on elongate, bracteate peduncles; involucral bracts blackish, darker than in subsp. *typica*; achenes blackish, the beak short, concolorous.

Northwestern Himalaya. The following have been seen. KASHMIR: Sarbul Lake, Jhelum Valley, alt. 3640 m., *Keshavanand 1323*; Musjid Valley, 3940—4240 m., *Duthie 13277*; above Mandkole near Baldari, *Falconer in 1838*. HAZARA: Chaffri, Bonja, Khagan, alt. 3640 m., *Duthie 19753*; Kharru, Nila, Kagan, *Inayat in 1899*; Laran Range, *Duthie in 1899* (in herb. UC).

The writer has not seen De Candolle's type, but the specimens cited seem to fit his description well enough. In its extreme form this subspecies is very striking, and it may be distinct species, but the last two specimens cited appear to be transitional toward subsp. *lyrata*.

Lactuca macrorhiza (Royle) Hook. f. Fl. Brit. Ind. 3: 408. 1882. (*Mulgedium macrorhizum* Royle Ill. 251, t. 61. 1838; DC Prodr. 7: 251. 1838; *Mulgedium laevigatum* DC Prodr. 7: 249. 1838; *Lactuca laevigata* Clarke, Comp. Ind. 269. 1876; *Melanoseris saxatilis* Edgew., Trans. Linn. Soc. 20: 79. 1851; *Cicerbita laevigata* Beauverd, Bull. Soc. Bot. Génève, Sér. II, 2: 120. 1910; *Cicerbita duthieana* Beauverd op. cit. 119; *Cicerbita macrorhiza* Beauverd op. cit. 134).

Like *L. lessertiana*, this species is variable in the shape of its achene and the length of the beak, and it is even more variable in leaf shape. With the large series of specimens now available, however, it is evident that the three "species" proposed by Beauverd merge into one another both as to leaf shape and achene character. Furthermore, in this species the writer has not been able to recognize geographic segregates which are well enough defined so that they can be made into subspecies. The type collection of *Cicerbita duthieana* Beauverd is extreme as to leaf shape, but many intermediates occur between it and the typical form. Its achenes are shorter beaked than those of most forms of *L. macrorhiza*, and are narrower. In some ways they suggest those of L. *filicina*, to be described below, which *C. duthieana* also approaches in leaf shape. Since, moreover, its pollen is slightly irregular, C. *duthieana* may be hybrid between *L. macrorhiza* and *L. filicina*, both of which occur in the vicinity.

Lactuca filicina Duthie in herb. (Fig. 2) Herba perennis, 6—10 dm. alta; folia caulinia numerosa, 15—25 cm. longa, pinnatifida, segmentis lanceolatis vel linearibus, 3·5—5·5 cm. longis; inflorescentia cymoso-paniculata, pedunculis tenuibus, bracteatis; involucra 13-14 mm. longa; phyllis imbricatis; achaenia cum rostro 6-6·5 mm. longa, 1 mm. lata, nigrescentia, rostro pallide, 1-1·5 mm. longo; pappi setae niveae, 5·5 mm. longae,

Similar to *L. macrorhiza*, but much taller and with larger leaves, which are very striking in shape (Fig. 2*a*). The involucres and corollas are about as in *L. macrorhiza* but the achenes are more slender, the body being about 5-6 times as long as broad in *L. filicina*, and 3-4 times in all forms of *L. macrorhiza*. The following are in the Dehra Dun Herbarium ; KUMAUN : Kali Valley, 1820—2430 m., *Duthie 3097* (type), 5725, 5725*a*.

The writer has not been able to find any reference to the description of this most striking species, and it is not listed in the *Index Kewensis*. He is, therefore, including a Latin description, so that it may be effectively published. *L. filicina* is a close relative of *L. macrorhiza*, but is extremely different in habit, and its achenes are recognizably distinct from any seen by the writer in *L. macrorhiza*.

Lactuca quercina L. Sp. Pl. 795. This southeastern European and Caucasian species is known to the writer from India through a single specimen, consisting of the inflorescence only, collected at Tangmarg, near Gulmarg, Kashmir by Mohindor Nath in 1935, and sent to the writer by Dr. R. R. Stewart. It is characterised by a cymose inflorescence, a well imbricated involucre, yellow flowers, and black achenes, which taper into an elongate black beak. The inflorescence and achenes are identical with those of European specimens seen by the writer. More material of it, however, is needed.

Lactuca viminea (L.) J. & C. Presl. This European and western Asiatic species is close to the common *L. orientalis* Boiss., and the two can be told apart with certainty only by their achenes. These are in *L. viminea* black, with an elongate beak about equalling the body, while in *L. orientalis* they are yellowish or grayish, somewhat less flattened and with a much shorter beak. Although the two species are similar in habit, two differences hold for all of the specimens seen by the writer. *L. orientalis* is more branched and bushy than *L. viminea*, with the branches shorter and stiffer. Furthermore it bears in the axils of its lower leaves conspicuous tufts of cottony wool, which are absent from all specimens of *L. viminea* seen. Aitchison found both species growing together in Afghanistan and according to notes on his specimens, apparently had no difficulty in distinguishing between them, since he says " both are very characteristic plants ". The writer has not seen any intermediates between them, nor would they be expected, since the two species have different chromosome numbers (Babcock, Stebbins and Jenkins 1937, see below). The following specimens are undoubtedly *L. viminea* :

BALUCHISTAN : Loralai, alt. 1360 m., *Harsukh 18898* ; AFGHANISTAN : Kurrum (Kurram) Valley, *Aitchison 884* ; same locality, *Harsukh 15378*. Several of the Indian specimens