

16.8.1953, *Fanshawe 246* (K); Kasama Distr., burnt *Brachystegia* woodland, 28.8.1960, *E.A. Robinson 3792* (M).

M A L A W I: 40 km N of Mzimba, c. 11°35'S, 33°35'E, 1600 m, 1.11.1966, *Gillett 17525* (K); new road Mpui to Rukwa, 1800 m, 5.11.1956, *Richards 6878* (K).

(7) *Launaea angolensis*

Launaea angolensis N. Kilian, **sp. nova**

Holotype: Angola, Cuanza Sul, Cela-Casamba, 1350 m, 28.10.1963, *Teixera & All 7403* (COI) – Fig. 37.

A habitu simili *Launaea rarifolia* achaeniis brunneis (versus albidis) et minoribus (4.2-5.5 mm versus (5.0)5.8-9.2 mm longis), ligulis florum et antherarum tubis sine appendicis distincte majoribus (>7 mm versus <5.5 mm et >2.5 mm versus >2 mm longis) differt; *L. cabrae* similis in achaeniorum characteribus principalibus et proxime affinis, sed ab illa differt habitu valde caulescenti (versus semper acaulescenti), capitulorum involucrio post anthesin distincte prolongato (versus indistincte prolongato), ligulis florum et antherarum tubis sine appendicis aliquantum minoribus (8-9 mm versus 9-12 mm et <3.0 mm versus >3.1 mm longis), achaeniis aliquantum majoribus (4.2-5.5 mm versus 2.4-4.6 mm longis), pappo distincte minori (5-6 mm versus 8-12 mm longo); a *L. rogersii* habitu et achaeniis simili differt capitulis, involucrio, floribus et antherarum tubis distincte majoribus.

lc.: Fig. 37.

Description

Perennial herb, subterranean parts not seen, with a single, ± erect, upwards branched flowering stem or a few, leafless except for inconspicuous, ovate-acute bracts, at anthesis up to 60 cm high. *Leaves* appearing after anthesis, not seen. *Synflorescence* many-capitulate; main axis with several monopodially to monochasially branched secondary axes, terminated by a capitulum and overtopped by the upper, monochasial, spreading-erect branches; pedunculate capitula and short monochasial branches from accessory buds present. *Peduncles* 0.3-2.0 mm long, spreading-erect, wiry to capillaceous, with 0-2 bracts passing over into the outer involucrial bracts. *Capitula* with 6-11 flowers. *Receptacle* at fruiting time 1-1.5 mm in diameter. *Involucre* slender, before anthesis narrowly cylindrical, at anthesis 10-12 mm long and somewhat clavate, after anthesis distinctly prolonged, finally up to 14 mm long; involucrial bracts at time of fruit dispersal spreading and their midrib basally somewhat swollen and hardened; outer involucrial bracts 2-4 (in capitula from accessory buds occasionally with none!), the outermost ovate-acute, 1.0-1.5 mm long, the following bracts gradually longer, lanceolate, the innermost 1/5-1/3 as long as the inner involucrial bracts; inner involucrial bracts (4)-5, in one row, ± equal, linear-lanceolate, 10-14 × 1.5-2.0 mm. *Flowers* with a yellow ligule of 8-9 × 1.8-2.2 mm and a tube 4.5-5.5 mm long; anther tube without appendages 2.7-2.9 mm long, basal appendages 0.5-0.6 mm and apical appendages 0.3-0.4 mm long; style branches 1.6-1.8 mm long. *Achenes* 4.2-5.5 × 0.7-0.9 mm



Fig. 37. *Launaea angolensis* (holotype specimen).

long, subhomomorphic, brown, with 5 main ribs each accompanied by 2 secondary ribs, \pm scabrid of short, squamulose papillae, inner columnar to \pm subfusiform, marginal subfusiform, somewhat compressed and curved, otherwise similar. Pappus 5-6 mm long, deciduous, homomorphic, of numerous setaceous rays.

Launaea angolensis habitually resembles *L. rarifolia* but is distinguished by its larger flowers and longer anther tubes as well as by its smaller, brown achenes and smaller pappus. With *L. cabrae* and the following species, it constitutes a subgroup of this section distinguished from species 1-5 by its brown to reddish brown and generally smaller achenes. *L. rogersii* is similar in habit but well distinguished by its tiny capitula, involucre, flowers and anther tubes.

Chromosome number: Unknown.

Distribution and ecology

Launaea angolensis is known only from two collections and localities. Both collections were made in the farther vicinity of the Bie Plateau in W Central Angola (Fig. 36) at elevations of 1350 m and 1700 m. The natural vegetation cover in this area is a more humid type of the deciduous Zambebian Miombo woodland (White 1983), but no data on the immediate habitats of the species are known.

Additional specimens seen:

ANGOLA: Benguella, Hochland zwischen Ganda und Caconda, c. 1700 m, 1932, O. Hundt 27 (BM, COI).

(8) *Launaea rogersii*

Launaea rogersii (Humbert) Humbert & Boulos in Humbert, Fl. Madagasc., Compos.: 882. 1963 \equiv *Lactuca rogersii* Humbert in Mém. Soc. Linn. Normandie 28 [Compos. Madagascar]: 156, 307. 1923, p.p. excl. syntypum *P. de la Bathie* 2976 quod est *L. rarifolia*. – Syntypes: Zaire, à Sanakia, 15.5.1911, F.A. Rogers 10038 (K!); Madagascar, prov. d'Ambositra, Cipolins, à 1400 m, 6.1912, Perrier de la Bathie 2976 (P!). – Lectotype (designated by Jeffrey 1966: 467): F.A. Rogers 10038 (K!).

= *Sonchus pycnocephalus* R.E. Fries in Acta Horti Berg. 8: 114. 1925 \equiv *Launaea pycnocephala* (R.E. Fries) Boulos in Bot. Not. 115: 58. 1962. – Holotype: Zambia, Bwana Mkubwa, 8.1911, R.E. Fries 489 (UPS!).

lc.: Figs 5d-e, 38. – Fries 1925: fig. 3(3-4) sub *Sonchus pycnocephalus* (photo of specimen); Lawalrée & al. 1986: p. 15, fig. 3 (habit and details); Pope 1992: p. 216, fig. 40(c) (achene).

Description

Perennial herb with vertical, thick, fleshy rootstock, at anthesis c. 10-70(100) cm high and (almost) leafless, with one or few rather delicate, \pm erect flowering stems; leaves, appearing after anthesis, in a basal rosette on the short, woody, rarely brown-woolly caudex. *Rosette leaves* 3.5-13.5 \times 2.5-7.5 cm, obovate to broadly spatulate with apex rounded and \pm suddenly narrowed into a sometimes even petiolelike base; margin \pm entire and denticulate to shallowly sinuate-dentate and denticulate; lamina green on upper and greyish-glaucous on lower surface.

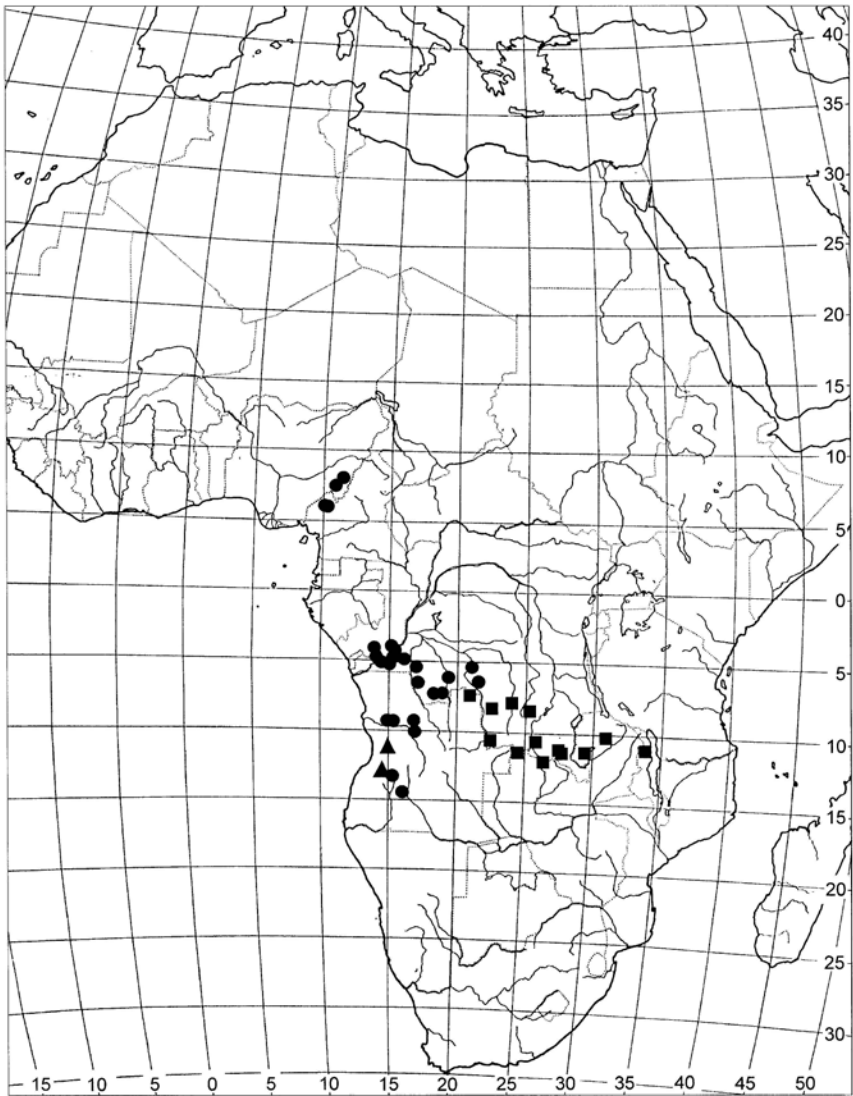


Fig. 36. Distribution of *Launaea cabrae* subsp. *cabrae* (circles), *L. cabrae* subsp. *nanella* (squares), and *L. angolensis* (triangles).

Sonchus nanellus. If one compares plants referable to this taxon with the type material of *L. cabrae*, the differences regarding the involucre indeed seem considerable. Otherwise, however, and particularly with respect to flower and achene features, both taxa do not differ at all.