

*Trichodesma zeylanicum*

**Family:** Boraginaceae

**Species:** *Trichodesma zeylanicum* (Burm.f.) R. Br.

**Common Names:** African borage, late weed, and nyarumundu (Zimbabwe); Koenstler bush, eileilo, and nyalak-dede (East Africa); khoswe (Zambia)

**Synonyms:**

*Trichodesma zeylanicum* (L.) R. Br.

*Borago zeylanica* Burm.f.

**Bayer Code:** TRHZE

**Description:** An erect annual up to 1.2 m high, much branched, rough and hairy with unpleasant bulbous-based spiny hairs that break off in the skin when the plant is handled. Leaves are opposite below, becoming alternate higher on the plant, ovate to narrowly lanceolate up to 12 cm long, tapered to the base, with no distinct petiole, conspicuously veined below, also covered in spiny hairs. Flowers are single, hanging from long pedicels in the axils of upper leaves, pale blue with a white center, or all white, with 5 petals fused in a campanulate form, 12 mm across, the calyx also hairy with 5 acute lobes, just exceeding the length of the corolla. The calyx swells as the fruit develops, containing four 3-angled seeds, 4 mm long, rough on the inner surface, smooth and glossy on the back, gray-brown in color (MOBOT, 2009).

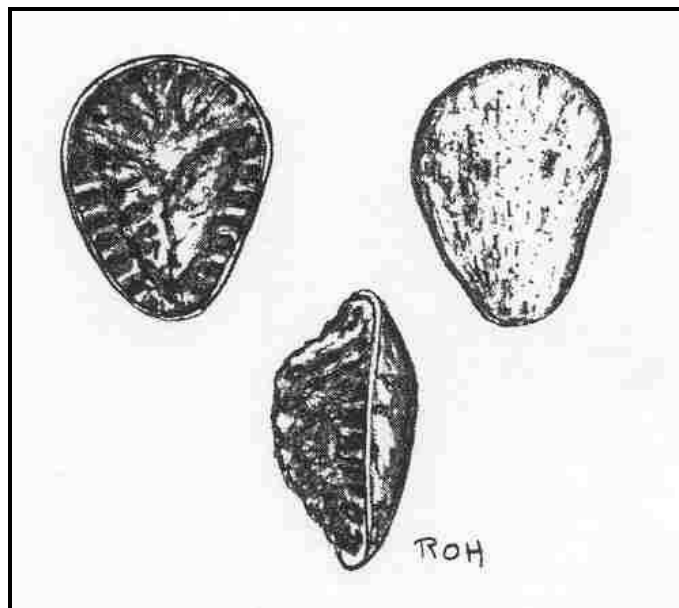


Figure 1. *Trichodesma zeylanicum* fruit from Reed (1977)



Figure 2. *Trichodesma zeylanicum* seedling from Vernon (1983)

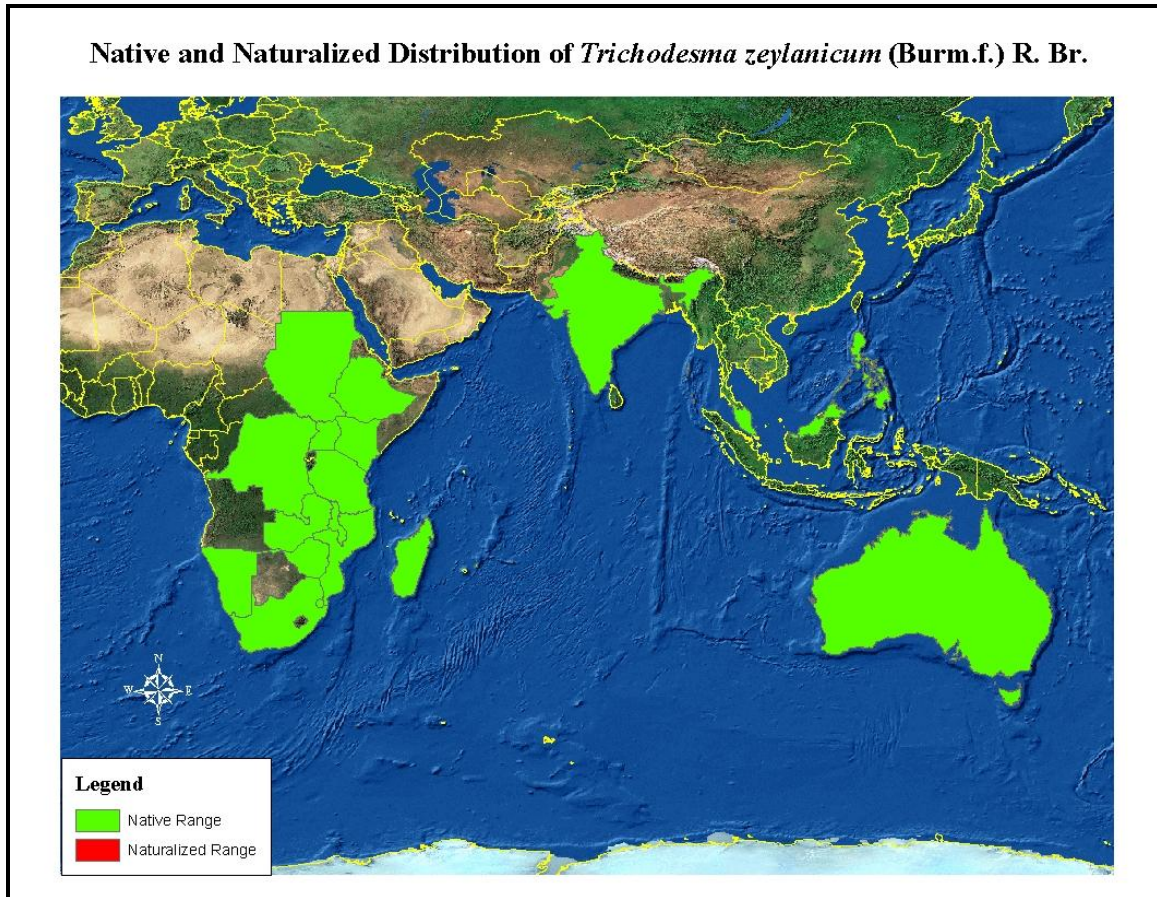


Figure 3. *Trichodesma zeylanicum* from Vernon (1983)

**Distribution:** *Trichodesma zeylanicum* is native to Africa (Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Namibia, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zaire, Zambia, Zimbabwe), Asia (India, the Philippines, Malaysia), and Australasia



(Mauritius Australia and Fiji) (NGRP, 2002; Holm et al., 1979; Reed, 1977; Wells et al., 1986).



**Figure 4.** By Glenn Fowler, USDA APHIS PPQ CPHST, 2002 (Fowler, 2002)

**Biology and Ecology:** *Trichodesma zeylanicum* occurs in disturbed ground, crop fields, roadsides, and sandy river beds. It tends to germinate late in the season and can dominate crop land to prevent a harvest.

**Possible Pathways to the United States:** No information provided

**Adverse Impact:** It is reportedly poisonous to stock in Australia (Watt and Breyer-Branwijk, 1962). *Trichodesma zeylanicum* is listed by Holm et al. (1979) as a “principal” weed in Kenya and Zimbabwe. Drummond (1984) describes it as a “serious late weed” in Zimbabwe. Wells et al. (1986) refers to *Trichodesma zeylanicum* competing and replacing vegetation and being unpalatable. It competes in the latter stages of crop growth. It can dominate river borders, fallow fields, and other disturbed ground and make land preparation difficult. *Trichodesma zeylanicum* is extremely unpleasant to handle because it has bulbous-based spiny hairs that break off in the skin when the plant is handled. It has the ability to establish and spread in the United States and would be a most unwelcome addition to the flora.

**Literature Cited:**

Drummond, R. B. 1984. Arable Weeds of Zimbabwe. Agricultural Research Trust of Zimbabwe, Harara, Zimbabwe. 154 pp.

- Fowler, G. 2002. Distribution Map. USDA, APHIS, PPQ, Center for Plant Health Science and Technology, Raleigh, NC.
- Holm, L. G., J. V. Pancho, J. P. Herberger, and D. L. Plucknett. 1979. A Geographical Atlas of World Weeds. Wiley, New York. 391 pp.
- Mobot. 2002. Missouri Botanic Garden (Mobot) W3TROPICOS Last accessed 2009, <http://www.mobot.org/MOBOT/Research/alldb.shtml>.
- NGRP. 2002. World Economic Plants in GRIN (Germplasm Resources Information Network). United States Department of Agriculture, Agricultural Resources Service, National Germplasm Resources Program (NGRP). Beltsville. Last accessed 2009.
- Reed, C. F. 1977. Economically Important Foreign Weeds: Potential Problems in the United States. Agricultural Research Service, Animal and Plant Health Inspection Service, U.S. Dept. of Agriculture, Washington, DC. 746 pp.
- Vernon, D. 1983. Field Guide to Important Arable Weeds of Zambia. Department of Agriculture, Chilanga, Zambia. 151 pp.
- Watt, J. M., and M. G. Breyer-Branwijk. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa (2nd). E&S Livingstone, Edinburgh. 1457 pp.
- Wells, M. J., A. A. Balsinhas, H. Joffe, V. M. Engelbrecht, G. Harding, and C. H. Stirton. 1986. A Catalogue of Problem Plants in Southern Africa. *Memoirs of the Botanical Survey of South Africa* 53:1-658.