

*Bidens tripartita* L.-K. F. A. 392.

Borak, Badakhshan (Sept. 4, 1960 R. Y. nos. 1007)-achenia minora corpore 5-6 mm longa.

*Blumea mollis* (D. Don) Merr. in Philip. Journ. Sci. Bot. V: 395 (1910).-*Randeria* in *Blumea* X: 261 (1960). *Erigeron molle* D. Don (1825). *Blumea Wightiana* DC.-K. F. A. 392.

*Breea arvensis* Less. var. *alpestris* (Naeg.) Kitamura, F. A. 393.

Ishkashim (Aug. 29-31, 1960 R. Y. nos. 913, 911).

*Carduus onopordioides* Fisch.-K. F. A. 394.

*Carduus songaricus* (Winkl.) Tamamsch. in Notulae Syst. ex Herb. Kom. XV: 391 fig.  $\beta$ . (1953), Fl. URSS XXVIII: 11.

*Carduus Schischkinii* Tamamsh., l. c. 389 fig.  $\delta$  (1953), Fl. URSS XXVIII: 12.

As mentioned already in K. F. A. 394, this species is very variable. The forms described by Tamamschian as *C. songaricus* and *C. Schischkinii*, are also found in Nuristan.

*Carthamus lanatus* L.-K. F. A. 394.

Borak (July 12-13, 1960 R. Y. no. 214).

*Centaurea depressa* Bieb.-K. F. A. 395.

Pagman (June 17, 1960 R. Y. no. 6).

*Centaurea iberica* Trev.-K. F. A. 397.

Between Faizabad and Borak (July 7-8, 1960 R. Y. no. 94), between Zabak and Borak (Sept. 3, 1960 R. Y. nos. 1203, 1191).

***Chondrilla lejosperma*** Kar. et Kir. in Bull. Soc. Nat. Mosc. XIV, 3: 456 (1841), l. c. XV, 2: 397 (1942).-Leonova in Fl. URSS XXIX: 574, Tab. XXVIII, fig. 2 (1964).

Borak, Badakhshan (Sept. 4, 1960 R. Y. no. 998), (Sept. 12, 1960 R. Y. no. 1147).

Distr. Central Asia widely distributed, Afghanistan, Dz.-Kashg. and Mongolia.

Some specimens referred as *C. juncea* from Afghanistan may belong here.

IV The beak of the achene, easily separate at its base from the body by an articulation.

The inner involucre scales of this species have bristles at the apex. While the inner involucre scales of *C. juncea* have no bristle.

***Chondrilla phaeocephala*** Rupr. in Mém. Acad. Pétersb. XIV, 4: 59 (1869).-Leonova in Fl. URSS XXIX: 577, Tab. XXVIII, fig. 3 (1964).

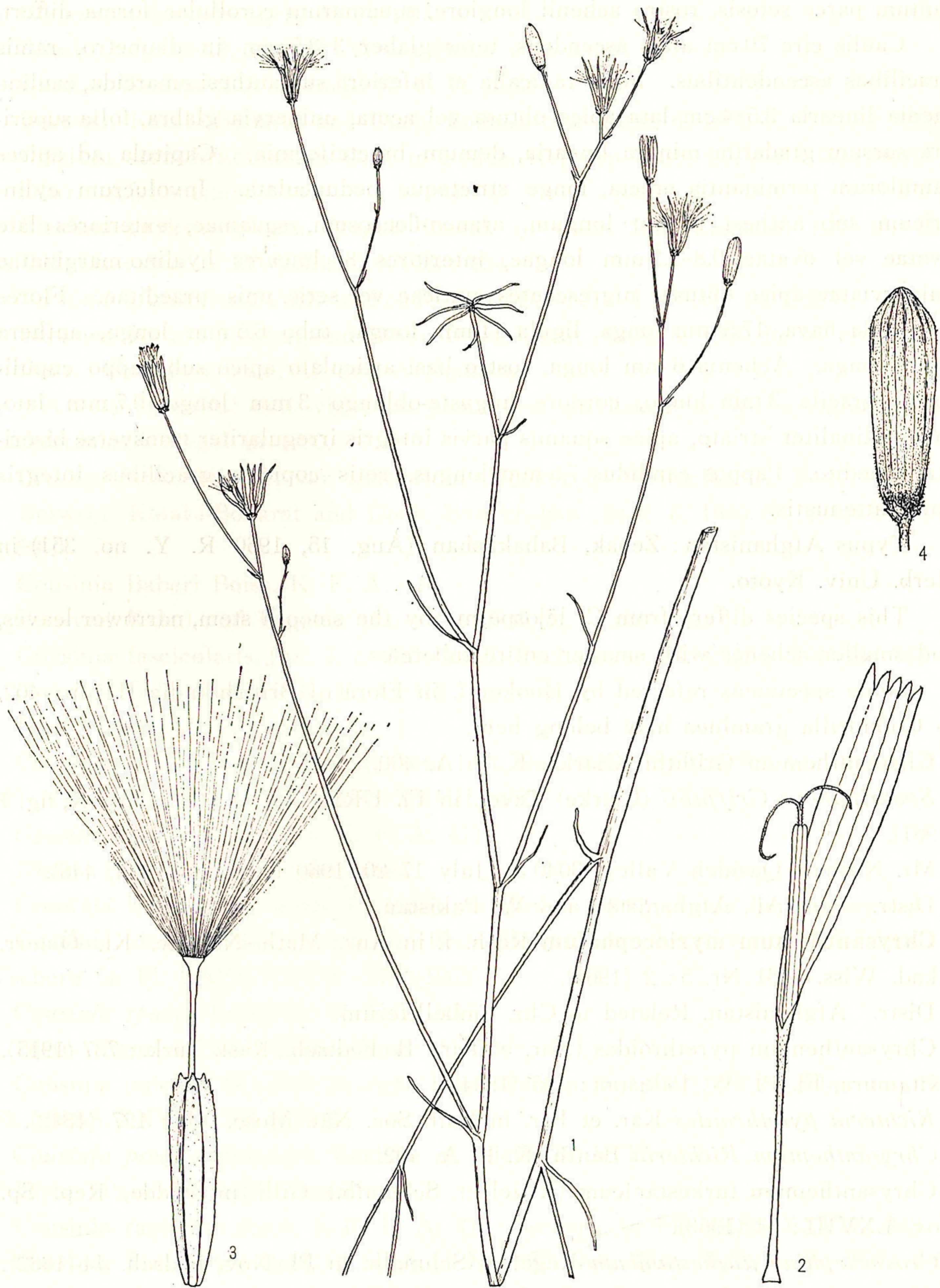
*Chondrilla graminea* err. det. Kitamura, Fl. Pl. W. Pakistan 145 (1964).

Between Zebak and Borak, Badakhshan (Sept. 3, 1960 R. Y. nos. 1199, 1219), Qasideh Village (Aug. 24, 1960 R. Y. no. 746).

Distr. Tianshan, Pam.-Al., Dz.-Kashg., Afghanistan and W. Pakistan.

***Chondrilla Yosiii*** Kitamura sp. nov. Fig. 4.

Species *C. laticorna* affinis a qua foliis longioribus, involucri squamis apice



**Fig. 4** *Chondrilla Yosiii* Kitamura. 1 Plant 2 Ligule 3 Achene 4 Involucre  
(Badakhshan: Zebak).

tantum parce setosis, rostro achenii longiore, squamarum corollulae forma differt.

Caulis circ 70 cm altus ascendens, teres glaber 3-3.5 mm in diametro, ramis gracilibus ascendentibus. Folia radicalia et inferiora sub anthesi emarcida, caulina media linearia 3.5-4 cm lata apice obtusa vel acuta, uninervia glabra, folia superiora sursum gradatim minora linearia, demum bracteiformia. Capitula ad apices ramulorum terminantia erecta, longe stricteque pedunculata. Involucrum cylindricum sub anthesi 11 mm longum, araneo-floccosum, squamae, exteriores late ovatae vel ovatae 0.8-1.2 mm longae, interiores 8, lineares hyalino-marginatae uninerviatae apice obtusae nigrescentes muticae vel setis unis praeditae. Flores 9, corolla flava, 17.5 mm longa, ligula 11 mm longa, tubo 6.5 mm longo, anthera 5 mm longa. Achenia 6 mm longa, rostro basi articulato apice sub pappo cupuliformi gracile 3 mm longo, corpore anguste-oblongo 3 mm longo 0.7 mm lato, longitudinaliter striato, apice squamis parvis integris irregulariter transverse biserialis praedito. Pappus candidus 7.5 mm longus, setis copiosis gracilibus integris apice attenuatis.

Typus Afghanistan: Zebak, Babakhshan (Aug. 15, 1960 R. Y. no. 351)-in Herb. Univ. Kyoto.

This species differs from *C. lejosperma* by the smooth stem, narrower leaves, and smaller achenes with smaller entire tubercles.

Some specimens referred by Hooker f. in Flora of British India III: p. 402, as *Chondrilla graminea* may belong here.

*Chrysanthemum Griffithii* Clarke.-K. F. A. 400.

*Spathipappus Griffithii* (Clarke) Tzvel. in Fl. URSS XXVI: 262, Tab. X, fig. 1 (1961).

Mt. Noshag, Qasideh Valley, 3040 m (July 17-20, 1960 R. Y. nos. 444, 446).

Distr. Pam.-Al., Afghanistan and W. Pakistan.

***Chrysanthemum myriocephalum*** Rech. f. in Anz. Math.-Naturw. Kl. Österr. Akad. Wiss. 1961 Nr. 5: 2 (1961).

Distr. Afghanistan. Related to *Chr. umbelliferum*.

*Chrysanthemum pyrethroides* (Kar. et Kir.) B. Fedtsch., Rast. Turk.: 737 (1915). -Kitamura, Fl. Pl. W. Pakistan: 145 (1964).

*Richteria pyrethroides* Kar. et Kir. in Bull. Soc. Nat. Mosc. XV: 127 (1842).

*Chrysanthemum Richteria* Benth.-K. F. A. 402.

*Chrysanthemum turkestanicum* (Regel et Schmalh.) Gilli in Fedde, Rep. Sp. Nov. LXVIII: 94 (1963).

*Crossostephium turkestanicum* Regel et Schmalh. in Pl. Nov. Fedtsch. 44 (1882).

*Chrysanthemum chrysostachys* (Rech. f. et Köie) Kitam., F. A. 398.

*Lepidolopsis turkestanica* (Regel et Schmalh.) Poljak. in Not. Syst. Herb. Kom. XIX: 375 (1959), Fl. URSS XXVI: 316, Tab. XII, fig. 2 (1961).

*Artemisia chrysostachys* Rech. et Köie, Symb. Afgh. 52 (1955).

Distr. Tianshan, Syr-Dar., Pam.-Al., and Afghanistan.