

subulatae, 3–4 mm. longae. *Flores* numerosi; corolla purpurea, tubo c. 12 mm. longo primum basi leviter dilatato deinde per 8–9 mm. angustato tum per 3 mm. campanulato, lobis linearibus c. 5 mm. longis. *Antherae* c. 6 mm. longae, nigrae, appendicibus albis 1 mm. longis. *Achaenia* nigra, muricata, c. 2.5 mm. longa; pappi setae biseriatae, plumosae, exteriores 9–11 mm. longae, interiores 12–14 mm. longae.

NEPAL. Ringmigaon, Phoksumdo Tal, slopes beneath Kanjiroba (lat. 29° 04' N., long. 82° 56' E.) 4,700 m., growing on open slopes; leaves dark green above, phyllaries very dark purple; florets purple; anthers black; stigmas purple; 21st September, 1952. *Pulinin, Sykes & Williams* 3534 (holotype in Herb. Brit. Mus.) East of Chalike Pahar (lat. 28° 40' N., long. 83° 05' E.), 4,400 m.; grass slopes; leaves glossy; inflorescence purple, 22nd September, 1954, *Stainton, Sykes & Williams* 4540.

Although similar in appearance to *Saussurea superba* forma *pygmaea* Anthony (in *Not. R. Bot. Gard. Edinb.* xviii: 213 (1934)), this new species may be distinguished by its broad outer phyllaries (whence the specific epithet) which are sparsely villous, its sessile or almost sessile capitula with the short scape when present completely hidden in the rosette, and the muricate achenes crowned by a double pappus, the outer hairs of which are slender and feathery, not scabrid, and almost as long as the stouter inner series.

[F. Ludlow]

**Dubyaea stebbinsii** Ludlow, sp. nov. (Plate 5 and Fig. 7.) (*Compositae*)

*Caudex* subglobosus, c. 1.5 cm. latus; caulis florifer usque ad 100 cm. altus, striatus, praeter apicem sparse tolosum glaber. *Folia* basalia ignota; folia caulina omnia petiolata, glabra, tenuia, inferiora pinnatipartita segmentis 3–5, superiora simplicia; segmenta lateralia foliorum inferiorum mediorumque elliptica vel obovata, 1–3 cm. longa, 0.5–2 cm. lata; segmentum terminale foliorum inferiorum mediorumque ut superiora simplicia, magnum, triangulare, apice longe cuspidatum vel acuminatum, margine repandum sparse mucroni-denticulatum, basi hastatum vel subcordatum, ad 15 cm. longum et 12 cm. latum; rhachis (vel petiolus foliorum superiorum) 1–7 cm. longa. *Capitula* 1–4, longe pedunculata, cernua, 2.5–4 cm. longa, 4–6 cm. diametro; pedunculus 12–22 cm. longus, superne pubescens, inferne glaber, bractea mediana anguste lanceolata vel lineari 2 cm. longa suffultus; involucrium late campanulatum; phylla imbricata, nigra, praeter marginem interdum ciliatum glabra, quoad formam et magnitudinem valde variabile, exteriora ovata vel anguste ovata 8–10 mm. longa et 3–4 mm. lata, interiora anguste oblonga acuta vel obtusa 13–15 mm. longa et 3–5 mm. lata; *Flores* numerosi; corolla violaceae, purpurea vel rubro-malvina, tubo 6–8 mm. longo, ligula 12–16 mm. longo. *Antherae* 6 mm. longae. Styli rami 2 mm. longi. *Achaenia* (immatura) oblonga, apice truncata, basi angustata c. 8-costata, glabra; pappi setae uniseriatae, rufescentes, scabridae, 8–10 mm. longae.

BHUTAN. Singhi Dzong (lat. 27° 55' N., long. 91° 12' E.), alt. 3,600 m., 17th August, 1933, *Ludlow & Sherriff* 469. Singhi Dzong, 2,400 m.<sup>1</sup> 4th August, 1949, *Ludlow, Sherriff & Hicks* 21387 (holotype in Herb. Brit. Mus.).

<sup>1</sup> This altitude is that of a Lepcha collector and is almost certainly too low. Singhi Dzong is just below the tree line and is about 3,600 m.

S. E. TIBET. Migyitun (lat.  $28^{\circ} 40' N.$ , long.  $93^{\circ} 38' E.$ ), alt. 3,750 m., 28th August, 1936, Ludlow & Sherriff 2518.

This new species belongs to *Dubyaea* sect. *Dubyaea* (i.e. sect. *Eudubyaea* Stebbins in *Mem. Torr. Bot. Club* xix, 3: 13 (1940). From the other nine members of this Sino-Himalayan genus it is readily distinguishable by its height—the stems reaching a metre in length—and its compound lower stem-leaves. Unfortunately the basal stem-leaves are unknown, but in its almost glabrous and glaucous habit, its involucre,

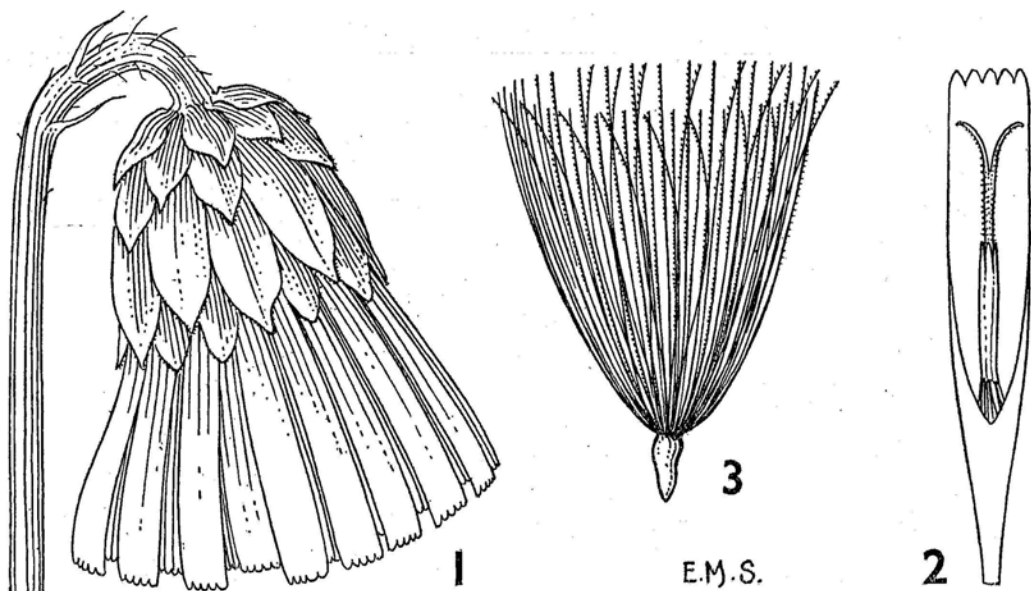


FIG. 7.—*Dubyaea stebbinsii* Ludlow. 1. Capitulum ( $\times 2$ ). 2. Corolla ( $\times 3$ ). 3. Achene and pappus ( $\times 6$ ).

and its purplish or violet corollas it shows kinship to *D. glaucescens* Stebbins of Western China; in its foliage it perhaps comes nearer *D. rubra* Stebbins, likewise from Western China. Like most other species of *Dubyaea* it is extremely localized in its distribution. Although Bhutan and south-east Tibet have been fairly well worked in recent years it is known only from two gatherings in the former country (both from the same locality) in 1933 and 1949, and from one in the latter country in 1936. The Bhutanese plants from Singhi Dzong were growing in woodland shade, whilst the Tibetan plants from Migyitun (150 miles east of Singhi Dzong) were found on open grassy alpine slopes. Both these localities are subject to a very heavy rainfall.

I have named this species in honour of Professor Ledyard Stebbins of the University of California, whose monographic work on *Dubyaea*, *Sorosaris* and other genera of *Cichorieae* has so greatly clarified their taxonomy.

[F. Ludlow]



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FLORA OF BRITAIN

Locality: [illegible]

Date: Aug. 5, 1909.

Coll. [illegible]

No. 2457.

TYPE SPECIMEN

of  
*Dubyaea stebbinsii* Fernald



Type specimen of *Dubyaea stebbinsii* Ludlow