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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

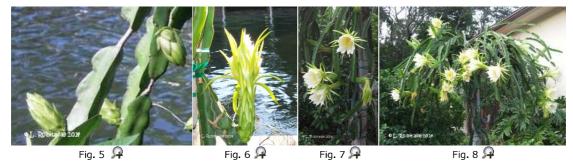


Fig. 3 Pitaya Stem



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



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. 13 Fig. 14

Pitaya (dragon fruit)trees at the Agricultural Science and Pitaya (green dragon) fruits being grown commercially in Technology School Muñoz, Nueva Ecija 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 Fig. 20

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

'Seoul Kitchen'

'Delight'

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 $1\!\!/2$ pd Palm fertilizer every 2 months Drench soil with chelated iron $3\!\!/4$ -1 oz/gallon every 2 months Minor element sprays from March to Sept.

Fourth Year:

1/2-3/4 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.



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

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Bibliography

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