

Synsepalum dulcificum

Heather Lemer

Sapotaceae

- ▶ family of flowering plants belonging to order Ericales
- ▶ includes about 800 species of evergreen trees and shrubs in around 65 genera
- ▶ Many species produce edible fruits and have other economic uses
- ▶ leaves are simple, coriaceous
- ▶ flowers are bisexual and actinomorphic
- ▶ calyx consists of 4-12 imbricate, biseriate or spirally disposed sepals

Morphological Description

- ▶ shrub that grows between 1.8 and 4.5 meters
 - ▶ has dense foliage
- ▶ leaves are 5-10 cm long, 2-3.7 cm wide
 - ▶ glabrous below
 - ▶ clustered at the ends of the branchlets
- ▶ flowers are white
- ▶ carries red, 2 cm long fruits
 - ▶ fruit contains one seed



Geography

- ▶ Native to West and West-Central Africa
 - ▶ leaves are attacked by lepidopterous larvae
- ▶ plant cannot survive at less than 7 C



Features of Cultivatoin

- ▶ grows best in soils with a pH as low as 4.5 to 5.8
- ▶ environment free from frost and in partial shade with high humidity
- ▶ tolerant of drought
- ▶ seeds need 14 to 21 days to germinate
- ▶ spacing of 4 m between plants is suggested
- ▶ plants first bear fruit after growing for approximately 3-4 years
- ▶ produce two crops per year, after the end of the rainy season
- ▶ seeds are about the size of coffee beans.

Plant Uses

- ▶ In tropical West Africa the fruit pulp is used to sweeten palm wine
 - ▶ it was also used to improve the flavor of soured cornbread
- ▶ cancer patients, because the fruit allegedly counteracts a metallic taste
- ▶ In Japan, miracle fruit is popular among patients with diabetes and dieters
 - ▶ diabetic patients regularly utilize the miracle berry before eating low-sugar foods



Historical Facts

- ▶ They were first discovered by Europeans in 1725 by Chevalier des Marchais
- ▶ 1970 a biomedical postgraduate, Robert Harvey, came in touch with the miracle berries, and formed the Miralin Company
 - ▶ He planned to make sweet foods without sugar
- ▶ Harvey believed he was the victim of back room lobbying from the sugar industry
- ▶ The Miracle Berry was not really heard of again for over 30 years until mBerry created the Miracle Berry Tablet in 2008

Sources

- ▶ <https://en.wikipedia.org/wiki/Sapotaceae>
- ▶ <http://www.botany.hawaii.edu/faculty/carr/sapot.htm>
- ▶ <http://eol.org/pages/1149984/overview>
- ▶ <https://mymberry.com.au/miracle/history>