# LARGE INDIGO

Zollinger's indigo

*Indigofera zollingeriana* Leguminosae

ECHO® PLANT INFORMATION SHEET

## Description

Large indigo is an erect shrub which can grow into a small tree between 3-5 meters within 2 years. It has been observed up to 12 m in height. Its branches and leaves have white hairs. The leaf is 20 cm long and composed of 11-17 leaflets. The fruit is a legume, with pods 35-45 mm long and indehiscent (do not split open), each containing about 10 round, flat seeds stacked like a roll of coins in the pod.

syn. I. teysmannii

## Uses

Crop uses (soil improvement) – Large indigo is an effective nitrogen fixer and green manure.

Crop uses (livestock production) – Large indigo is a high-quality livestock forage, with high protein content (27-31%, depending on fertilization), good digestibility, and low tannins.

Other uses – Large indigo is used for fuel wood production, as an agroforestry over-story (shade) tree, and as a pioneer species for reforestation of degraded land. It is particularly effective in suppressing imperata (Iperata cylindrica) grass.

## Common Names

## Cultivation

Seasons of production – It generally flowers at the end of the rainy season and fruits in the cold season, with seed ready to harvest near the beginning of the hot season (February in Thailand and Vietnam).

Length of production and harvest period – If grown for fodder, prune at 1-1.5 m every 60 days for maximum leaf production.

Pollination – It is believed that Indigofera is mainly insect and bee pollinated.

Planting space – When planted as a pioneer species it can be planted in alleys 4 m apart, with lines of climax species or food crops in between. Closer spacing can be used if planting for fodder.

Production methods – Large indigo can be direct seeded or transplanted. To hasten seed germination, dip seeds into hot and cold water successively. Seedlings can be planted out at 1 year old.

Known environmental conditions for production – Large indigo is a pioneer species which often invades open areas or fields after burning. It is found at altitudes up to 850 m. It needs full sun.

Known soil requirements – Large indigo can grow on poor soil, and tolerates acidity.

## Harvesting and Seed Production

Seed saving – Seeds are harvested by collecting the pods and drying them in open areas. Dried seeds can be stored in normal conditions for 2 years.

## Pests and Diseases

Known pests – The seed beetle Bruchidius zollingerianae has been observed on large indigo seed pods in Vietnam.

## References

Abdullah, L., Tarigan, A., Suharlina, Budhi, D., Jovintry, I. and Apdini, T.A. Indigofera zollingeriana: A Promising Forage and Shrubby Legume Crop for Indonesia, Proceedings of the 2nd International Seminar on Animal Industry, Jakarta, July 2012. http://repository.ipb.ac.id/bitstream/handle/123456789/56937/Proceeding2ndisai.0001.pdf?sequence=1

Delobel, Alex. A new seed beetle associated with Indigofera zollingeriana in Vietnam, with a note on the Bruchidius japonicas (Harold) species group (Coleoptera: Chrisomelidae: Bruchinae) Genus, Vol. 21(2): 249-255 Wroclaw, 30 VII 2010

Hanum, I. Farida, Van der Maesen, L.J.G. (Editors). PROSEA: Plant Resources of South-East Asia 11, Auxiliary Plants, Prosea Foundation, Bogor, Indonesia, 1997.

Mattapha, Sawai and Chantaranothai, Pranom. The Genus Indigofera L. (Leguminosae) in Thailand, Tropical Natural History 12(2): 207-244, October 2012. http://www.biology.sc.chula.ac.th/TNH/TNH%2012_2/7-Pranom8.pdf

Merrill, Elmer Drew. An Enumeration of Philippine Flowering Plants. 18. 2. Manilla: Bureau of Printing, 1923. 276. Print.

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Schrire, Brian D. "Indigofera zollingeriana." Flora of China 10.151 31, Jan, 2010. 140. e.Floras.org. Web. 21 Jun 2012. http://www.efloras.org/florataxon.aspx?flora_id=620&taxon_id=242326907

So, Nguyen Van. The Potential of Local Tree Species to Accelerate Natural Forest Succession on Marginal Grasslands in Southern Vietnam. In Elliot S., J. Kerby, D. Blakesley, K. Hardwick, K. Woods and V. Anusarnsunthorn (Eds). Forest Restoration for Wildlife Conservation, Chiang Mai University, 2000. http://www.forru.org/PDF_Files/frfwcpdf/part2/p28%20So%20The%20potential%20of%20local.pdf

Subagiyo, Puji Yosep. "Index of Scientific - Vernacular Names." Primastoria.info. Web. 21 Jun 2012. http://primastoria.net/artikel/tekstiltradisi2.pdf