

Eastern *Pamir*, between the two glaciers Kamper-kishlak and Yambulak-bashi on the western slope of Mus-tagh-ata, 4480 m., 4th Aug. 1894 (flow.).

Geogr. area: N. W. Tibet (Zugmayer, acc. to Keissler), Pamir, Karakash Mountains (Dr. Cayley, in Herb. Kew).

Saussurea alpina (L.) D. C., in Ann. Mus. Paris XVI (1810) 198; Hemsley and Pearson, in Peterm. Mitteil. Ergänzungsbd. 28 (1900) 394; Hemsley, in Journ. Linn. Soc. 35 (1902) 185; Fedtschenko, in Acta Horti Petrop. XXI (1903) 358 (var. *Kuschakewiczi* C. Winkl.).

Northern *Tibet*, Camp I, valley of Kara-muran, Kwen-lun, 4075 m., 7th Aug. 1896 (recorded by HEMSLEY and PEARSON).

It seems to me rather doubtful if the plant recorded by HEMSLEY and PEARSON (l. c.) as »*S. alpina*, var.«, really is *S. alpina*.

Geogr. area: N. temp. and arctic regions; Siberia, Persia; Pamir (var. *Kuschakewiczi*).

Aster.

The *Aster*-forms of the group *Alpigeni* are very difficult to distinguish, especially those growing in the alpine parts of Asia. They need a thorough revision based upon the original types described by HOOKER fil., CLARKE, BUNGE and DE CANDOLLE.

BENTHAM (Genera pl. II, 272) was, no doubt, quite correct when he rejected DE CANDOLLE'S genus *Heterochaeta*, as the distinction between forms with double pappus and those with single pappus is not of generic value.

CLARKE (Comp. Ind., 1876, pp. 42—45) makes the first attempt to clear up the Himalayan and Tibetan species of the *Alpigeni*. He admits three species with single pappus: *A. alpina* L., *A. himalaicus* Clarke and *A. tricephalus* Clarke, and three with double pappus: *A. heterochaeta* Benth. (= *Heterochaeta asteroides* D. C.), *A. elegans* Hook. f. et Thoms., and *A. diplostephioides* Benth. (= *Heterochaeta d. D. C.*)

In HOOKER fil. (Fl. Brit. Ind. III, 1882, pp. 250—251) we find *A. himalaicus* Clarke and *A. tricephalus* Clarke, while HOOKER has seen no true *A. alpinus* from Himalaya; he adds a new species *A. Stracheyi* Hook. f. with single pappus. Among those with double pappus HOOKER keeps *A. heterochaeta* and *A. diplostephioides*; he adds a new species *A. tibeticus* Hook. f., but rejects *A. elegans* Hook. f. et Thoms., saying: »I fail to recognise CLARKE'S *A. elegans* H. f. & T., described by him at Calcutta as from Sikkim. I find no species having biseriate pappus together with very silky achenes except *A. diplostephioides*«.

None of these two authors does mention that BUNGE (1835) has described an *A. flaccidus* from the Alatau Mountains, which is »proxime affinis *A. alpino* L.«.

Later HEMSLEY (in Journ. Linn. Soc. XXX, 1895, 113) has a new species *A. Boweri* which is »*A. flaccido* forma minima similis«. In Hook. Icon. pl. (pl. 2495)