

point, closely denticulate in the lower part; partial heads 1-flowered; achenes pubescent . . . . . 1. *longifolius*

Leaves glabrous below :

Stems not winged, glabrous; leaves imbricate, 2 cm. long, deeply pinnatilobed, lobes spine-tipped; flower-heads sessile, globose, 3 cm. diam.; bracts lanceolate, acute, serrulate, 5-6 mm. long, glabrous . . . . . 2. *elegans*

Stems setosely winged, glabrous; leaves imbricate, about 1.5 cm. long, deeply pinnatisect with spine-tipped segments; flower-heads sessile, globose, 2.5 cm. diam.; involucre bracts of the partial heads spine-tipped, serrulate in the lower part

3. *gracilis*

1. *E. longifolius* A. Rich.—F.T.A. 3: 431; Chev. Bot. 375. *E. bathrophyllus* Mattfeld. *E. otarus* Mattfeld. Erect hoary perennial 1-2 ft. high with narrow leaves sometimes 1 ft. long, and greyish-white spherical flower-heads 1 in. in diameter when in flower.

French Sudan: Ouré, etc. (Apr.). French Guinea: Kouroussa (July)! Gold Coast: Yeji! Amansare, N. Ashanti (July)! Dahomey: Savalou, between Cabolé and Bassila (May)! Djougou to Pobégon, 2,700 ft. N. Nigeria: common in the northern savannah! S. Nigeria: Lagos Colony! Extends to E. Sudan and Abyssinia. Exsicc.—Baikie, Elliott 203. Dalz. 29. Anderson 48. Chipp 523. Lely 247. Dent Young 162. Dawson 152. Pobéguin 318. Chev. 23934. (See Appendix).

2. *E. elegans* Hutch. & J. M. Dalz. in Kew Bull. 1931: ined. *E. gracilis* A. Chev. Bot. 375, not of O. Hoffm. Erect branched 2 ft. or more high, with glabrous ribbed stems and solitary terminal flower-heads overtopped by long flowerless branchlets.

French Guinea: Beyla (Mar.)! Beyla to Sadougou (Mar.)! Ivory Coast: Upperassandra, Toura country, Mt. near Koualé, at the summit, 3,400 ft. Exsicc.—Chev. 20864; 20871; 21703.

3. *E. gracilis* O. Hoffm. in Bull. Soc. Bot. Fr. Mém. 8: 42. Perennial 1-2 ft. high from a woody stock, erect, branched, with crowded narrow leaves and spherical flower-heads  $\frac{1}{2}$  in. or more in diameter when in flower. N. Nigeria: Bauchi Plateau, Vom, 3,000-4,500 ft. S. Nigeria: Bamenda! Extends to E. Sudan, and up to 6,000 ft. in Bambuto Mts., Cameroons. Exsicc.—Dent Young (no number). Migeod 298; 423; 424.

### 68. PICRIS Linn.—F.T.A. 3: 447.

Perennial herb; leaves all radical, oblanceolate, denticulate, 6-14 cm. long, up to 2 cm. broad, setose on both surfaces and on the margin; peduncles elongated, 1-3-flowered; involucre bracts unequal, the outer small, sparingly setose outside, up to 1.5 cm. long; achenes shortly beaked, scabrid on the ribs; pappus plumose . . . *humilis*

P. *humilis* DC. Prodr. 7: 130—F.T.A. 3: 447, in obs. Erect from a hard base, 6-18 in. high, with oblong yellow flower-heads  $\frac{3}{4}$  in. long, appearing after bush burning.

Senegal. N. Nigeria: north of Zaria (Feb.)! Bauchi Plateau, Naraguta (June)! Vom, 3,000-4,500 ft. Exsicc.—Dalz. 392. Lely 24; P. 36; 341. Dent Young 163.

### 69. LACTUCA Linn.—F.T.A. 3: 450.

Climbers :

Stems and bracts pilose with gland-tipped hairs; leaves lyrate, with a winged rhachis, one pair of lateral reflexed lanceolate lobes and a terminal triangular terminal lobe repand denticulate and about 4 cm. long, pilose-setose on the nerves below; flower-heads numerous, paniculate, 1-1.5 cm. long; achenes with a long slender beak, flattened, with several wing-like ribs, glabrous . . . . . 1. *glandulifera*

Stems and bracts glabrous; leaves with a broadly winged basal portion and a terminal ovate-deltoid lamina, auriculate at the base; flower-heads as in *L. glandulifera* but outer bracts longer and narrower . . . . . 2. *Dunlapii*

Erect herbs :

Achenes not compressed, about 10-ribbed, shortly beaked :

Inner involucre bracts 5, 2-3 times as long as the outer ones; leaves pinnately sagittately lobed, denticulate with crustaceous teeth; flower-heads in lax much branched panicles . . . . . 3. *taraxacifolia*

Inner involucre bracts 8; leaves dentate or undulate with small crustaceous teeth; flower-heads rather few in the sparingly branched panicle . . . . . 4. *goraensis*

Achenes compressed, narrowed into a long slender beak, with only one rib up the middle, glabrous; leaves linear or linear-lanceolate, sharply auriculate at the base, entire or irregularly dentate; flower-heads narrowly paniculate . . . . . 5. *capensis*

1. *Lactuca glandulifera* Hook. f.—F.T.A. 3: 454. A climbing herb, rather viscid, with pale yellow narrow flower-heads  $\frac{1}{2}$  in. long.

Cameroons Mt., 7,000-8,000 ft. (Dec., Feb.)! Exsicc.—Mann 1240; 1917.

2. *L. Dunlapii* Hutch. & J. M. Dalz. in Kew Bull. 1931: ined. A straggling weed, nearly glabrous. Cameroons Mt., 6,000 ft. (Jan.)! Exsicc.—Dunlap 47. Matiland 226. Mildbr. 10814.

3. *L. taraxacifolia* Schum. & Thonn.—F.T.A. 3: 451; Chev. Bot. 378. A glabrous herb sometimes attaining 4-6 ft. in height, with pale yellow narrow flower-heads  $\frac{1}{2}$  in. long; a weed of cultivated fields and waste places, sometimes cultivated.

Senegal to Nigeria! Extends to E. Sudan and E. Africa. Exsicc.—Perronet 2. E. Vogel 1; 47. Barter 3414. Brown 402. Dalz. 104; 169; 993. (See Appendix).

4. *L. goraensis* Sch. Bip.—F.T.A. 3: 452. *L. tuberosa* A. Chev. Bot. 379, name only. Erect branched weed like the last, 1-3 ft. high, with a stout woody rootstock.

Senegal: Goree Island, etc. French Guinea: Farana (Jan.)! S. Nigeria: Ebute Metta! Lagos Colony, common in savannah! Extends to Abyssinia and the Red Sea; also in Angola. Exsicc.—Rowland. Millen 133. Dodd 379. Chev. 20485.

5. *L. capensis* Thunb.—F.T.A. 3: 452; Chev. Bot. 378. *L. holophylla* Baker. *L. sassandrensis* A. Chev. Bot. 378. A glabrous perennial herb, from a few inches to 3-4 ft. high or more from a woody stock, with lilac or darker purple narrow flower-heads  $\frac{3}{4}$ -1 in. long.

French Sudan and French Guinea to Cameroons (Cameroons Mt. grasslands up to 10,000 ft. or higher)!