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# SHORT COMMUNICATIONS

## *PELTIGERA DOLICHOSPORA*, A NEW HIMALAYAN-WESTERN CHINESE LICHEN

According to the protologue, the only characteristics to separate *Peltigera polydactyla* (Necker) Hoffm. and its newly described var. *dolichospora* Lu (Lu 1958) were the conspicuously longer spores and asci, and the higher hymenium, in the variety. Since its description this taxon has probably never been discussed. When studying the isotype preserved in the Leningrad herbarium (LE) I could not ascertain any close affinities to *P. polydactyla* or its segregates, although further taxonomic conclusions were hindered by the rather fragmentary condition of the specimen.

However, amongst *Peltigera* material collected by Professor J. Poelt in Eastern Nepal in 1962 and recently sent to me for identification, two specimens proved comparable to the type of var. *dolichospora* and it became clear that this taxon should be recognized at species level.

### Peltigera dolichospora (Lu) Vitik. comb. nov.

*Peltigera polydactyla* var. *dolichospora* Lu, *Acta phytotax. sinica* **7**: 264 (1958); type:—China, Sichuan, Mt Emei Shan, 'Golden Peak', alt. 3000 m, 1957, *Lu* 615 (LE—isotype!).

(Fig. 1)

*Thallus* small to medium-sized, to 6 cm diam; brownish-grey to dark brown when dry; lobes 5–10 (–15) mm broad; upperside scabrose especially towards the margins; cortex 20–45 (–62) μm; underside with dark brown reticulate veins and wide pale interstitia; rhizines fasciculate, branched, partly confluent at bases, 1–6 mm long; no isidia or soralia.

*Apothecia* 1–4 mm diam, discs rounded, flat, dark brown to black; hymenium 120–180 μm high; asci 120–160 × 12 μm; ascospores acicular, straight, multiseptate, 65–125(–134) × 3–6 μm.

*Chemistry:* 15α-acetoxyphopan-22-ol (dolichorrhizin), hopane-6α,22-diol (zeorin, ±) and 1–2 other accessory substances (triterpenoids?) (t.l.c.).

*Icones:* Asahina (1955: fig. 3, as '*P.* cf. *scabrosa*'); Awasthi & Joshi (1982: fig. 15, as '*P. pulverulenta*').

The dark brown colour, small size and lack of tomentum in this species may recall *P. polydactyla*, but the distinctly scabrose cortex readily distinguishes *P. dolichospora* from that species and its allies. On the other hand, the surface structure of the cortex has led to misidentifications of *P. dolichospora* as *P.* cf. *scabrosa* (Asahina 1955) or *P. pulverulenta* (Awasthi & Joshi 1982; I have not seen their specimens, but their description of the morphology and chemistry agrees well with *P. dolichospora*). It differs from both of these by its smaller size, darker colour, more prominent veins, and flat apothecia; furthermore,

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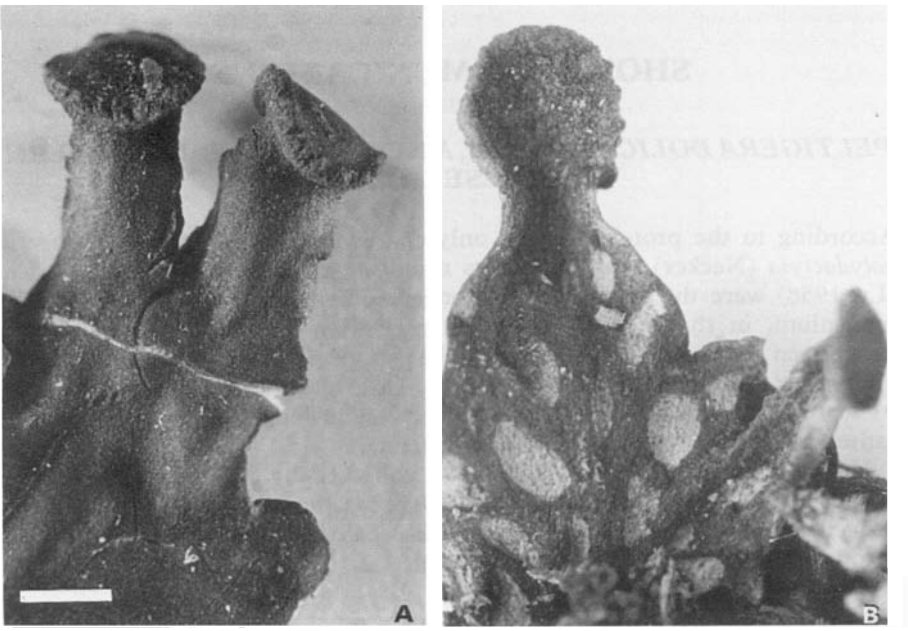


FIG. 1. *Peltigera dolichospora* (Nepal, *Poelt* L1724, M). A, Upperside; B, underside. Scale = 1 cm.

the spores are longer than is known in any other species of the genus. In addition, the chemistry is exceptional: dolichorrhizin and accessory substances found in *P. dolichospora* are not accompanied by the depsides tenuiorin and methyl gyrophorate, the usual pattern in this genus. Only two other species of *Peltigera* are known to me which also lack these depsides, even though containing triterpenoids, namely *P. laciniata* (Merrill ex Riddle) Gyelnik (syn. *P. tomentosa* Vainio), a common neotropical tomentose species, and the poorly known *P. oceanica* Gyelnik from the Philippines in the *P. polydactyla* group. In *P. laciniata* only zeorin is constantly found, whereas *P. oceanica* contains, besides zeorin and dolichorrhizin, trace amounts of (or as accessories?) peltidactylin (7$\beta$-acetoxyhopan-22-ol; see White & James 1985) and one or two other substances.

*P. dolichospora* is terricolous and muscicolous. Its known altitudinal range is 3000–4100 m, and at least some of its habitats in eastern Nepal lie in *Abies–Rhododendron* mountain forests. Besides China (Sichuan) and eastern Nepal, it is known from West Bengal in India (Awasthi & Joshi 1982, as '*P. pulverulenta*'). Present information suggests that this species should be added to the endemic Himalayan–western Chinese element of lichens discussed by Poelt (1976)

*Specimens examined:* **China:**—see type.—**Nepal:** Hänge westlich Rowuche Teng (Rauje) gegen Ringmo, *Poelt* L1724; Okhaldu [illegible] Tolo Gompa Khola, 4100 m, 1953, *Nakao* (TNS).

I am grateful to the keepers of the herbaria LE, M and TNS for the loan of the specimens; to Dr B. J. Coppins for correcting my English; and Mr M. Korhonen for the photograph.

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## A *CALICIUM*-LIKE *CALOPLACA* FROM VENEZUELA

During fieldwork in the paramo-region near Merida, Venezuela with M. Lopez-Figueiras and T. Ahti, I discovered a *Baccharis* covered in a small, yellow lichen consisting of stalks, each with a mazaedium-like head. However, closer examination revealed that the heads were capitate soralia developed on the top of stalked thalli containing parietin. This remarkable lichen has to my knowledge not been reported previously, and is accordingly described as new below.

### Caloplaca calicioides P.M. Jørg. sp. nov.

Thallus stipitiformis, cinerascens, usque ad 1 mm altus; soralio terminali ± capitato, flavo-aurantiaco, K + purpureo.

*Type:* Venezuela, Merida, Sierra Nevada de Santo Domingo, Paramo Mucabaji towards Laguna Negra, *c* 3500 m alt., 9 January 1979, *P.M. Jørgensen* 7533 (BG—holotypus; BM, GZU, MERF, UPS, US—isotypi).

(Fig. 1)

*Thallus* developing from soredia directly into greyish or faintly yellow stipitate structures that soon develop terminal, granular soralia. Stipes at maturity *c.* 1 mm tall, unbranched, sometimes growing in aggregates of 2–3. *Soralia* terminal, ± capitate or flat with down-turned margins, yellow-orange, but colour often deeper marginally. *Chemistry:* parietin, K+ purple.