

apicem setoso-glandulosi; inflorescentia terminalis copiosa ramulis fere rectangulo abeuntibus, foliis reductis ovatis vel lanceolatis praedita. Capitula ovato-oblonga, 2 cm. longa vel ultra, basi 6-8 mm. lata, cernua, circ. 10-flora; involucri phylla 3-seriata, lineari-lanceolata, acuta vel acuminata, purpureo-viridia, setoso-carinata, exteriora subreflexa, circ. 1 cm. longa, interiora erecta, circ. 2 cm. longa, 3 mm. lata; ligulae coeruleae involucrum multo superantes, 5-dentatae, tubo extus glabro; ovarium oblongum, valde compressum, faciebus 3-5-costatum, glabrum, in rostrum albidum gracile attenuatum, pappo albido fragili praeditum.

"Plant of 1-2½ ft. Flowers blue. On rocks and ledges of cliffs on the eastern flank of the Lichiang Range. Lat. 27° 30' N. Alt. 10,000 ft. September 1910." G. Forrest. No. 6703.

Also flowered in the Royal Botanic Garden, Edinburgh, in September 1912.

### *Lactuca funebris*, W. W. Sm. Sp. nov.

Species ex grege *Scariolarum*; foliis atroviridibus, capitulis saepe apice glomeratis more *Cardui palustris*, floribus albido-caeruleis vel albidis conspicua.

Herba 30-120 cm. alta, erecta, in schedâ simplex (sed culta a basi ad apicem ramis erectis ramosa) succo lacteo praedita, radicibus fasciculatis fusiformibus. Caulis robustus, .5-2 cm. diamet. vel ultra, subteres, basi glabrescens, medio sparse, apice dense rufo-tomentellus, purpureo-striatus atque -maculatus; ramuli similes, apice bene foliati. Folia infima et mediana subsimilia, alterna, crebra, petiolo 10-15 cm. longo, anguste alato, praedita; lamina 9-12 cm. longa, 7-9 cm. lata, ambitu irregulariter et late triangularia, varie 3-5-loba vel -fida, lobis oblongis serratis, serraturis apiculatis, supra atro-viridia, nigro-pilosula, nervis immersis, infra pallidiora, sparsius pilosula vel subglabra, nervis eminentibus; folia superiora minus divisa, saepe fere integra, obovata vel oblanceolata, vel lanceolata vel lineari-lanceolata, acuta vel acuminata. Inflorescentiae numerosae caulem et ramulos terminantes et cymas breves axillares formantes; capitula 5-20-aggregata, pedunculis brevissimis rufo-pilosulis praedita, circ. 1.5 cm. longa, circ. 7 mm. lata, 20-30-flora; involucri cylindrici phylla exteriora lanceolata, 5-8 mm. longa, carinâ albo-setosulâ praedita, interiora lineari-lanceolata, 1 cm. longa vel ultra, subglabra, omnia arcte imbricata; receptaculum planum nudum. Corolla circ. 5 mm. exserta, sordide albida vel pallido-caerulea. Ovarum ovoideum, compressum, glabrum, apice in rostrum breve productum, pappo albo praeditum.

"Plant of 1-2 ft. Flowers pale blue. Ledges of cliffs and humus covered boulders on the eastern flank of the Lichiang

Range. Lat.  $27^{\circ} 30'$  N. Alt. 11,000-12,000 ft. September 1910." G. Forrest. No. 6677.

The plant was cultivated in the Royal Botanic Garden, Edinburgh, in the cold, wet season of 1912. It grew to a height of 4 ft., branched freely from base to top with strict erect branches, while the inflorescences remained compacted and were slow to flower. The colour of the corolla was whitish at first, but the bloom was imperfectly developed; later, bluish heads were observed. In the wild plant the collector notes that the flowers were pale blue.

### *Saussurea loriformis*, W. W. Sm. Sp. nov.

Species affinis *S. subulatae*, C. B. Clarke et *S. Hookeri*, C. B. Clarke; foliis loriformibus, bracteis dense et longe albo-tomentosis, inter alia distincta.

Planta nana caespitosa, facie *S. subulatae*, stolonifera, multiceps; radix crassa, superne (cum caule inferiore) foliorum pristinorum vaginis siccis nigrescentibus dense obtecta. Caulis brevissimus, 1-3 cm. longus, foliis bracteisque velatus et capitulo solitario terminatus; e caudice multiplicite plerumque oriuntur caulis unus capitulifer, ceteri (5-6) steriles. Folia omnia radicalia, rosulata, circ. 4-8-fasciculata, suberecta (saltem primo), linearia, 3-4 cm. longa, 2-3 mm. lata, apice obtusa vel rotundata, basin versus angustata in vaginam brevem purpurascentem tomento denso albo celatam, integra, supra dense fulvo-tomentosa, infra dense et longe albo-tomentosa. Capitulum 2-2.5 cm. diametriens, involucri phylla 1-1.5 cm. longa, lineari-lanceolata, apice caudato-acuminata, basi dilatata, extus dense albo-tomentosa, intus (nisi apice ipso albo-tomentosissimo) glaberrima viridia. Receptaculi setae numerosae, circ. 5 mm. longae. Corolla (purpurea?) circ. 12 mm. longa; tubi pars infera angustissima 6-7 mm. longa, supera circ. 3 mm. longa; limbi segmenta circ. 3 mm. longa. Pappi series exterior setulis 2-3 mm. longis composita; seriei interioris pili basi paulo coaliti plumosi circ. 10 mm. longi. Achaenium immaturum, 2 mm. longum.

"N.W. Yunnan, China:—At Pei-ma-shan, on scree at an altitude of 17,000 ft. July 1911." F. Kingdon Ward. No. 74.

The *Saussureas* of the Himalayan-Chinese Mountain-systems seem endless in their number and variety. The present species recalls *Saussurea subulata*, but differs widely in the leaves and bracts from the Himalayan plant. *Saussureas* are about the last survivors of the phanerogams as the limit of vegetation is approached in these regions, and the appearance of *S. loriformis* is quite in keeping with its habitat on the scree as 17,000 ft.