

## *Cyanotis axillaris*

**Family:** Commelinaceae

**Species:** *Cyanotis axillaris* (L.) D. Don

**Common Names:** phak plaap naa (Thailand); nilani phul (Assam, India); salt-raj and baghanulla (India)

**Synonyms:**

*Cyanotis axillaris* (L.) D. Don

*Cyanotis axillaris* (L.) Schult.f.

*Cyanotis axillaris* (L.) Sweet

*Cyanotis axillaris* (L.) Benth.

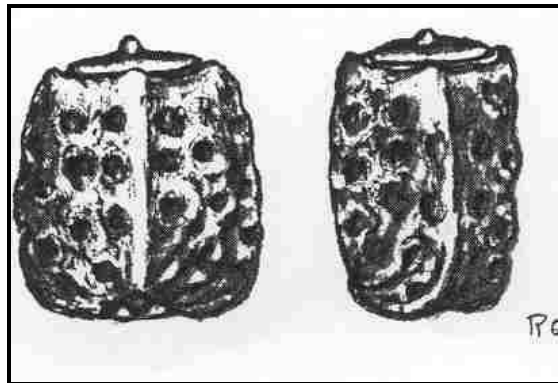
*Commelina axillaris* L.

*Zygomenes axillaris* (L.) Salisb.

*Amischophacelus axillaris* (L.) Rolla,

**Bayer Code:** CYBAX

**Description:** A perennial herb, mainly prostrate, creeping or sub-erect to 90 cm long, rooting at the nodes, and with the tips erect. Stem and leaves all rather fleshy, succulent, glabrous, or very finely ciliate or villous. Leaves 2–15 cm long by about 1 cm wide, lanceolate, tapering steadily to an acute tip, and the base forming a complete amplexicaul sheath around the stem with some long hairs. The flowers, in clusters of 1–3 mm (6 mm) almost hidden in the leaf-sheaths, are pale blue, mauve, or pink; corolla tube about 10 mm long, with three lobes about 4 mm long. Sepals three, free, about 7 mm long. Stamens six on filaments inflated just below the anthers and with long white hairs below. Capsule about 8 mm long with three chambers, two seeds in each chamber arranged one above the other. Seeds dark brown, shining, squarish 1 x 2 mm, with distinct pattern of pits.



**Figure 1.** *Cyanotis axillaries* from Reed (1977)

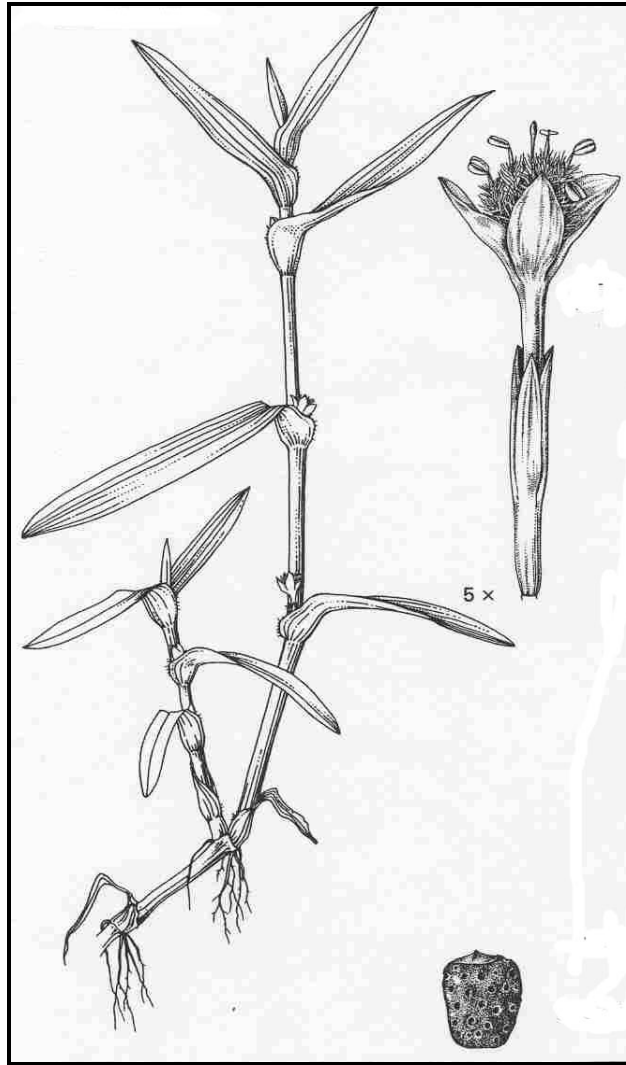
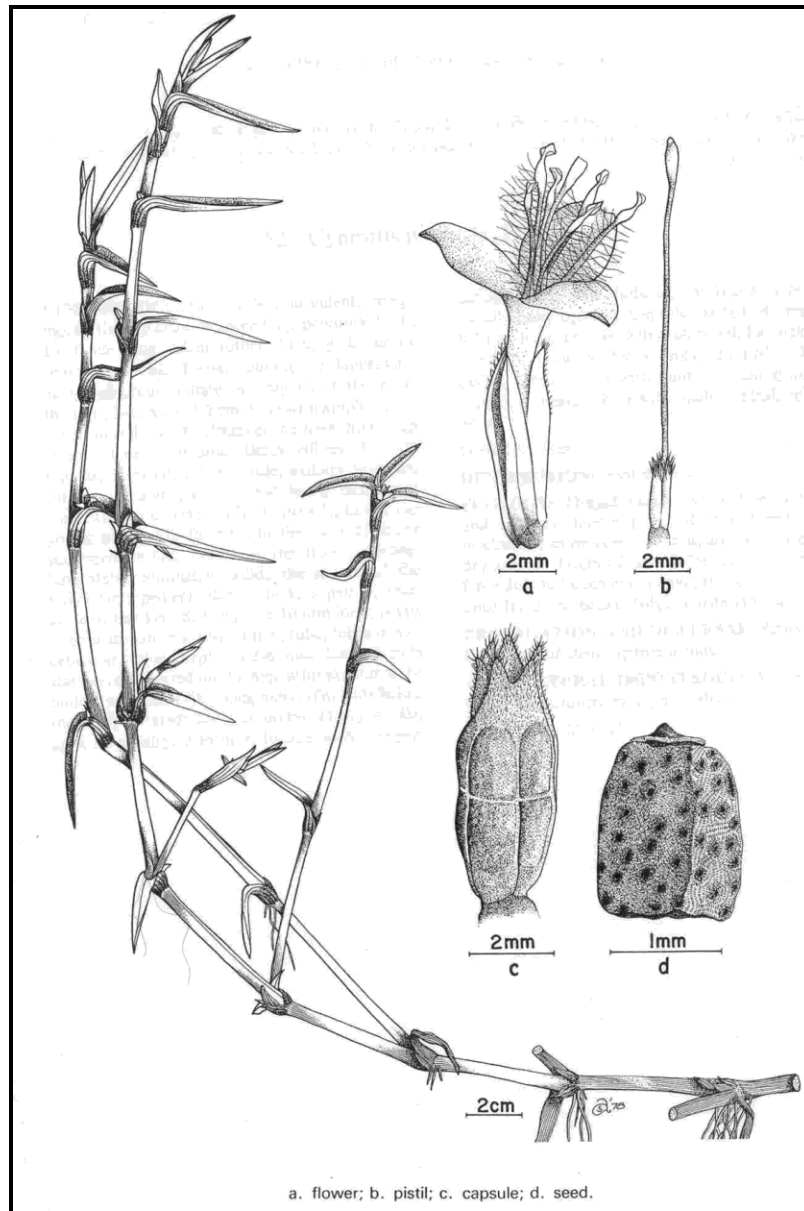


Figure 2. *Cyanotis axillaries* from Häfliger & Scholtz (1981)



**Figure 3.** *Cyanotis axillaris* from Kostermans et al. (1987)

**Distribution:** According to NGRP (2002) and Wiersma and León (1999), *Cyanotis axillaris* is native to South and East Asia and Australia, but Kostermans et al. (1987) describe it as “pantropical.” Presumably the wider distribution results from relatively recent introduction and naturalization. Based on these and other sources, the distribution of this species is classified as follows: Native in Asia (Bangladesh, Burma, Cambodia, China, India, Indonesia, Laos, Malaysia, Malesia, Philippines, Sri Lanka, Thailand, Vietnam) and Australasia (Australia); Possibly naturalized in Africa (Sudan) (NGRP, 2002; Holm et al., 1979; Kostermans et al., 1987; Moody, 1989; Noltie, 2000; Reed, 1977; Wiersma and León, 1999).

### Native and Naturalized Distribution of *Cyanotis axillaris* (L.) D. Don

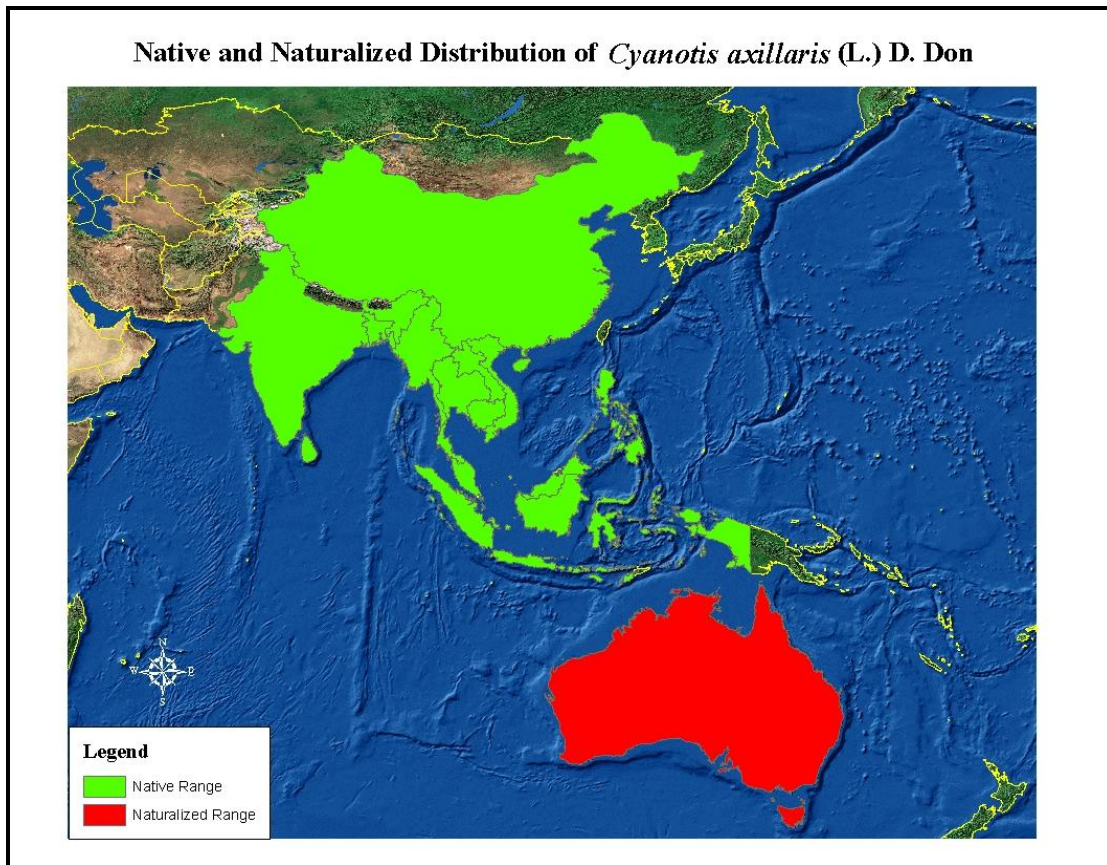


Figure 4. By Glenn Fowler, USDA APHIS PPQ CPHST, 2002 (Fowler, 2002)

**Biology and Ecology:** *Cyanotis axillaris* is a plant of wet ground, shallow ditches, rice fields, and forest borders, but Kostermans et al. (1987) refer to its preference for areas with “a longer dry season.” It occurs up to 250 m altitude in Indonesia. Distribution is mainly tropical, but occurrence in southern Europe indicates some wider climatic tolerance. In northeastern India, it flowers and fruits from September to December. *Cyanotis axillaris* is listed by Holm et al. (1979) as a “principal” weed in India, Sudan, and Thailand and as a “common” weed in the Philippines. Garcia-Torres (1997) singled it out as a potential invasive weed for Central America.

**Possible Pathways to the United States:** Because *Cyanotis axillaris* is a weed of rice and jute, and presumably some other crops in the native and introduced range, there is a risk of accidental introduction with crop seeds. Occurrence in China is regarded as of particular concern in the light of increasing trade with that country. There is also some medicinal use in India, which increases chances of deliberate introduction.

**Adverse Impact:** The fact that it has naturalized widely outside of its original Asian distribution suggests that it has potential for further naturalization in warmer regions of the United States with resultant impact as a weed of rice or as a colonist of wetlands.

#### Literature Cited:

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