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## Proposal to conserve the name Orchis majalis against O. elata, O. vestita, and O. sesquipedalis (Dactylorhiza: Orchidinae: Orchidaceae)

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**PO Box 117** 221 00 Lund +46 46-222 00 00 Flowering Plants and Gymnosperms of Peru (1993) as a synonym of *Chucoa*, though both names were published in the same year and date priority has not been conclusively established. *Weberbaueriella* has not appeared in any other modern literature. Although annotations of the types suggest that Dillon was unsure when he synonymised the names, it now seems certain that *Chucoa* Cabrera, Bol. Soc. Argentina Bot. 6(1): 40 (November 1955) is taxonomically identical, and that is the name most commonly used for the taxon. If *Weberbauerella* Ulbrich and *Weberbaueriella* Ferreyra were ruled to be treated as homonyms, it would establish *Chucoa* as unquestionably the correct name for the Composite genus.

Committee recommendation. 14 vote to treat them as

confusable, and 1 not to do so.

(2). *Passiflora guianensis* and *Passiflora guyanensis* (*Passifloraceae*). Submitted by R. J. R. Vanderplank, National Collection of Passiflora, Lampley Road, Kingston Seymour, North Somerset, BS 21 6XS, U.K.

a). *Passiflora guianensis* Miquel, Linnaea 18: 751 (1844). See below.

b). *Passiflora guyanensis* Annonay, Gazette des Jardins 21: 52 (2004). A newly described species from Guyane Française.

Committee recommendation. 14 vote to treat them as confusable, and 1 not to do so.

# (1704) Proposal to conserve the name *Gnaphalium purpureum* (*Compositae*: *Gnaphalieae*) with a conserved type

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(1704) Gnaphalium purpureum L., Sp. Pl.: 854. 1 May 1753 [Dicot.: Comp.], nom. cons. prop. Typus: U.S.A., Virginia, Clayton 385 (BM No. 51197; isotypus: BM No. 51198), typ. cons. prop.

The name Gnaphalium purpureum L. [basionym of the more recently used Gamochaeta purpurea (L.) Cabr.] has been used widely since 1753 for the purple cudweed thought to be native to the eastern United States (e.g., Linnaeus, Sp. Pl., ed. 2: 1200. 1763; Michaux, Fl. Bor.-Amer. 2: 127. 1803; Willdenow, Sp. Pl. 3(3): 1884. 1803; Pursh, Fl. Amer. Sept.: 525. 1814; Nuttall, Gen. N. Amer. Pl. 2: 146. 1818; Elliott, Sketch. Bot. S. Carolina 2: 325. 1823; Candolle, Prodr. 6: 232. 1838; Torrey & Gray, Fl. N. Amer. 2(3): 428. 1843; Chapman, Fl. South. U.S.: 243. 1860; Gray, Syn. Fl. N. Amer. 1(2): 236. 1884; Small, Fl. S.E. U.S.: 1238. 1903; Britton & Brown, Ill. Fl. N. U.S., ed. 2, 3: 456. 1913; Fernald, Gray's Manual, ed. 8: 1464–1465. 1950; Gleason & Cronquist, Man. Vasc. Pl.: 736. 1963, ed. 2: 596. 1991; Holub in Tutin & al., Fl. Europ. 4: 127. 1976; Cronquist, Vasc. Fl. S.E. U.S. 1: 178. 1980; Nesom in Phytologia 68: 186-198. 1990). Some of these authors broadly circumscribed the purple cudweed as including the distinct Gamochaeta pensylvanica (Willd.) Cabrera (e.g., Torrey & Gray, l.c.; Gleason & Cronquist, l.c., 1991), while others circumscribed the purple cudweed more narrowly.

While the name *Gamochaeta purpurea* has been applied to plants worldwide as well, names in *Gamochaeta* have often been misapplied, and the overall distribution of *G. purpurea* will be understood only after many identifications are reassessed. The concept of the species in North America was recently focused by the segregation of Gamochaeta argyrinea Nesom and Gamochaeta chionesthes Nesom (in Sida 21: 717-741. 2004a), and at least it is clear that G. purpurea is widespread in the eastern U.S.A. and also occurs in scattered localities in Arizona and Mexico (Nesom, 1.c., 2004a and in Sida 21: 1175-1185. 2004b). Applications of the name, however, in South America (e.g., Cabrera in Bol. Soc. Argent. Bot. 9: 359-386. 1961; Freire & Irhalegui in Bol. Soc. Argent. Bot. 33: 23–35. 1997), New Zealand (Drury in New Zealand J. Bot. 9: 157-185. 1971), and Europe (Holub, l.c.) may not be consistent with the North American usage, although it is clear that these authors intended to equate their material with typical material from eastern North America. This proposal to conserve the basionym of Gamochaeta purpurea [Gnaphalium purpureum L.] with a new type is a further attempt to clarify the definition of this taxon.

In the protologue of *Gnaphalium purpureum*, Linnaeus (Sp. Pl.: 854–855. 1753) noted "Habitat in Carolina, Virginia, Pensylvania" and listed three polynomials from four references, thereby establishing the following original elements (discussed below in the order presented):

1. "Roy. lugdb. 148." (Royen, Fl. Leyd. Prodr.: 148. 1740). Van Royen provided a descriptive phrase for his *Gnaphalium* species 8 - "*Gnaphalium foliis lanceolatis nudis, caule erecto simplicissimo, floribus spicatis & lateralibus*" - and referred to the same Dillenius illustration and description as cited by Linnaeus (see element 3 below), prefaced by "*Elichrysum spicatum obtusifolium basi angustiore*". Both phrases were essentially repeated by Gronovius (Fl. Virgin.: 178. 1743) and Linnaeus (l.c., 1753) both of whom treated this element as conspecific with that represented by element 2 below. Perhaps in accordance with this view, but without any rationale presented and no apparent consideration of the alternative elements, a plant in the van Royen Herbarium at Leiden (L-ROYEN 900.286-424 [IDC microfiche BT-341. 355.I.8!]) was designated as the lectotype of Gnaphalium purpureum by Hilliard & Burtt (in Bot. J. Linn. Soc. 82: 233-265. 1981). Neither the provenance nor collector of this specimen is evident on the sheet, but Hilliard & Burtt noted "North America," possibly implying that they believed the plant was collected in North America or else affirming the generally held assumption that the species occurs in that region. The plant matches the morphology of Gamochaeta (Gnaphalium) americana (P. Miller) Wedd., a widespread species of South America, Central America, the Caribbean, and Mexico, especially the expression of the species that occurs in the West Indies. The plant apparently is relatively young, with a slender, flexuous stem and extremely slender taproot, oblanceolate cauline leaves 5–6 cm long (the basal completely absent) with glabrous adaxial surfaces, and small clusters of heads in the axils of widely separated, relatively large, distal cauline leaves. The van Royen specimen clearly is not Gamochaeta purpurea sensu Nesom (l.c., 2004a, 2004b) and there is no firm evidence that it was seen by Linnaeus. Although the flexuous stems of the van Royen specimen are seemingly the only feature at odds with the Linnaean protologue, we know of no modern usage of Gamochaeta purpurea that would identify the van Royen sheet with this name.

2. "Gron. virg. 178." (Gronovius, l.c.) was cited by Linnaeus following the descriptive phrase from van Royen (see element 1 above). Gronovius cited "Clayt. n. 385" – the plants collected by John Clayton in Virginia are mounted on two sheets (BM-CLAYTON-2). These sheets were annotated by James Reveal in 1990 as "syntypes", and they are representatives of the North American Gamochaeta purpurea sensu Nesom (l.c., 2004a). One of the sheets (our proposed conserved type) is very ample, having three plants, each with shallow fibrous roots, discolorous, slightly spatulate leaves, an apparently congested inflorescence (young plants), and the young phyllaries are sharply acute apically and show a characteristic rosy-pink color. The single plant on the second sheet (our proposed conserved isotype) is similar but lacks roots. Among the original elements for Gnaphalium purpureum, only the Clayton collections in BM and the Kalm specimen (see element 5 below) unambiguously represent the current concept of this North American taxon and are thus the best candidates to serve as the conserved type. Because the Kalm collection was a late addition to his herbarium, Linnaeus probably had more familiarity with the Clayton material he examined as he was helping Gronovius, material that defined his original concept of Gnaphalium purpureum. Further, the Clayton material is more ample than the Kalm material, and was cited not only by Linnaeus but also by Gronovius.

3. "Dill. elth. 131. t. 109. f. 132." (Dillenius, Hort. Eltham. 1732). The illustration is somewhat stylized and the identity of the plant is somewhat ambiguous. It could be the North American *Gamochaeta purpurea*, and the accompanying description cannot be said to conflict with that of Linnaeus (l.c., 1753). Van Royen (l.c.) and Dillenius (l.c) cited the Dillenius illustration, but it is clear that the illus-

tration in Dillenius is not based on van Royen's specimen.

4. "Moris. hist. 3, p. 92." (Morison, Pl. Hist. Univ. 1699). Morison's entry no. 2 for *Gnaphalium* is "*Gnaphalium spicatum majus non ramosum erectum Virginianum foliis obtusioribus*". There is no associated figure in Morison's publication, however, and the text is too vague for an unambiguous identification. Authentic material in the Dillenian herbarium (but not seen by Linnaeus and thus unavailable to serve as the type) that was the basis for Morison's account (Vines & Druce, Acc. Morison. Herb. 1914; the Virginia material was presumably collected by John Banister, see Reveal, Phytologia 53: 1-96. 1983) is the following: U.S.A. Virginia: s.d., John Banister(?) s.n. (OXF-MORISON n.v., [IDC microfiche BT17. 65.II.5]).

5. A specimen seen by Linnaeus and numbered "22 *purpureum*" in reference to *Gnaphalium purpureum* (the 22nd species of *Gnaphalium* in Sp. Pl.) is in the Linnaean herbarium (U.S.A.: perhaps from Pennsylvania, one of the localities cited by Linnaeus, s.d., *P. Kalm s.n.* (LINN No. 989.73 [IDC microfiche 177. 572.III.2!])). It was brought by Kalm to Europe in 1751 and communicated to Linnaeus. This specimen also appears to be *Gamochaeta purpurea*, as understood by Nesom (l.c., 2004a, 2004b), but it is in young flower and not as ample as the Clayton specimens (see element 2 above).

Of these five original elements for Gnaphalium pur*pureum*, only plants of the Clayton collection (element 2) and the Kalm collection (element 5) clearly represent the species generally identified as Gamochaeta purpurea. Two of the remaining elements (3 and 4) are ambiguous in identity. The van Royen specimen of element 1, which was selected by Hilliard & Burtt (l.c.) as lectotype of Gnaphalium purpureum, apparently is Gamochaeta (Gnaphalium) americana. The potential nomenclatural confusion resulting from the lectotype choice by Hilliard & Burtt can be avoided by conserving the name Gnaphalium purpureum L. with Clayton 385 (BM No. 51197) as the conserved type, thus maintaining an unambiguous correspondence between the name and the concept of the species in both the traditional sense (see references cited above) and its current sense (sensu Nesom, l.c., 2004a, 2004b). Otherwise, Gnaphalium purpureum as lectotypified by the van Royen material would replace Gamochaeta (Gnaphalium) americana and Gamochaeta (Gnaphalium) *purpurea* sensu stricto would be replaced either by the now synonymous Gamochaeta (Gnaphalium) rosacea (I. M. Johnst.) Anderb. (named from a population in Mexico) or by the earlier Gnaphalium hyemale Walter (the identity of Walter's name remains uncertain). Our proposal, if accepted, will unequivocally establish the application of Gnaphalium purpureum while maintaining both historical and modern usage.

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