

Thaumatococcus daniellii

(Benn.) Benth. ex B.D.Jacks.
+ Synonyms

Marantaceae

Common Name: Sweet Prayer Plant

General Information

Sweet prayer plant is a stemless herbaceous perennial with a rhizomatous root stock. It produces leaves 12 - 25cm wide by 12 - 40cm long on a leaf stalk 2 - 3 metres long[332]. The crimson fruit is formed at or below ground level[332].

The aril surrounding the seed is harvested from the wild and used as a sweetening substance[310]. The plant is also occasionally cultivated, both within and outside its native range, especially for its leaves[310].

Known Hazards

None known

Botanical References

[200](#)



Range

Western and central Tropical Africa - Sierra Leone to Zaire.

Habitat

Tropical lowland rainforest[310]. Forest clearings[418].

Properties

Edibility Rating	
Other Uses Rating	
Habit	Perennial
Height	2.00 m
Cultivation Status	Cultivated, Wild

Cultivation Details

A plant of the moist, lowland tropics. It grows best in areas where annual daytime temperatures are within the range 21 - 30°C, but can tolerate 15 - 35°C[418]. It prefers a mean annual rainfall in the range 1,700 - 2,300mm, but tolerates 1,300 - 2,700mm[418].

Requires a shady position[310]. Plants can succeed in full sun as well as in shade[418]. Prefers a well-drained,



Cultivated plant in the greenhouse of the Deutsches Institut für tropische und subtropische Landwirtschaft, Witzenhausen, Germany

Photograph by: [James Steakley](#)



loamy to clayey soil[418]. Prefers a pH in the range 4.5 - 5, tolerating 4.3 - 7[418]. First flowering starts 3 months after planting, but flowering is more abundant after about 1 year[310]. Good fruits develop only in plants that are 2 years old or older[310]. Young fruits mature in 13 weeks[310].

Edible Uses

Seed - raw or cooked. A very sweet flavour[301]. When the raw seed is chewed, it affects the taste buds so that, for about an hour thereafter, any sour foods that are eaten or drunk seem to have a sweet flavour[301]. The seeds are also used for sweetening bread, fruits, tea etc[301]. The aril of the seed contains a sweet-tasting protein (thaumatin) that can be used as a substitute for sugar, also in low caloric diets and drinks[310]. Because of the persistent sweet aftertaste, it also 'sweetens' normally bitter or sour substances[310]. Thaumatin is the sweetest of known natural and synthetic substances, 2,000 - 3,000 times sweeter than sucrose[310].

The leaves are used for wrapping food[418]. The report does not make it clear if the leaves are used to impart a flavour when cooking, or are merely used to wrap the food when it is stored[K].

Medicinal

None known

Other Uses

The leaves are used as food wrappers, as a packing material and for roofing[301, 310].

Propagation

Seed -
Rhizome cuttings.

Add a Comment:

If you have any useful information about this plant, please leave a comment. Comments have to be approved before they are shown here.

Name:

Email(Private):

Message:

Captcha: a square has how many sides?

Submit

Last update on 2016-04-01: Now containing 11001 plants.



Useful Tropical Plants Database 2014 by [Ken Fern](#), web interface by [Aina Fern](#) with help from [Richard Morris](#).

The database and code is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](#).