March 2017

Ifit

Intsia bijuga

Native Plants of Guam

Ifit is a medium to large tree with tremendous cultural importance on Guam. It is termite resistant and valued for its dense, dark wood. Once the most important source of timber for homes and construction, it was named the territorial tree of Guam in 1969. Ifit thrives in a range of habitats from limestone forest to mangrove swamp edges, but large trees are not common due to development and demand for wood.

Other Common Names: Bendora, Borneo teak, Go Nuoc, Ife-lele, Ifet ifil, Ipil, Kayu besi, Kwila, Lumpaw, Marabow, Merbau, Moluccan ironwood, Praduu thale, Tat-talum, and Vesi.

Synonyms: *Afzelia bijuga, Albizia bijuga, Intsia retusa, Macrolobium bijugum, Eperua decandra*

Family Name: Fabaceae

Plant Appearance

Distinctive feature: Ifit has stalked pinnate compound leaves, typically with 2 pairs of thin leathery leaflets oppositely arranged.

Leaf

Shape: Broadly ovate to obovate, oblong or subfalcate

Arrangement: Alternate

Type: Compound (even-pinnate)

Flower

Size: Moderately large, entire panicle may be 2.5-4 in. in diameter.

Color: Petals are usually white with a red center, but may be pink or red. Flowers have distinctive green sepals.

Shape: Small bell

Arrangement: Flowers are clustered on branch terminals.

Flowering period: Throughout the year

Ifit flowers[a].

Ifit leaves[b].

Ifit fruit[b].

Ifit seeds[a].

Ifit seedlings[b].

NOAA CORAL REEF CONSERVATION PROGRAM

USDA

USDA is an equal opportunity employer and provider.

College of Natural & Applied Sciences
University of Guam | Unibetsedåt Guahan

Habit

Typical height: Guam's Ifit trees are usually 22-40 ft. high, and rarely exceed 80 feet.

Fruit

Type: Dehiscent dry fruit (legume/pod)

Size: Each 3-12 in. oblong pod contains up to 8 flat seeds.

Color: Light to dark brown when mature.

Number of seeds: 1-8 seeds per pod

Edible: Seeds may be eaten after careful preparation. They are traditionally soaked in salt water for 3-4 days before boiling.

Growing Your Own

PROPAGATION

Form: Seeds, seedlings, and bareroot

Seed collection: Pods and seeds may be collected from the tree or the ground. Seeds may be stored for years.

Seed treatment: To speed germination, nick or file seed coat opposite the hilum (scar) and soak for 12-24 hours.

Germination time: Clipped and soaked seeds usually emerge within 6 days. Untreated seeds may not emerge for weeks.

Planting depth: Plant seeds about 1 in. deep with hilum pointing downward.

Pre-planting: Average seedling height is 10-16 in. for outplanting. The seedling should have a woody base of about 0.5 in. diameter.

Special hints: Ifit has very long tap root system. When potting, use sterilized garden soil and larger plastic bag and place under shade until robust enough to be outplanted.

Pollinators: Beetles, flies, and bees.

Production Conditions

pH value: Neutral or has alkaline acidity (6.1 – 7.4+)

Water: Moderate

Salt tolerance: High

Wind tolerance: High

Soil characteristics: Light, medium, and heavy soils

Light: Full sun, shade tolerant as well

Space requirement: 10-40 ft.

Growth rate: 1-3 ft. per year

Growth direction: Upwards

Fertilizer: For calcium-deficient soils (usually more acidic, < pH5), add dolomite or calcium sulfate. If the soil needs more phosphorus, add super-phosphate or rock phosphate for optimum yield.

Pruning: Regular thinning is recommended to eliminate knots and crooked stems. When the tree is between 8-20 years old, pruning should be done after thinning to produce longer clear boles. It prunes naturally in closer spaces and branches out more in wider spaces.

Risks

Near surface roots: Ifit has a deep root system.

Limb breakage: Low

Special considerations: None

Pests: Psyllid, *Insnesia glabrascuta,* feeds on new leaves, stems, and flowers. Severe infestations may prevent flowering.

How to Use This Plant

Ifit was once widely used for homes and furniture on Guam, and large trees have been over-harvested. Today, Ifit is prized by carvers and is used for furniture and tools as well.

Agroforestry: Coastal protection, windbreak, coastal soil stabilization, ornamental, living fence, and nitrogen-fixing.

Wildlife: Bird nesting, host for epiphytes and native lizard species

Medicinal: The bark is used to treat urinary conditions, rheumatism, dysentery and diarrhea. An infusion of the bark is also given to women after delivery.

Other uses: The bark is used to make dyes and tannins, while seed oil produces an insect repellent.

References and Resources

Marler, T. and J.H. Lawrence. 1994. Ifit: Intsia bijuga, the Territorial Tree of Guam. College of Agriculture and Life Sciences, University of Guam. 2 p.

Raulerson, L. and A. Rinehart. 1991. Trees and Shrubs of the Northern Mariana Islands. Coastal Resources Management, Office of the Governor, CNMI. 120p.

Stone, B.C. 1970. The Flora of Guam. Micronesica, Vol. 6. University of Guam. 657p.

Vogt, S.R. and L.L. Williams. 2004. Common Flora and Fauna of the Mariana Islands. 158p.

http://www.fao.org/docrep/005/ac775e/AC775E04.htm

http://www.guampedia.com/guam-trees-ifit/

https://plants.usda.gov/plantguide/pdf/pg_inbi.pdf

www.binhi.ph/database

www.guamlegislature.com

www.tropical.theferns.info

www.worldagroforestry.org

Photo Credits

a. Forestry & Soil Resources Division, Guam Department of Agriculture

b. Christine Bucayu-Laurent

Contributors

Christine Bucayu-Laurent, James R. Hollyer, Adrienne Loerzel, and Ilene Iriarte.

Acknowledgements

Special thanks to John "Bart" Lawrence for his valuable contribution in the completion of this factsheet.

Notes

This publication is an update of: Iriarte, Ilene. 2006. *Ifit.* Guam Department of Agriculture. 2pp.

For Further Information

Forestry & Soil Resources Division
Guam Department of Agriculture
Phone: (671) 735-3949/51
Fax: (671) 734-0111
163 Dairy Rd, Mangilao, Guam 96913
http://forestry.guam.gov/http://forestry.guam.gov/