

Ixeridium is a genus of about 13 species from eastern and southeastern Asia to New Guinea (Pak & Kawano 1992, see also Shih 1993), of the subtribe *Crepidinae* Dumort. (cf. Bremer 1994). Most of the species are rosulate herbs with relatively tall, multi-headed, corymbose inflorescences. Sometimes, as in *I. pusillum*, the plants are small, with few (1 or 2) capitula on a short peduncle. Rarely the capitula are sessile in the centre of a small rosette of an acaulescent plant, as in *I. subacaule*. The collections considered here are closest to *I. subacaule*, the material keys out to *Lactuca subacaulis* (= *I. subacaule*) in Royen's key and in both Pak & Kawano (1992) and Koster (1976). However, there are several differences which we think merit recognition of this material as a new species.

DESCRIPTION

Ixeridium sandsii D. J. N. Hind & R. J. Johns, sp. nov., *I. subacaulis* (J. Kost.) J. H. Pak & Kawano affinis sed foliorum basi dense indumentosa (non glabra), foliis planis (non conspicue carinatis margine involutis) marginibus plerumque dentibus 2 vel 3 provisus (nec integris) apicibus apiculatis (nec muticis), phyllariis interioribus apice truncatis et dense fimbriatis (nec apice acutis usque obtusis et tantum parce laciniatis) differt. Typus: New Guinea, Papua (Irian Jaya): Mimika Regency, PT-Freeport Indonesia Concession Area. Mine Area, Water Supply Valley, alt. 4100–4200 m, 19 Aug. 1998, Barker 69 & Beaman (holotypus K, isotypus BO (n.v.)).

Dwarf perennial herb to 1.5–2 cm tall. Roots few, somewhat wiry, possibly subfleshy when alive. Stems (when present) short, stout and poorly branched, individual plants often with only 1–4 rosettes; rosette with numerous dense, long, uniseriate, multicellular, brown eglandular hairs at base of leaves, sometimes scarcely visible in dense clumps of plants, older leaf bases retained at base of plant. Leaves densely rosulate, pseudopetiolate, pseudopetiole 3–6 × 1–1.5 mm, lamina narrowly elliptic to elliptic, 3–7 × 2–3 mm, slightly discolourous, mid-green above and paler beneath, midrib slightly prominent beneath in lower half, insculcate above, secondary venation not evident on either surface, margins reddish, entire or more often with (1–) 2 or 3 pairs of teeth, teeth c. 1 mm long, hyaline and often retrorse and folded over upper surface of lamina, leaf apices acute to obtuse, apiculate. Inflorescences of solitary (see note below) capitula, sessile to subsessile at anthesis (sometimes scapes to c. 3 mm when capitulum flowering), scape elongating significantly after fertilisation (to 6 cm) (see discussion below), bracteolate, bracteoles 6, c. 2 mm long × c. 1 mm wide, evenly spaced along scape in lax spiral, resembling (but probably are) outer phyllaries, base cordate to sub-cordate, margins entire, upper surface pale, lower surface mid-green, apices acute; capitula ligulate, c. 8 mm diam. (acc. to collecting notes); involucre cylindrical; phyllaries markedly dimorphic, outermost series ovate to narrowly ovate, 2–2.5 × 1 mm, margins entire, all herbaceous, apices acute, sometimes scarcely laciniate, inner series of 8 ± equal phyllaries, alternately with two broad scarious margins or herbaceous to edge (occasionally one or more with one broad scarious margin and one herbaceous), outer surface glabrous, markedly finely bullate, margins entire except for rounded to truncate coarsely

lacinate apices; receptacle small, epaleaceous, glabrous; post fruiting inner phyllaries recurved at length and conspicuously keeled with prominently swollen bases. Florets 10, ligulate, hermaphrodite, all fertile; corollas light yellow, corolla tube 1.5 – 2 mm long, very slightly inflated at base then expanding gradually upwards, glabrous, ligule $3.5 \times c. 1.3$ mm, glabrous, corolla teeth conspicuously thickened inside, outside usually reddish-purple, mammillate to almost papillate; anther cylinder blackish in upper half, apical anther appendages slightly longer than wide, apices obtuse to rounded, basal anther appendages long-caudate, entire to slightly fimbriate, anther collars not evident; style base lacking basal node, glabrous, style shaft cylindrical, glabrous except for short-papillate section in upper 0.5 mm beneath style arms, style arms c. 0.5 mm long, usually 2, sometimes 3, ascending, short papillate outside, dirty coloured, apices acute. Achenes c. 1.5 mm long (immature with no obvious ribs), glabrous, rostrate, rostrum c. 2 mm (immature), smooth; carpodium scarcely discernible, but probably a narrow annulus; pappus setae biseriate, 3 – 3.5 mm long, numerous, barbellate, fawn. Fig. 1.

MATERIAL EXAMINED. INDONESIA, PAPUA (IRIAN JAYA). Mimika Regency, PT-Freeport Indonesia Concession Area. Pylon close to HEAT road near Grasberg Mine, alt. 3800 m, 6 March 1998, *Baker 922 et al.* (K); Mount Jaya, S slopes, path from water supply near Surabaya shop. Subalpine grassland, alt. 4000 m, 13 March 1998, *Baker 979 et al.* (K); Mine Area, Water Supply Valley, alt. 4100 – 4200 m, 19 Aug. 1998, *Barker 69 & Beaman* (holotype K); Mount Jaya, S slopes, path from water supply near Surabaya shop, alt. 4000 m, 13 March 1998, *Heatubun 256 et al.* (K); Meren Valley, along trail to glaciers on summit area of Mount Jaya, alt. 3700 – 4000 m, 7 Dec. 1998, *Sands 7307* (K).

DISTRIBUTION. Currently only known from Mount Jaya, between 3700 and 4200 m.

HABITAT. Known only from wet subalpine grassland and grassland patches within subalpine shrubbery.

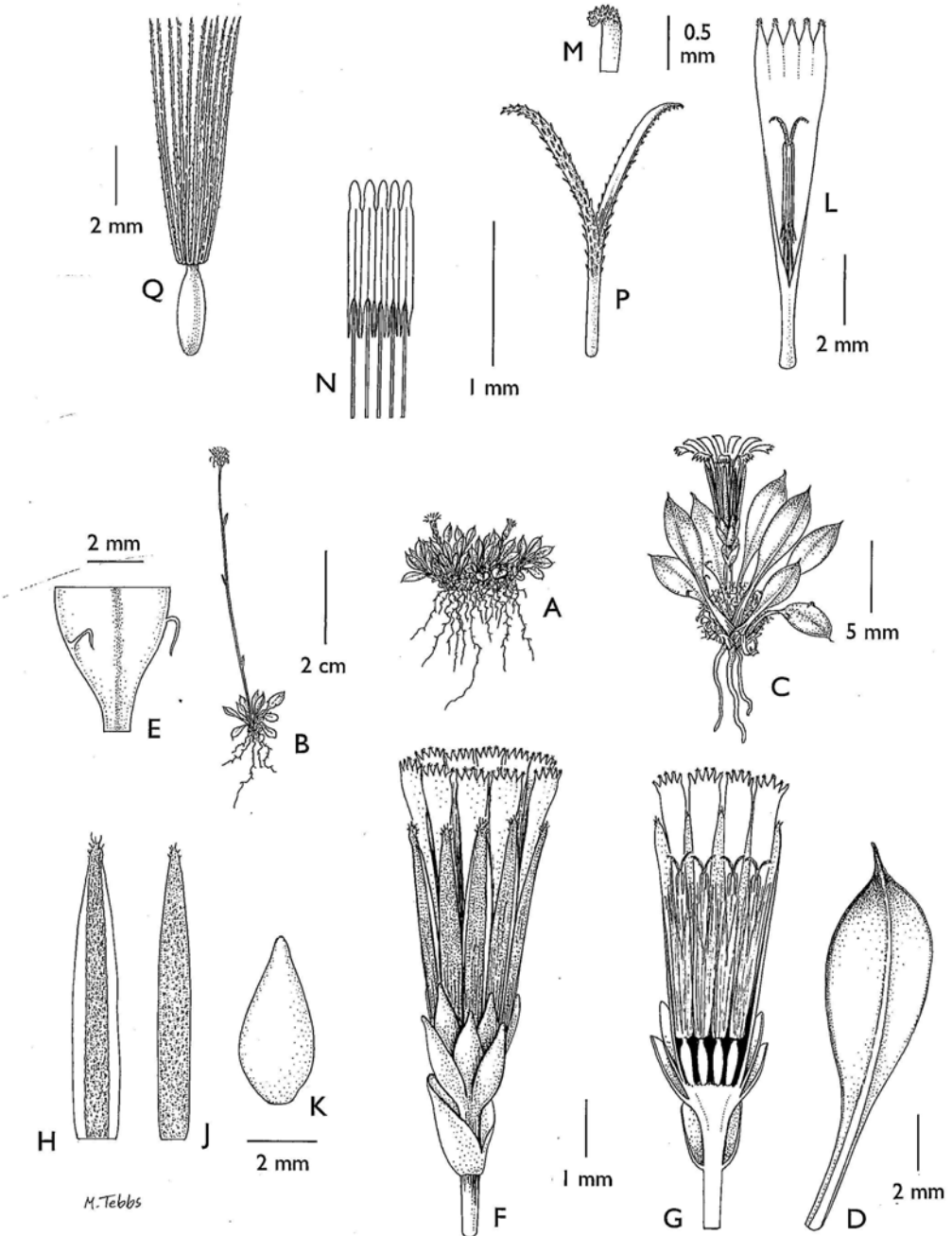
ETYMOLOGY. The species is named after one of our former colleagues and collector of one of the paratypes, Martin Sands.

PHENOLOGY. Flowering period probably March – April judging by the state of the type material examined.

CONSERVATION STATUS. The limited label information available suggests that this species is relatively scarce in the few localities where it has been found. There is currently no known threat to the species.

DISCUSSION

Ixeridium sandsii is clearly closely allied to *I. subacaule*, especially in its dwarf habit and solitary terminal capitula. The two species differ principally in their indumentum, leaf shape and margin type. Close examination of isotype material of *I. subacaule* shows that although the leaves appear to be linear, they are actually narrowly lanceolate and markedly involute, with a paler matt upper surface; the involute margins are entire. In *I. sandsii* the leaves are narrowly elliptic to elliptic, flat and concolorous, the reddish margins often have two or three pairs of teeth,



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FIG. 1. *Ixeridium sandsii*. A whole plant; B whole plant with elongated fruiting scape; C single plant showing crisped hairs amongst leaf bases; D underside of leaf with prominent midrib; E base of upper surface of leaf showing subopposite pair of teeth; F capitulum; G l.s. capitulum; H inner phyllary; J outer phyllary; K uppermost bract on peduncle; L ligule; M magnified apex of corolla lobe; N anther cylinder opened out; P style arms; Q achene (immature) and pappus. Drawn from Barther 69 & Beaman (K) by Margaret Tebbs.