

of *Munzothamnus* must be regarded as tentative. In my cladistic analysis of the Lactuceae (Bremer, in press), both *Malacothrix* and *Stephanomeria* were included. The two genera never appeared together in the resulting cladograms, even though the position of *Stephanomeria* was very unstable. In Jansen et al.'s (1991) analysis of chloroplast DNA restriction site variation in the subtribe Microseridinae, *Stephanomeria* was included and appeared as nested within that subtribe. Stebbins's *Malacothrix* group is described here as a new subtribe Malacothricinae, separate from the Stephanomeriinae and the Microseridinae.

The *Launaea*-*Sonchus* group of Stebbins (1953) comprises two entities, *Launaea* with the related genera *Aetheorhiza* (Rechinger, 1974) and *Reichardia* (Gallego et al., 1980), and the *Sonchus* group of closely related genera (*Actites*, *Babcockia*, *Embergeria*, *Kirkianella*, *Lactucosonchus*, *Sonchus*, *Sventenia*, *Taeckholmia*; cf. Boulos, 1972, 1973, 1974a, b; Aldridge, 1976a, b; Lander, 1976). Many *Launaea* species share the compressed, non-beaked fruits and the dimorphic pappus, consisting of intermixed bristles and fine hairs, typical of *Sonchus*. Hence it appears that the two subgroups are closely related and that the entire *Launaea*-*Sonchus* group is monophyletic. It has a scattered but very wide distribution with many *Sonchus* and *Launaea* species in Eurasia and throughout Africa. Several genera and species are restricted to the Canary Islands (*Babcockia*, *Lactucosonchus*, *Sventenia*, *Taeckholmia*); others occur exclusively in Australia (*Actites*) and New Zealand (*Embergeria*, *Kirkianella*). Stebbins included the *Launaea*-*Sonchus* group in his Crepidinae sensu lato, a highly polyphyletic taxon. The Crepidinae will be reclassified into four subtribes (Bremer, in press), Crepidinae sensu stricto, Hieraciinae, Lactucinae, and Sonchinae. In the cladistic analysis (Bremer, in press) *Sonchus* never grouped with the genera representing the three other subtribes. The Sonchinae are described here as a new subtribe.

Catananchinae K. Bremer, subtribus nov. TYPE: *Catananche* L.

Herbae annuae vel perennes. Bractee involucri margine plus minusve scariosae. Receptaculum setosum vel paleaceum. Cypselae teretes vel subangulatae et obconicae, ecostatae, erostratae. Pappus e squamis ovato-lanceolatis, apice plerumque in setam scabrido-barbellatam prolongatis, constatus.

Annual or perennial herbs. Involucral bracts with \pm scarious margins. Receptacle setose or paleate. Cypselas terete or subangular and obconical, without ribs and without beak. Pappus of ovate-lanceolate

scales apically often prolonged into scabrid-barbelate bristles.

Mediterranean, eight species in three genera: *Catananche* L., *Hymenonema* Cassini, *Rothmaleria* Font Quer.

Malacothricinae K. Bremer, subtribus nov. TYPE: *Malacothrix* DC.

Herbae annuae vel interdum perennes. Bractee involucri margine plerumque scariosae. Receptaculum vulgo squamosum, raro paleaceum. Cypselae tereti-fusiformes vel obovoideae, costatae, interdum rostratae. Pappus e setis tenuibus scabridis vel raro plumosis constatus vel raro nullus, extra saepe coronam minutam ferens.

Annual or sometimes perennial herbs. Involucral bracts often with scarious margins. Receptacle generally squamose, rarely paleate. Cypselas teretefusiform or obovoid, ribbed, sometimes beaked. Pappus of slender, scabrid or rarely plumose bristles, or rarely absent, often surrounded by a minute corona.

North American, 33 species in 7 genera: *Anisocoma* Torrey & A. Gray, *Atrichoseris* A. Gray, *Calycoseris* A. Gray, *Glyptopleura* Eaton, *Malacothrix* DC., *Munzothamnus* P. H. Raven, *Pinaropappus* Lessing.

Sonchinae K. Bremer, subtribus nov. TYPE: *Sonchus* L.

Herbae annuae vel perennes, suffrutices vel frutices. Bractee involucri herbaceae, interdum margine scariosae. Receptaculum nudum. Cypselae plus minusve compressae, ellipsoideo-fusiformes vel oblongo-obovoideae, leviter costatae, laeves vel rugulosae vel valde rugosae, interdum apice attenuatae, erostratae vel rarissime breviter rostratae. Pappus e setis scabrido-barbellatis vel saepe dimorphus e setis et pilis tenuibus mixtis constatus.

Annual or perennial herbs, subshrubs, or shrubs. Involucral bracts herbaceous, sometimes with scarious margins. Receptacle naked. Cypselas \pm compressed, ellipsoid-fusiform or oblong-obovoid, slightly ribbed, smooth or rugulose to strongly rugose, sometimes attenuate apically, without beak or very rarely with a short beak. Pappus of scabrid-barbelate bristles or dimorphic of intermixed bristles and fine hairs.

Almost worldwide, mainly Eurasia and Africa, Canary Islands, also North America, Australia, and New Zealand, ca. 130 species in 11 genera: *Actites* Lander, *Aetheorhiza* Cassini, *Babcockia* Boulos, *Embergeria* Boulos, *Kirkianella* Allan, *Lactucosonchus* (Schultz Bipontinus) Sventenius, *Launaea* Cassini, *Reichardia* Roth, *Sonchus* L., *Sventenia* Font Quer, *Taeckholmia* Boulos.