

## ***Lindelofia anchusoides* (Lindley) Lehmann (Boraginaceae) and *Merremia aegyptia* (L.) Urban (Convolvulaceae): two new records for Nepal from Arghakhanchi district**

M.P. Panthi<sup>1</sup> and R.P. Chaudhary<sup>2</sup>

<sup>1</sup>Butwal Multiple Campus, Butwal, <sup>2</sup>Central Department of Botany, Tribhuvan University, Nepal

### Abstract

Two species *Lindelofia anchusoides* (Lindley) Lahm. (Boraginaceae) and *Merremia aegyptia* (L.) Urban (Convolvulaceae) have been collected from Arghakhanchi district as new records for Nepal. Both species, which generally appear as weed on wastelands are described and illustrated.

**Keywords:** *Lindelofia anchusoides*, *Merremia aegyptia*, Boraginaceae, Convolvulaceae, Nepal.

### INTRODUCTION

During the floristic study (2000 – 2005 A.D.) in Arghakhanchi district, few species of plants have been reported as new records for Nepal (Panthi 2006; Panthi & Chaudhary 2002). Among them *Lindelofia anchusoides* (Boraginaceae) and *Merremia aegyptia* (Convolvulaceae) are described below. *Lindelofia anchusoides* has been earlier reported from West Himalaya from Afghanistan to Himachal Pradesh, India and *M. aegyptia* from west and north India (Polunin & Stainton 1984).

A brief description and drawings based on the collections are given below to facilitate their identification:

***Lindelofia anchusoides*** (Lindley) Lehmann in Neue Allg. Deutsche Garten-Blumenzeitung, 6: 351. 1850; Fl. Him. 280. 1984. [Fig. 1]

*Cynoglossum anchusoides* Lindley in Edward's Bot. Reg. 5: t 14 (1842).

Herbs c.50 cm high; stem branched, adpressed hairy, upper part hollow; root-stock stout, fusiform, 15 cm long and c.2.5 cm diameter. Lamina narrowly lanceolate, acute, midrib distinct, veins less distinct, silvery grey, with adpressed greyish hairs. Radical leaves larger, 7-9 x 1-1.5 cm, long petioled up to 4 cm, upper narrower, much smaller, 1.5 x 0.3 cm, sessile. Flowers small, c.0.5 cm, bright blue, funnel shaped, with triangular blunt lobes, borne in clusters on slender dropping, dichotomously branched scorpioid cymes, sticky. Corolla c.12 mm long, wider at the throat with distinct scales; calyx-lobes oblong, blunt, woolly, usually about half as long as corolla. Styles protruding, stamens included. Nutlets c.3 mm across, with hooked bristles, arranged in groups of four.

**Habitat:** Occasionally in rocky slopes and weed of abandoned fields.

**Use:** Locally root is used as appetizer and remedy of 'Kapta' (stomach problem with indigestion).

**Distribution:** Afghanistan to Himachal Pradesh 2100 – 3600 m (Polunin & Stainton, 1984).

**Voucher Specimens:** Central Nepal, Arghakhanchi, Adaguri, 1925m, 24 August 2001, M. Panthi 125 (TUCH).

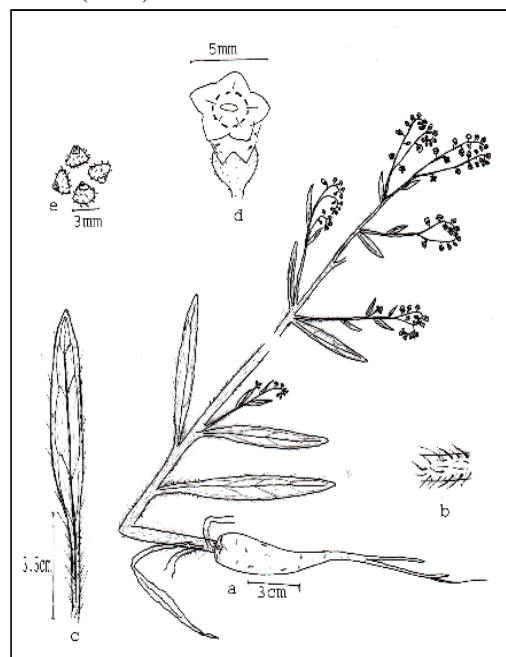


Fig. 1: *Lindelofia anchusoides* (a) plant with root stock, (b) adpressed hairs on stem, (c) leaf, (d) flower and (e) nutlets with hooked bristles.

Three species of *Lindelofia* (*L. longiflora* (Benth.) Baillon, *L. stylosa* (Karelin & Kir.) Brand and *L. anchusoides* (Lindley) Lehmann) have been reported from Western Himalaya (Polunin & Stainton, 1984). J.D. Hooker (1885) in *Flora of British India* treated *L. anchusoides* as a synonym of *Paracaryum heliocarpum* A. Kerner distributed in temperate Western Himalaya, 2100 – 2700 m, Kashmir, Lahul and Spiti. The present collection shows extended distribution of *L. anchusoides* to Nepal Himalaya. It is a common weed of open field. When plant matures the inflorescence becomes sticky and get attached to the animal coats or to the human bodies and that is why it is locally called as ‘Chyap chyape kuro’ (sticky weed).

Only one more species of *Lindelofia* has been reported from Nepal (Press *et al.*, 2000), *Lindelofia longiflora* (Benth.) Baill. Enum. Fl. Pl. Nep. 3: 101(1982) [Syn. *L. spectabilis* Lehmann] and can be easily distinguished from *L. anchusoides* as presented in Table 1.

**Table 1. Comparison between *L. anchusoides* and *L. longiflora***

Character	<i>Lindelofia anchusoides</i>	<i>Lindelofia longiflora</i>
Habit	Branched herbs	Herbs with solitary or several stems
Lamina	Narrowly lanceolate, upper ones smaller, narrowed to the base but not clasping to the stem	Broadly lanceolate, upper ones with clasping heart-shaped basal lobes
Flowers	Small, light blue, lobes triangular-blunt deep blue to purple, lobes spreading	Large (1.5 cm across), much variable in size, rounded
Calyx	Calyx-lobes oblong obtuse, woolly throughout	Calyx-lobes oblong/ elliptic, hairy particularly on margins
Distribution	Afghanistan to Himachal Pradesh; grows between 2100 – 3600 m (Polunin and Stainton 1984) and 1500 – 3500 m in Palas valley [ <a href="http://www.palasalley.org/wildflora-list.htm">www.palasalley.org/wildflora-list.htm</a> ]	Kashmir to Western Nepal, grows between 3300 – 4600 m (Press <i>et al.</i> , 2000).

*Merremia aegyptia* (L.) Urban, Symb. Antill 4: 505. 1910; Fl. W. Trop. Africa 2: 342. 1963.

*Ipomoea pentaphylla* Jacquin in Fl. Brit. Ind. 4: 202 1883; Fl. Delhi 238. 1963. ‘Egyptian day glory’. [Fig. 2]

Herbs, slender, twining, silky hairy, annual. Leaves digitately 5-foliolate, leaflets 4-6×1.5-2 cm, lanceolate, acuminate, arranged on a hirsute and long petiole. Flowers white to yellowish white, showy, 2.5-3 cm across, infundibuliform, axillary, on long laxly dichotomous cymes. Sepals densely brown-hirsute, apex entire. Corolla-tube 3.5 – 5 cm long. Stamens unequal. Stigma globular lobed; style long slender; ovary 3-celled. Flowers begin to fade by late mid-day. Capsules ovoid.

*Fl. & Fr.*: August – November

*Habitat*: Common on dry wastelands

*Distribution*: West and North India, a native of Tropical America and Africa.

*Voucher specimens*: Central Nepal, Arghakhanchi, Adguri-4, 1280 m, 16 May 2000, *M. Panthi 321* (TUCH).

Fig. 2: *Merremia aegyptia* (a) twig with flower buds, (b) flower, (c) carpel with swollen stigma and d) seed

**Other species of *Merremia* in Nepal**

*M. emarginata* (Burm. f.) Hallier f., *M. hederacea* (Burm. f.) Hallier f., *M. umbellata* (Burm. f.) Hallier f., *M. vitifolia* (Burm. f.) Hallier f. have been reported from Nepal (Press *et al.*, 2000). *M. aegyptia* is a tropical plant naturalized in Nepal and occasionally cultivated in gardens as an ornamental, found along hedges, and unpalatable to cattle. It resembles with *Ipomea* species but can be distinguished in having five digits of leaf, entire apex of sepals and globose stigmas.

**Acknowledgements**

We are thankful to the KATH and LWG for providing us opportunity to verify and identify our specimens. We are also thankful to the Central Department of Botany, Tribhuvan University, Kirtipur for laboratory facilities.

**LITERATURE CITED**

- Panthi, M. 2006. Plant Diversity and Resource Utilization in Arghakhanchi and Manang district, Nepal. Tribhuvan University, Kirtipur, Nepal (Ph. D. dissertation).
- Panthi, M.P. and Chaudhary, R.P. (2002). Angiospermic Flora of Arghakhanchi District and adjoining areas, west Nepal. *Journal of Natural History Museum*, Tribhuvan University, Nepal, **21**: 7-31.
- Polunin, O. and Stainton, A. (1984). *Flowers of the Himalaya*. Oxford University Press, London. p.280.
- Press, J.R., Shrestha, K.K. and Sutton, D.A. (2000). *Annotated Checklist of the Flowering Plants of Nepal*. The Natural History Museum, London and Tribhuvan University, Kathmandu.
- [www.palavalley.org/wildflora-list.htm](http://www.palavalley.org/wildflora-list.htm)