineless. The stem sections of pitaya form aerial roots which adhere to the surface upon which they grow or climb. The stem may reach about 20 ft (6.1 m) long. ¹



Fig. 2
Pitaya Seedling



Fig. 3
Pitaya Stem



Fig. 4
Pitaya Stem with Buds Forming

Flowers: are hermaphroditic, however, some pitaya species and cultivars are self incompatible. The extremely showy, edible, white (pink in other species) flowers are very large, very fragrant, nocturnal, bell shaped and may be 14 inches long (36 cm) and 9 inches wide (23 cm). The stamens and lobed stigmas are cream colored. ¹



Fig. 5

Fig. 6

Fig. 7

Fig. 8

Support: For the home landscape, consider a trellis for individual plants which should consists of a post and a structure at the top of the post to support the plant. A strong trellis should be established that may withstand several hundred pounds of stem weight. A weak trellis may buckle under the weight of a mature pitaya plant. Do not use wires on the trellis because they may cut or damage the stems. If wire is used, it should be covered by hoses. ¹



Fig. 9

Fig. 10

Fig. 11

Fig. 12



Fig. 13

Pitaya (dragon fruit)trees at the Agricultural Science and Technology School Muñoz, Nueva Ecija



Fig. 14

Pitaya (green dragon) fruits being grown commercially in southern Vietnam

The Pitaya in Florida (good images of supports) *pdf*



Fig. 15

Dragon Fruit Chiyai Market



Fig. 15b

Wine And Fruits Are Fine For Dinner.



Fig. 16



Fig. 17



Fig. 18

Yellow Pitaya

'Costa Rica Sunset'

'Bloody Mary'

Fig. 19
'Delight'Fig. 20
'Seoul Kitchen'

Planting: There are two methods of planting; one is to plant a cured cutting directly into the soil. A cured cutting is one in which the cut portion of the stem has been allowed to heal (dry) for several days in the shade. The second and highly recommended system is to plant the cured cuttings in pots, let them develop a good root system for 4-6 months, and then plant them in the landscape. Planting may be done any time in south Florida if an adequate provision for watering is made, otherwise, the warm, rainy season is a good time to plant. ¹

Irrigation

Spring:

No irrigation to induce flowering

First Year:

¼ pd Palm fertilizer every 2 months
Drench soil with chelated iron
½ oz/gallon every 2 months
Minor element sprays from March to Sept.

Second and Third Year:

1/3 to ½ pd Palm fertilizer every 2 months
Drench soil with chelated iron ¾-1 oz/gallon every 2 months
Minor element sprays from March to Sept.

Fourth Year:

½-¾ pd Palm fertilizer four times a year
Drench soil with chelated iron 1 oz/gallon four times a year
Minor element sprays from March to Sept.



Fig. 21



Fig. 22




Fig. 23

Irrigation: It is important to water your pitaya through the flowering and fruiting season at least once a week.

Pruning: Pruning is required to maintain the shape and size of the plants as they can quickly become unruly and top heavy. Pruning also enables access to the plant which assists harvesting. Care should be taken to dispose of the cuttings as they have the potential to become weeds. ²

Pruning Pitaya (Dragon Fruit) from the Sub-Tropical Fruit Club of Qld Inc.

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Fig. 24 

Further Reading

Pitaya (Dragon Fruit, Strawberry Pear) from the University of Hawaii [pdf](#)

Dragon Fruit: Postharvest Quality-Maintenance Guidelines from the University of Hawaii [pdf](#)

Peeling **Video** [ext. link](#)

Grow Dragon Fruit from **Cuttings** [ext. link](#)

Dragon Fruit Blooming **Video** [ext. link](#)

Hand Pollination **Video** [ext. link](#)

Pitaya Fruit Cycle **Video** [ext. link](#)

Diseases and Pests

Some damage by mites, thrips, ants, scales and mealybugs, beetles, borers (*Diatrea*), slugs and fruit flies has been reported. Raccoons, possums, rats and birds may also cause damage to fruit and plants. Severe scale infestations of stems have been reported in Florida.

Several important diseases attack pitayas. These include the bacterium *Xanthomonas compestris*, which causes a severe stem rot, and *Dothiorella* and anthracnose. Severe anthracnose damage to newly planted pitaya has been observed in Florida, and anthracnose also attacks the fruits. *Fusarium oxysporum* has also attacked plants. Please contact your local County Cooperative Extension Agent for current control measures. ¹

A new disease to Florida is **Bipolaris fruit rot**

List of Growers and Vendors

[Top](#)

Bibliography

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