## **ECHO Asia Seed Fact Sheet**

Scientific name – Lactuca indica L.

English common name – Indian lettuce, tropical lettuce

<u>Asian common names</u> – (taken from Herklots, Globinmed, and Porcher) –

- China: foo mak tsoi
- Indonesia: komak, lampenas (Sudanese), sawi rana, kuban kayu rana (Javanese)
- Japan: アキノノゲシ akino nogeshi
- Malaysia: daun panjang
- Philippines: gilgiloy (Bisaya), batudan (Bontoc), gatudan Kankanai)
- Vietnam: di[ees]p d[aj]i, rau b[oof] c[os]c, b[oof] c[oong] anh
- Thailand: ผักกาดหอมบ้าน phak kat hawm ban



Photo: ECHO Asia staff

## **Variety** – **ECHO Tropical**

General description and special characteristics – Tropical lettuce is an erect, self-seeding, semi-perennial originally from China that grows to 2 m (6 ft) in height and is cultivated for its long, succulent leaves. The leaves are somewhat bitter – a desirable quality for certain Asian dishes. The stem or stalk of the plant contains a milky sap and the main rib or vein in each of the leaves is often red.

<u>Crop uses (culinary)</u> – Tropical lettuce leaves are a fair source of vitamins A and C. According to the *Plants for a Future* online database, "The leaves contain about 1.5% protein, 0.4% fat, 2.2% carbohydrate, and 0.7% ash." Cooked, the stem contains 0.6% protein, 0.1% fat, 2.1% carbohydrate, and 0.5% ash (Fern 2010). Young leaves can be eaten raw while older leaves, which are bitter, can be served raw with vinegar, steamed, or boiled. At times, the leaves are employed as wrappers in which to fry fish. The leaves also have medicinal uses.

<u>Crop uses (livestock production)</u> – Tropical lettuce has been used as a feed for ducks and geese in Taiwan and for silkworms (Herklots 1972).

<u>Seasons of production</u> – Seeds are planted at the start of the rainy season or established during the dry season with irrigation.

<u>Length of production and harvest period</u> – Leaves are ready for harvest between 30 and 60 days and can be gathered continually over a period of four to five months. As the rainy season draws to a close, the plant will produce yellow flowers that will yield tiny flat, black seeds.

<u>Production methods</u> – Sow the seeds and then thin seedlings to 30 cm x 30 cm (1 ft x 1 ft), or if seeding in trays, transplant the seedlings at the same spacing after one month. Seedlings can be planted in full sun. Roots left in the ground after final harvest will produce smaller plants originating from the rootstock the following season.

<u>Pollination information</u> – Tropical lettuce flowers contain both male and female organs. Mainly self-pollinating, the pollen is transferred by insects.

<u>Environmental conditions for production</u> – Very heat tolerant and able to withstand full sun, tropical lettuce can be grown in low-lying areas and higher elevations up to 2000 m (approximately 6500 ft). The plant can also tolerate cool temperatures (maximum 10 degrees C) and rainfall in excess of 3500 mm (138 in)/year.

<u>Soil requirements</u> – Ideal conditions for growing tropical lettuce include well-drained soils containing large amounts of organic matter and a pH between 5.0 and 6.0; however, the plant will tolerate a variety of soils.

<u>Pests and diseases</u> – In general, the plant has no major pests, but aphids (*Aphis gossypii*) do attack it on occasion. Wood vinegar solution or a mild detergent solution can be used to control them.

<u>Seed saving</u> – Tropical lettuce produces yellow flowers toward the end of rainy season. These should be allowed to dry to become wispy, white tufts on the plant. The dried flower heads can be collected when the seed turns black.

## References

FAO, "*Lactuca indica*." *Ecocrop* (2007). *Ecocrop*. Web. 16 May 2012. http://ecocrop.fao.org/ecocrop/srv/en/cropView?id=7081.

Globinmed. (2012). "Lactuca indica L." Global Information Hub On Integrated Medicine (Globinmed). Web. 16 May 2012. <a href="http://www.globinmed.com/index.php?option=com\_content&view="article&id=62979:lactuca-indica-l&catid=376:1">http://www.globinmed.com/index.php?option=com\_content&view=</a> article&id=62979:lactuca-indica-l&catid=376:1.

Herklots, G.A.C. (1972). Vegetables in Southeast Asia, p. 137

Fern, Ken. (2010). "*Lactuca indica L." Plants For A Future*. Web. 16 May 2012. <a href="http://www.pfaf.org/user/Plant.aspx?LatinName=Lactuca indica">http://www.pfaf.org/user/Plant.aspx?LatinName=Lactuca indica</a> .

Porcher, Michel H. et al. 1995 - 2020, Sorting Lactuca Names. Multilingual Multiscript Plant Name Database (M.M.P.N.D) – A Work in Progress. School of Agriculture and Food Systems. Faculty of Land & Food Resources. The University of Melbourne. Australia. http://www.plantnames.unimelb.edu.au/Sorting/Lactuca.html (2005).