(1977) Proposal to reject the name Maxillaria ramosa (Orchidaceae)

Mario A. Blanco

Herbarium, Florida Museum of Natural History, Dickinson Hall, University of Florida, Gainesville, Florida 32611-7800, U.S.A.; and Department of Biology, Bartram Hall, University of Florida, Gainesville, Florida 32611-8525, U.S.A. mablanco@ufl.edu

(1977) Maxillaria ramosa Ruiz & Pav., Syst. Veg. Fl. Peruv. Chil.: 226. Dec 1798 [Monocot.: Orchid.], nom. rej. prop. Lectotypus (vide Oakeley & McIllmurray in Orchid Rev. 110: 186. 2002): [unpubl. icon] "Maxillaria ramosa" [painted by Isidro Gálvez] (MA [Div. IV, archive Ruiz & Pavón, lam. 1243; reproduced in Orchid Rev. 109: 50, fig. 45. 2001]).

From 1777 to 1788, Hipólito Ruiz (1754–1815) and José Antonio Pavón (1754–1844) led a now-famous botanical expedition to the Viceroyalty of Peru (then comprising the present-day countries of Peru, Chile and Bolivia), then a possession of Spain (Ruiz & al. in Publ. Field Mus. Nat. Hist., Bot. Ser. 21: 1–372. 1940). Most of the surviving herbarium material of the expedition is deposited in MA. However, a great quantity of specimens, both with and without duplicate numbers in MA, found their way to various other (mostly European) herbaria. Accounts of their distribution history were presented by Miller (in Taxon 19: 538–540. 1970), Lack (in Willdenowia 9: 177–184. 1979), Stafleu & Cowan (in Regnum Veg. 110: 981–982. 1983) and Knapp (in Anales Jard. Bot. Madrid 65: 307–309. 2008).

Maxillaria ramosa was described in 1798 by Ruiz and Pavón as one of their discoveries in Peru, from a plant collected in the vicinity of Chinchao (in present-day Huánuco department), and the number 16 was assigned to this species in their treatment. Garay (in Bot. Mus. Leafl. 21: 259–260. 1967) assumed that the isotype specimen of Scaphyglottis tafallae Rchb. f. (1849) (= Ornithidium tafallae (Rchb. f.) Rchb. f. = O. pendulum (Poepp. & Endl.) Cogn.) at G (labeled "Orchys ramosa Fl. P. & C. nº 16. Chicoplaya. 97" by Pavón and annotated "Ornithidium ramosum" by Rchb. f.) was also type material of M. ramosa; an apparently reasonable (but erroneous) conclusion. Both M. ramosa and S. tafallae had, by coincidence, been assigned the number 16 but the latter was collected in 1797 by Juan Tafalla for Ruiz and Pavón from Chicoplaya, a site located 48 km NNW of Chinchao on the Monzón River, and one which Ruiz and Pavón never visited (McIllmurray & Oakeley in Caesiana 23: 33-41. 2004; Blanco & al. in Harvard Pap. Bot. 13: 137-154. 2008).

From then on, the name Maxillaria ramosa was widely misapplied to both Ornithidium pendulum (as noted in 18 references, including Schweinfurth in Fieldiana, Bot. 33: 64, 65. 1970; Garay & Sweet in J. Arnold Arbor. 53: 524. 1972; Siegerist in Selbyana 7: 298. 1984; Hamer in Selbyana 11 (Suppl.): 486. 1990; Brako & Zarucchi in Monogr. Syst. Bot. Missouri Bot. Gard. 45: 820. 1993; Ortiz, Orquídeas Colombia, ed. 2: 284. 1995; Dix & Dix in Monogr. Syst. Bot. Missouri Bot. Gard. 78: 33. 2000; Atwood in Orchid Rev. 109: 316. 2001; Dodson, Native Ecuadorian Orchids 3: 562. 2002, 5: 1134. 2004; Ossenbach & al., Orquíd. Istmo Centroamer.: 96, 214. 2007) and to the recently described O. elianae Carnevali & M.A. Blanco (11 such references noted, including Foldats in Lasser, Fl. Venez. 15(4): 516. 1970; Dunsterville & Garay, Venez. Orchid. Ill. 6: 37. 1976, Orchids Venez.: 545. 1979; Romero & Carnevali, Orchids Venez., ed. 2: 581. 2000; Carnevali & Ramírez in Steyermark & al., Fl. Venez. Guayana 7: 442. 2003; Chiron & Bellone, Orch. Guyane Franç.: 264. 2005; Funk & al. in Contr. U.S. Natl. Herb. 55: 127. 2007). From 1970 to 2008, the name *M. ramosa* was simultaneously misapplied to both *O. pendulum* and *O. elianae* (Venezuelan material of *O. pendulum* was called by its synonym *M. ochracea* Rchb. f.) (Blanco & al., l.c. 2008).

At one point, *Maxillaria ramosa* (based on the confused type of *Scaphyglottis tafallae*) was even designated as the type of the generic name *Maxillaria* Ruiz & Pav. (Garay & Sweet, l.c.), an unacceptable designation in view of the earlier designation of *M. platypetala* Ruiz & Pav. by Brieger & Hunt (in Taxon 18: 602–603. 1969; later supported and clarified by Garay in Harvard Pap. Bot. 11: 51–52. 1997).

McIllmurray & Oakeley (in Orchid Rev. 109: 49-51. 2001) published a photo of a painting by Isidro Gálvez (one of the illustrators of the Ruiz and Pavón expedition) in MA with the name Maxillaria ramosa. However, this painting depicts a plant clearly different from Scaphyglottis tafallae (see below). McIllmurray & Oakeley (l.c. 2001) erroneously stated that this painting and the herbarium specimen at G represented the same species. This error was pointed out in a letter to the editor by Atwood (l.c. 2001) who, in a flawed attempt to stabilize the nomenclature, designated the isotype of S. tafallae at MA as the lectotype of M. ramosa (following Garay's misapplication of the name). McIllmurray & Oakeley (l.c. 2004) later demonstrated that the description in the protologue of M. ramosa corresponds to the painting in MA and not to the type material of S. tafallae and pointed out that they had designated the painting as the lectotype of M. ramosa in a letter responding to Atwood's letter (Oakeley & McIllmurray in Orchid Rev. 110: 186-187. 2002). In this response they stated "We disagree [with Atwood], and nominate the painting by Galvez of Maxillaria ramosa, that we published [cited by footnote] as the lectotype ..."; this phrasing can be considered as sufficiently equivalent to the phrase "designated here" (as required by Art. 7.11 since 1 Jan 2001, McNeill & al. in Regnum Veg. 146. 2006) that their designation can be accepted. Atwood's (l.c. 2001) earlier lectotypification must be rejected as being of a specimen that was not original material, nor is it acceptable as a neotypification in view of the existence of the painting which is original material. A more detailed explanation of these events was presented by Blanco & al. (l.c. 2008), although overlooking the Oakeley & McIllmurray (l.c. 2002) letter.

The painting of *Maxillaria ramosa* at MA depicts a species of the "*M. graminifolia* (Kunth) Rchb. f. suballiance" (sensu Atwood in Selbyana 24: 144–164. 2003), most likely *Maxillaria cassapensis* Rchb. f. (1863) (≡ *Maxillariella cassapensis* (Rchb. f.) M.A. Blanco & Carnevali). The name *Maxillaria cassapensis*, which is potentially threatened by the earlier *M. ramosa*, has become recently accepted (e.g., Christenson, Proc. 16th World Orchid Conf.: 283. 2002a, in Richardiana 2: 49. 2002b; Dodson, 1.c. 2002: 548; Atwood, 1.c. 2003: 149–155; Dodson, 1.c. 2004: 1133; Blanco & al. in Lankesteriana 7: 528. 2007; Whitten & al. in Amer. J. Bot. 94: 1884. 2007; Zelenko & Bermúdez, Orchids Sp. Peru: 400. 2009) after many years of being incorrectly synonymized with *M. graminifolia* (Kunth) Rchb. f., *M. luteorubra* (Lindl.) Rchb. f. or *M. longibracteata* var. *luteorubra* (Lindl.) C. Schweinf. (e.g., Williams in Bot. Mus. Leafl. 9: 16. 1940; Schweinfurth in Fieldiana, Bot. 30: 712. 1960; Brako & Zarucchi, 1.c.: 817).

Recently (Dix & Dix, 1.c.), the name *Maxillaria repens* L.O. Williams (≡ *Ornithidium repens* (L.O. Williams) M.A. Blanco & Ojeda) has been incorrectly synonymized with *M. ramosa*. This constitutes yet another erroneous circumscription of the latter name.

The main advantages of rejecting the name *Maxillaria ramosa* (as advocated here under Art. 56.1) are that (1) it would eliminate a name that has been a source of confusion for 200+ years (it has been widely misapplied to two different species, and to a third by synonymization); (2) it would preserve the current use of the name *Maxillaria (Maxillariella) cassapensis*, thus avoiding a disadvantageous nomenclatural change; and (3) the name *M. ramosa* does not have any horticultural importance. A potential disadvantage is that the name *M. ramosa* has appeared with some frequency in the taxonomic literature, and thus there is a risk that it will be used again by authors unaware of its rejection.

An alternative (but potentially "messier") course of action would be to conserve the name *Maxillaria ramosa* with a conserved type (i.e., the now-rescinded lectotype designated by Atwood, l.c. 2001, isotype of *M. tafallae*), as allowed by Art. 14.9 of the *Code*. Although this would have the advantage of preserving the (historically) most consistent use of the name *M. ramosa* (and also the current use of the name *M. cassapensis*), I do not favor such a procedure because (1) the names *Ornithidium pendulum* and even *M. ramosa* (in oblivion of Art. 57.1) have already been used in their new, corrected sense (e.g., Christenson, l.c. 2002a, l.c. 2002b; McIllmurray & Oakeley, l.c. 2004; Blanco & al., l.c. 2007, l.c. 2008); and (2) the risk of continued confusion or erroneous synonymization of *M. ramosa* with *O. elianae*.

Acknowledgements

Funding from a Kew-Latin American Research Fellowship (K) allowed MAB to visit G, K, W and various other European herbaria. The present study is part of the project "Systematics of *Maxillariinae* (*Orchidaceae*): Generic delimitation, pollinator rewards, and pollination," supported by a grant (No. DEB-0234064) from the U.S. National Science Foundation to Norris H. Williams and W. Mark Whitten (FLAS). John H. Wiersema (BARC) and John McNeill (E) provided substantial suggestions for the improvement of this proposal.

(1978) Proposal to reject the name Corispermum orientale (Amaranthaceae)

Alexander P. Sukhorukov

Department of Higher Plants, Biological Faculty, Moscow Lomonosov State University, 119991, Moscow, Russia. suchor@mail.ru

(1978) Corispermum orientale Lam., Encycl. 2: 111. 16 Oct 1786 [Dicot.: Amaranth.], nom. utique rej. prop. Typus: non designatus.

Since the description of the species, researchers have associated the name Corispermum orientale Lam. with plants morphologically close to C. hyssopifolium L. but having wingless fruits (e.g., Fenzl in Ledebour, Fl. Ross. 3: 758. 1851; Boissier, Fl. Orient. 4: 929. 1879; Iljin in Shishkin, Fl. SSSR 6: 150. 1936; Grubov, Pl. Asiae Centr. 2: 1-164. 1966; Jalas & Suominen, Atlas Fl. Europ. 5: 64-65. 1980; Lomonsova in Krasnoborov & Malyshev, Fl. Sibiri 5: 170. 1992; Aellen & Akeroyd in Tutin & al., Fl. Europ., ed. 2, 1: 120. 1993; Mosyakin in Tzvelev, Fl. Vost. Evropy 9: 67. 1996; Hedge in Rechinger, Fl. Iranica 172: 111. 1997). These wingless forms grow in the steppes and semideserts of Eastern Europe and Kazakhstan, with some extension into more southern regions along the Caspian Sea in eastern Caucasus and northern Iran. However, no significant investigation has been undertaken to clarify the taxonomy of specimens referred to C. orientale, which my study of fruit morphology and anatomy suggests can only be decided by the presence of mature fruits (Sukhorukov in Willdenowia 37: 63-87. 2007).

In the protologue, Lamarok (l.c.) diagnosed his new species with the phrase "foliis longis angustis linearibus, summitatibus floriferis subpaniculatis", with additional descriptive sentences in French. In Lamarck's time, it was the first known species of *Corispermum* having narrow leaves. However, many Asian species described later possess linear or lanceolate leaves, so Lamarck's information is not definitive.

Lamarck did not see plants of *Corispermum orientale* in situ; he indicated that the plant grew "dans le Levant", from which seeds were sent by "M. André" to the Jardin du Roi in Paris. If one searches the same volume of Lamarck's work (l.c.: 134, 217, 238, 456, 558, 560) for other occurrences of this personal name, it becomes clear that the indicated collector was André Michaux, who traveled through the

Levant (generally applied to the region immediately east of the Mediterranean) on the way to Persia, sending seeds back to Thouin (then head gardener at the Jardin du Roi fide Stafleu & Cowan in Regnum Veg. 115: 297. 1986) in Paris (see Allorge, Medicographia 28: 307–308. 2006). Only one authentic specimen of Corispermum orientale is available in the historical collection of P (herb. Lamarck), a small part of a plant collected in the blooming stage and having a few unripe fruits (labeled "Corispermum orientale. enc. [Encyclopédie] du levant, de M. andre?", P-LA No. 00381158). Analysis of this specimen clearly indicates that the fruit wing is well developed and that the plant belongs much more likely to the "Aralocaspicum" group sensu mihi (Sukhorukov, l.c.), containing only C. laxiflorum Schrenk, C. caucasicum (Bunge) Grossh. and C. aralocaspicum Iljin, none of which are found in the Levant region (sensu stricto). In fact, none of the floras covering the various parts of this region (e.g., Aellen & Hillcoat in Rechinger, Fl. Lowland Iraq: 180-212. 1964; Mouterde, Nouv. Fl. Liban Syrie 1: 407-439. 1966; Zohary, Fl. Palest. 1: 136-179. 1966; Aellen in Davis, Fl. Turk. 2: 318. 1967; Boulos, Fl. Egypt 1:92-129. 1999) indicate that species of Corispermum occur there. If we therefore suppose that the collection was from an area visited by Michaux in northern Iran, where the latter two species occur, precise identification of this specimen would still not be possible, since C. aralocaspicum and C. caucasicum differ from each other only in the mature fruiting stage, and then only insignificantly. More importantly, C. orientale has never been used in this sense, so to take it up for one of these species now would be disruptive to nomenclature and conflict with Art. 57.1 of the ICBN (McNeill & al in Regnum Veg. 146. 2006).

On the other hand, conservation of the name *C. orientale* with a new type that would retain application of the name for plants with wingless fruits is also undesirable. The specimens from the eastern Caucasus, northern Iran, and the Eurasian semideserts to which this name has been applied belong to at least three different taxa with local and non-overlapping ranges (Sukhorukov, in prep.). The records from