

Xerochrysum Tzvelev, a pre-existing generic name for *Bracteantha* Anderb. & Haegi (Asteraceae: Gnaphalieae)

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Summary. As a result of the recircumscription of *Helichrysum* Mill. by A. Anderberg and others, many species in that genus have been transferred to a number of segregate genera. In 1991, *Bracteantha* Anderb. & Haegi, was proposed to accommodate five Australian species of the former *Helichrysum*. However, *Xerochrysum* Tzvelev (1990), has nomenclatural priority over *Bracteantha*, and the following new combinations are proposed: *Xerochrysum bicolor* (Lindl.) R. J. Bayer, *Xerochrysum palustre* (Flann) R. J. Bayer, *Xerochrysum papillosum* (Labill.) R. J. Bayer, *Xerochrysum subundulatum* (Sch. Bip.) R. J. Bayer, and *Xerochrysum viscosum* (DC.) R. J. Bayer.

INTRODUCTION

Helichrysum Mill., in the traditional sense, consists of c. 600 species occurring throughout Africa, Eurasia, and Australia. However, it has long been recognized that the genus is a polyphyletic assemblage of unrelated taxa. Over the years a number of genera such as *Edmondia* Cass., *Erymophyllum* Paul G. Wilson, *Lawrencella* Lindl., *Ozothamnus* R. Br., and *Schoenia* Steetz, have been proposed to accommodate some of the variation in *Helichrysum sensu lato*. The type species of *Helichrysum* is *H. orientale* Gaertn., endemic to the eastern Mediterranean, and therefore the circumscription of *Helichrysum sensu stricto* must be linked with this species and its closest relatives.

Anderberg (1991) suggested, through the use of morphological cladistics, that the Australian species of *Helichrysum* are more closely related to Australian taxa in tribe *Gnaphalieae*, subtribe *Angianthinae* (or *Cassiniinae*), than to African and Eurasian members of *Helichrysum* (subtribe *Gnaphaliinae*). Molecular systematics also supports a close relationship of the Australian *Helichrysum* to members of subtribe *Angianthinae* (Bayer, Greber & Bagnall, in prep.).

Consequently, Anderberg & Haegi in Anderberg (1991), segregated five Australian species of the former *Helichrysum*. Synapomorphies that define the new genus include their “large and aberrant cypselas” and the presence of ectomycorrhizal fungi (Anderberg 1991). Flann (1998) added a sixth species, *B. palustris* Flann, to the genus. Morphologically all six species of *Bracteantha* are quite similar (see Flann (1998) for a key to the species).

The Russian botanist, N. N. Tzvelev, came to virtually the same conclusion as Anderberg & Haegi (Anderberg 1991), but one year earlier (Tzvelev 1990). He pointed out that the taxon known as *Helichrysum bracteatum* (Vent.) Andrews was

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generically distinct from the remainder of *Helichrysum*, and noted the main differences from *Helichrysum* were the size and shape of the cypselas (Tzvelev 1990). Tzvelev (1990) erected a monotypic genus, *Xerochrysum*, to accommodate *H. bracteatum*. Regrettably, Tzvelev's new genus was overlooked by Anderberg & Haegi when they erected *Bracteantha* (in Anderberg 1991). *Bracteantha*, therefore, is a superfluous name to be included in synonymy under *Xerochrysum*. The acceptance of the pre-existing generic name, *Xerochrysum*, and transference of the five remaining species of *Bracteantha* to *Xerochrysum* is recommended.

NOMENCLATURE

Xerochrysum Tzvelev, Novosti Sist. Vyssh. Rast. 27: 151 (1990). Type: *Xerochrysum bracteatum* (Vent.) Tzvelev, Novosti Sist. Vyssh. Rast. 27: 151 (1990). (= *Xeranthemum bracteatum* Vent., Jard. Malmaison 2: tab 2 (1803). Type: "Sous-Arbrisseau originaire de la Nouvelle Hollande". *Xeranthemum* L. is a genus of thistles (*Cardueae: Carduinae*) and the type species is *X. annuum* L.).

Helichrysum Mill., *pro parte*, Gard. Dict. abr. ed. 4: 28 (1754), "*Elichrysum*" corr. Pers., Syn. Pl. 2: 414 (1807). Type: *Helichrysum orientale* (L.) Gaertn. Fruct. Sem. Pl. 2: 404 (1791). Comment: orth. cons. vs. *Elichrysum* Miller (ref. I.C.B.N. (Greuter *et al.* 1988) No. 9006), spelling corrected to *Helichrysum* by C. J. Persoon.

Argyrocome Gaertn., *pro parte*, Fruct. Sem. Pl. 2: 410 (1791) [= *Helichrysum* Mill.]. Type: *Argyrocome retorta* (L.) Gaertn., Fruct. Sem. Pl. 2: 410 (1791). [= *Helichrysum retortum* (L.) Willd.]

Bracteantha Anderb. & Haegi, Opera Bot. 104: 102 (1991) [*nom. superfl.*]. Type: *Bracteantha bracteata* (Vent.) Anderb. & Haegi, Opera Bot. 104: 102 (1991).

1) **Xerochrysum bicolor** (Lindl.) R. J. Bayer comb. nov.

BASIONYM: *Helichrysum* ("*Elichrysum*") *bicolor* Lindl., Bot. Reg. 21. t. 1814 (1835). *Bracteantha bicolor* (Lindl.) Anderb. & Haegi, Opera Bot. 104: 105 (1991).

2) **Xerochrysum bracteatum** (Vent.) Tzvelev, Novosti Sist. Vyssh. Rast. 27: 151 (1990).

BASIONYM: *Xeranthemum bracteatum* Vent., Jard. Malmaison 2, t. 2 (1803). *Helichrysum* ("*Elychrisum*") *bracteatum* (Vent.) Andrews, Bot. Rep. 6: in text to plate 428 (*Elychrysum staehelina*) (1805). *Argyrocome bracteata* (Vent.) B. D. Jacks., Index Kew. 1: 184 (1895) [*nom. inval., pro. syn.*]. *Bracteantha bracteata* (Vent.) Anderb. & Haegi, Opera Bot. 104: 102 (1991).

Helichrysum lucidum Henckel, Adumbr. Pl. Hort. Hal.: 5 (1806).

Helichrysum chrysanthum Pers., Syn. Pl. 2: 414 (1807).

3) **Xerochrysum palustre** (Flann) R. J. Bayer comb. nov.

BASIONYM: *Bracteantha palustris* Flann, Muelleria 11: 97 (1998). Type: Victoria: Saplings Morass Flora and Fauna reserve, 11 Dec. 1996, C. Flann 1 & N. G. Walsh (holotype MEL!; isotype CANB!).

Helichrysum acuminatum var. *angustifolium* DC., Prodr. 6: 188 (1838) [nom. illeg., see under *X. subundulatum*]. Type: "in terram Van-Diemen legit cl. Gunn".

4) **Xerochrysum papillosum** (*Labill.*) R. J. Bayer **comb. nov.**

BASIONYM: *Helichrysum* ("*Elichrysum*") *papillosum* Labill., Nov. Holl. Pl. 2: 46, t. 192 (1806). Type: "*Elichrysum papillosum* Tab. 192, Labillardiere Nova Hollandia 109", MEL 61392! *Gnaphalium papillosum* (Labill.) Poir., Encycl. Suppl. 2: 808 (1812). *Bracteantha papillosa* (Labill.) Anderb. & Haegi, Opera Bot. 104: 105 (1991).

5) **Xerochrysum subundulatum** (*Sch. Bip.*) R. J. Bayer **comb. nov.**

BASIONYM: *Gnaphalium subundulatum* Sch. Bip., Bot. Zeitung (Berlin) 3: 171 (1845). *Bracteantha subundulata* (Sch. Bip.) Paul G. Wilson, Muelleria 7 (4): 519 (1992).

Helichrysum acuminatum DC., Prodr. 6: 188 (1838) [nom. illeg.]. *Bracteantha acuminata* Anderb. & Haegi, Opera Bot., 104: 105 (1991) [nom. nov.].

Non Gnaphalium acuminatum Link, Enum. Hort. Berol. Alt. 2: 317 (1822). Type: "in Pr. b. sp." non *Helichrysum acuminatum* (Link) Sweet, Hort. Brit. 223 (1826).

6) **Xerochrysum viscosum** (DC.) R. J. Bayer **comb. nov.**

BASIONYM: *Helichrysum bracteatum* var. *viscosum* DC., Prodr. 6: 189 (1838). *Bracteantha viscosa* (DC.) Anderb. & Haegi, Opera Bot. 104: 105 (1991). Type: "Flora Nov. Holl. exs. n. 345.", MEL 604820! *non Helichrysum viscosum* Sieb. ex Spreng., Syst. Veg. 3: 484 (1826). Type: "Nov. Holl.".

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