Tacca leontopetaloides (L.) Kuntze

Family:
Taccaceae

Kuntze, C.E.O. (1891) *Revisio Generum Plantarum* : 704.

Common name:
Arrowroot, Fiji; Tacca; Polynesian Arrowroot; Fiji Arrowroot; Arrowroot, Polynesian; Arrowroot, East Indian; Arrowroot; East Indian Arrowroot

Stem

The true stem consists of an underground tuber and the only parts above ground are the leaves, inflorescences and infructescences.

Leaves

Leaves generally bipinnate or tripinnate, basal, arising from an underground tuber and not from an aerial stem. Leaves very variable, spreading to about 40-90 cm. Petiole variable in size up to 1 m long and longitudinally ribbed. Compound leaf rhachis grooved on the upper surface. Midrib and lateral veins depressed on the upper surface of the leaflets. Lateral veins forming loops inside the blade margin.

Flowers

Inflorescence about 1.5 m tall, basal, arising from an underground tuber. Flowers produced in an umbel, about 20 flowers per umbel, subtended by several green to purple filiform bracts about 10-14 cm long. Tepals green, tips sometimes purple, in two whorls of three. Anthers attached to a hood-like structure. Stigma 3-lobed with each lobe divided into two.

Fruit

Fruits ovoid, ribbed, about 23-30 x 17-21 mm long, tepals persistent at the apex. Fruits emit a strong fruity odour when cut or broken. Seeds numerous. Surface striated, each seed about 5-8 x 4-6 mm.

Seedlings

First leaf arises from below ground level and the leaf blade is +/- reniform with a few small teeth on the margin. Second leaf also arises from below ground level and the margin is deeply toothed. Subsequent leaves soon conform to the adult leaf structure. Seed germination time 247 days.

Distribution and Ecology

Occurs in WA, NT, CYP, NEQ and CEQ. Altitudinal range in northern Australia from near sea level to 900 m. Usually grows in open forest but occasionally found in monsoon forest and also in or on the margins of lowland rain forest. Also occurs in Africa, Madagascar, Asia, Malesia and the Pacific islands.

Natural History & Notes

A widespread species but it is not commonly cultivated. Known for the large tripinnate basal leaves, it requires little attention once established and will thrive in sandy areas.

The tubers of this plant were formerly used as a source of starch in the Pacific area.

The tuber is very starchy; this starch may be extracted by grating, pounding, and washing, the resultant product being a kind of arrowroot. In the early days this was much used and highly recommended for dysentery and diarrhoea in the same way our more familiar arrowroot has been used. Cribb (1981).

Synonyms

Leontice leontopetaloides L., *Species Plantarum* 1: 313(1753), Type: India, J. Amman; holo: L?. **Tacca pinnatifida var. brownii F.M.Bailey**, *Comprehensive Catalogue of Queensland Plants* : 548(1913). **Tacca pinnatifida var. paeoniifolia Domin**, *Bibliotheca Botanica* 89(4): 533(1928), Type: Queensland, False Cape, near Yarraba, Jan. 1910, Domin; holo: PR?. **Tacca pinnatifida subsp. interrupta (Warb.) H.Limpr.**, *Inaug. Diss. Breslau* 1902: 56(), Type: Syntypes: Port Darwin, Holtze 191; syn: G, WRSL; Queensland, Warburg 18406; syn: BM. **Tacca pinnatifida J.R.Forst. & G.Forst.**, *Characteres Generum Plantarum* : 70(1775), Type: [Forster & Forster refer to Rumphius: Herb. Amb. 5 (1747) t. 114]. Tahiti, Forster s.n.; holo: ?. **Tacca brownii var. paeoniifolia (Domin) H.Limpr.**, *Das Pflanzenreich Heft 92* : 30(1928). **Tacca brownii Seem.**, *Flora Vitiensis* : 100(1868), Type: [given by E.Drent, Blumea 20 (1973) 377 as T. pinnatifida Brown

Inflorescence with flowers and immature fruit. © R.L. Barrett

Habit, leaves and infructescence. © R.L. Barrett

Flowers [not vouchered]. © ATH

Fruits. © CSIRO

(BM, E, K (= phot. Bailey Hortorium 8097), P), N. Australia.]. **Tacca pinnatifida var. permagna Domin**, *Bibliotheca Botanica* 89(4): 532(1928), Type: Queensland, Russell River, Jan. 1910, K. Domin; holo: PR?.

RFK Code

3137

Copyright © CSIRO 2020, all rights reserved.

Leaf [not vouchered]. © ATH

Scale bar 10mm. © CSIRO

Cotyledon stage and 1st leaf, hypogeal germination. © CSIRO

CSIRO
CENTRE FOR AUSTRALIAN NATIONAL BIODIVERSITY RESEARCH
AUSTRALIAN NATIONAL HERBARIUM
ATH Australian Tropical Herbarium
Australian Biological Resources Study
POWERED BY LUCID®
GET IT ON Google Play
Download on the App Store
Web edition hosted at https://apps.lucidcentral.org/rainforest