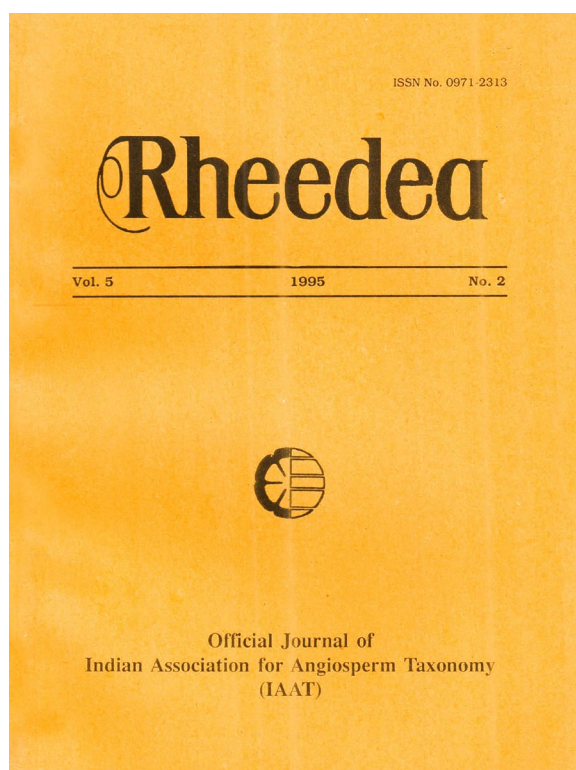




## *Eleutherine bulbosa* (Miller) Urban (Iridaceae-Tigridieae): a little understood exotic in India

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***Eleutherine bulbosa* (Miller) Urban  
(Iridaceae–Tigridieae) : a little understood  
exotic in India**

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**Abstract**

The taxonomy of the plant, commonly referred to as *Cipura paludosa* by Indian taxonomists, and commonly found under cultivation in Indian gardens, is discussed. The correct identification is *Eleutherine bulbosa*. Detailed description and illustration are provided.

*Eleutherine* Herbert, characterised by bulbous root stock, radical, pleated, lanceolate leaves, a similar subapical cauline leaf and small white, evening blooming flowers, is distributed in Mexico, Caribbean, and central and South America. It is introduced and cultivated in several parts of Africa and Asia. Morphological variability in this taxon has had different taxonomists recognise varying number of species in the genus, but in the latest treatment, Goldblatt and Snow (1991) have reduced these into two good species, *E. bulbosa* Herbert and *E. latifolia* (Standley & Williams) Ravenna. These two are identical in their floral features, but can readily be distinguished by the nature of the inflorescence. Those of *E. bulbosa* have several pedunculate rhipidia, the lowest of which is inserted in the axil of the solitary, subapical cauline leaf and the rest on a secondary axis, while those of *E. latifolia* is composed of 1-2 sessile rhipidia in the axil of the cauline leaf.

Among the two species, *E. bulbosa* was considered to have magical and psychadelic properties (Schultes, 1990) and was used by American Indians against a variety of ailments like bloody diarrhoea, haemorrhagia and open wounds and also as a vermifuge (Geerinck, 1977; Ayensu, 1981; Vickers & Plowman, 1984; Ayala, 1984). It is now introduced and naturalized in Indochina, Philippines, and in some parts of India.

It was Prain (1903) who first reported the occurrence of this plant in India (Bengal). But, he reported it under the name *Cipura paludosa* Aubl., which is an entirely different taxon. Since then, most other Indian taxonomists (Santapau & Henry, 1973; Karthikeyan *et al.*, 1989) have followed Prain in the nomenclature of this taxon.

Some botanists, investigating the cytotaxonomy of the taxon have also followed this (Sharma & Talukdar, 1959), while others have treated it under *Eleutherine plicata* (Rao, 1969) and *E. bulbosa* (Cherian & Kuriachan, 1988).

***Eleutherine bulbosa*, a little understood exotic**

Recently, the author found that this plant is widely cultivated in Gardens in several parts of India and that its identification and nomenclature is in some confusion. On perusal of literature, it was found it is an *Eleutherine* rather than a *Cipura*. The specimen was referred to Dr. Goldblatt, Missouri Botanic Garden, who confirmed it as *E. bulbosa*. Since none of the Indian treatises help in resolving the confusion, a detailed description and illustration of the species are provided here.

*Eleutherine bulbosa* (Miller) Urban, Repert. Spec. Nov. Regni Veg. 15: 305. 1915; Goldblatt & Snow, Ann. Missouri Bot. Gard. 78(4): 946. 1991.

*Sysyrinchium bulbosum* Miller, Gard. Dict. ed. 8. 1768.

*Galatea bulbosa* (Miller) Britton, Brooklyn Bot. Gard. Mem. 1: 37. 1918, *nom. invalid.*

*Ixia americana* Aublet, Hist. Pl. Guiana 1:33. 1775.

*Eleutherine anomala* Herbert, Edward's Bot. Reg. 29, t. 57. 1843.

*Eleutherine subaphylla* Gangnepain, Bull. Soc. Bot. France 81: 66, f. 67. 1934.

*E. plicata* (SW.) Katt in Mart., Fl. Bras. 3(1): 514, t. 64, f. 2. 1871.

*Eleutherine longifolia* Gangnepain, Bull. Soc. Bot. France 81 : 66. 1934.

*Cipura paludosa* sensu Prain, Bengal Pl. 2: 1055. 1903; Karthik. *et al.*, Fl. Ind. Enum. Monocot. 83. 1989, non Aubl., 1775.

(Fig. 1)

Herb to 60 cm tall. Bulbous root stock 3-5 x 2.5-3.0 cm, ellipsoid, fleshy, reddish. Basal leaves 15-40 x 1.5-3 cm, lanceolate, many-nerved, plicate, margin entire, glabrous throughout. Scape 30-40 cm long, slender, terete, with a subapical foliaceous leaf similar to basal leaves. Spathes green, subequal, 10-15 x 5-6 mm, glabrous, margins slightly scarious; peduncle 2-3.5 cm long. Flowers white, 2.5-3.0 cm in diameter, pedicellate; pedicels 10mm long; bracts membranous, 10-14 x 5-6 mm, hyaline, glabrous; tepals 6, white, free, in two whorls of 3 each, outer and inner similar, 10-15 x 6-8 mm, narrowly obovate, entire; stamen 3, erect, shortly connate at base, filaments 2 mm long, glabrous; anthers 3 mm long, orange - yellow, sagittate; ovary 2 mm long, obovoid, green, glabrous, 3-celled; ovules many in each locule; style yellowish, 3-branched 2 mm above from base, branches 4mm long, linear, glabrous, stigmatic apically. Fruits not seen.

***Eleutherine bulbosa*, a little understood exotic**

*Specimens examined:* KERALA : Kannur Dt. : Payangadi, Usha Kiran 8674, Indiradevi 9008 (CALI). Malappuram Dt. : Tenhipalam, Sivarajan & Pradeep 5381, Tanur, Rajasree 2602 (CALI).

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