leaved orchid growing on mass covered moist rocky substratum in association with Bryophytes such as *Herberta, Cephalozia, Scapania, Radula, Calipogeia* etc.

Bulbils in umbellate clusters at the top of mature pseudobulbs, about 30 in each cluster, with tiny ovoid dark purplish bulbous base, bearing two filiform unequal juvenile leaves and with a large sheathing scale. Soon after the dispersal each bulbil produces a solitary long slender root covered with root hairs.

The authors observed the plant both under cultivation and in natural habitat for its flowering over an year, but with no avail. However, it has a close morphological resemblance to the genera like *Pleione* and *Oreorchis* of this region, but for want of flowers the authors hesitate to include it in either.

Pseudobulbs 7 - 16 × 5 - 8 mm, ovoid with short or long neck, aggregate, 1-leaved, covered with a large sheath, dark purplish pink, leafless while bearing bulbils. *Roots* up to 8 cm long and 1 mm thick, many, crowded, covered with root hairs. *Sheaths* as long as or longer than the pseudobulbs. *Leaves* 2.5 - 10.0 × 0.4 - 2.0 cm, elliptic-oblong, obtuse to acute, plicate, 3-5-veined, narrowed at base into a petiole, deciduous; petiole 4 - 15 mm long, grooved adaxially. *Old pseudobulbs* with persisting scales at the apex, prominently grooved or smooth, covered with persisting sheath fibres at base.

J. JOSEPH AND N. R. ABBAREDDY
Botanical Survey of India, Shillong

A NOTE ON THE REPORTED OCCURRENCE OF *LEPIDIUM DIVARICATUM* SOLANDER IN INDIA

Lepidium divaricatum Soland., a native of tropical South Africa, was recorded for the first time from India by Bhattacharyya & Majumdar (1979), based on collections from Lahul, North West Himalaya (Jispa, 3200 m, 14th Aug., 1970, *U. C. Bhattacharyya* 40793; Koksar, 3100 m, 7th Aug., 1970, *U. C. Bhattacharyya* 40674—both at BSD). A study of the above specimens reveals that they are annual or biennial herbs; stems many from the base, ascending and spreading, densely puberulous throughout; fruiting racemes dense, 4-6 cm long; silicula 1.8 - 2.0 × 1.5 - 1.75 mm, elliptic or broadly ovate, distinctly emarginate and notched at the apex; style included within the notch.

On the basis of the above findings and a critical review of the literature, the specimens are now determined as *L. africanum* Burm f.) DC. and not *L. divaricatum* Soland. *L. africanum* is also a new record for India.

Solander (1789) described *L. divaricatum* based on plants cultivated in green house at Kew, the type of which is preserved in Herb. Deless. (G). Marais (1966) pointed out, that Solander's type with large, broad, pinnately lobed leaves does not represent the typical form of the species, the majority of which are fairly slender plants having small, narrower leaves. He (*l. c.*) had further shown that out of the three Burmann's specimens of *Thlaspi africanum* only one agrees well with his diagnosis. De Candolle (1821) wrongly excluded this specimen from *L. africanum* when he made the combination and considered the same

as *L. divaricanum* Soland. Marais (*l. c.*) concluded, "Thus, the name *L. africanum* must now be applied to plants which, since De Candolle's treatment, have been included in *L. divaricatum*". Therefore, the correct nomenclature of *L. africanum* is: **Lepidium africanum** (Burm. f.) DC. Syst. 2: 552-53. 1821, quad synon. tandem, excl. specim. et descr. non auct. *Thlaspi africanum* Burm. f. Prodr. Fl. Cap. 17. 1768. Type: *Burmann* in Herb. Deless. (G). *Lepidium divaricatum* sensu DC. *l. c.* 543. 1821, quad specim. Burm. sensu auct. pro parte.

In a recent revisionary study, Jonsell (1975) though holding a similar view, treated *L. divaricatum* as a subspecies (ssp. *divaricatum*) under *L. africanum*. But in spite of the wide range of variation within *L. africanum*, it differs considerably in a number of characters from true *L. divaricatum* and thus it would be better to treat it as a separate species as has been done by Marais (*l.c.*). The distinguishing features between the two are as follows:

L. africanum	*L. divaricatum*
1. Annual or biennial herbs.	1. Perennial, woody (undershrubs).
2. Stem one to many from the base, erect or ascending, moderately to densely puberulous.	2. Stem usually single, branched above, erect, glabrous or sparsely hairy.
3. Racemes both axillary and terminal, short and dense in fruit, 4-6 cm long.	3. Racemes usually terminal, much larger and less dense in fruit, 12-16 cm long.
4. Silicula small, 1.8-3.0 × 1.4-2.0 mm, elliptic to broadly ovate.	4. Silicula comparatively large, 2.5-3.7 × 1.8-2.3 mm, narrowly elliptic to ovate.

ACKNOWLEDGEMENT

The authors are thankful to the Deputy Direrter, Botanical Survey of India, Northern Circle, Dehra Dun, for the loan of specimens for study.

G. H. BHAUMIK AND K. THOTHATHRI

Botanical Survey of India, Howrah

REFERENCES

BHATTACHARYYA, U. C. AND N. C. MAJUMDAR. *Lepidium divaricatum* Solander—a new record for India. *Bull. Bot. Surv. India.* 18 (1-4) : 214. 1976 (1979).

DE CANDOLLE, A. P. Regni vegetabilis systema naturale 2. 1821, Paris.

JONSELL, B. *Lepidium* L. (Cruciferae) in Tropical Africa : a morphological, taxonomical and phytogeographical study. *Bot. Not.* 128 (1) ; 20-46. 1975.

MARAIS, W. Notes on South African Cruciferae. *Bothalia* 9 ; 107-108. 1966.

SOLANDER, D. C. In Aiton's *Hort. Kew.* (ed. 1) 2 : 375. 1789.

A NEW VARIETY OF *ABELMOSCHUS TUBERCULATUS* PAL & SINGH (MALVACEAE) FROM RAJASTHAN, INDIA

A. tuberculatus Pal et Singh var. **deltoidefolius** Paul et Nayar, var. nov. a typo differt, folius deltoideformis, 3-5 cm latis, seminis majoribus 4-5 mm longis pubescentibus.

Typus: INDIA: Jhalawar (Rajasthan), 19.9.64, *B. M. Wadhwa & D. M. Verma* 7581 (Holotypus—CAL); Jhalawar, 21.9.64, *B. M. Wadhwa & D. M. Verma* 7524 (Paratypus—CAL).

Anual erect herb *ca* 1 m high. *Leaves* deltoid, 3-5-lobed; base broadly cordate to truncate; apex acute; margin dentate, 4-10 × 5-10 cm, 5-7-nerved at the base; both surfaces hispid; petioles 2-8 cm long. *Stipules* linear, 3-5 mm long, hispid. *Flowers* axillary, solitary; *pedicel* 4-8 mm long, accrescent, up to 1.5 cm. *Epicalyx* with 8-10 subequal segments, linear, 5-7 mm long, accrescent, up to 1.2 cm, appressed,