NEW COMBINATIONS IN BRAZILIAN ORCHIDACEAE

T. E.C. Meneguzzo[1,2]

[1]Departamento de Botânica, Instituto de Ciências Biológicas, Universidade de Brasília, Caixa Postal 4457, 70919-970, Brasília, Distrito Federal, Brazil. e-mail: meneguzzotec@gmail.com
[2]Empresa Brasileira de Agricultura e Pecuária, Recursos Genéticos e Biotecnologia, Brasília, Distrito Federal, Brazil.

ABSTRACT

Studies in Brazilian orchids showed the need for several name changes. In the present study I propose the change of a variety of *Bletia* and another of *Sacoila* to the status of form and a variety of *Microchilus* to species.

Orchidaceae is a cosmopolitan family and one of the largest flowering plant families containing about 25,000 species, with greater diversity in tropical America and Southeast Asia (Dressler 1990, 2005). During the last few years, the use of different concepts of infraspecific categories have been followed by several orchidologists (Christenson 1991a, 1991b, 1996; Barros & Batista 2004; van den Berg 2008). Traditionally, any taxonomically significant intraspecific variation found in plants would be described as a variety. Barros & Batista (2004) discussed and characterized the traditional use of the variety category and how it differs from modern concepts of subspecies, variety and form. These I will sumarize in the following paragraph with a few additional comments.

Plant populations with a very high relative frequency of taxonomically important, genetically fixed morphological traits and not geographically isolated from each other merit varietal status (Barros & Batista 2004). When the relative frequency is very low or less taxonomically important and also not geographically isolated from each other they are named as forms (Barros & Batista 2004). This category is used especially for plants with an abrupt color change. An ecological aspect that reinforces the importance of appropriate nomenclature for this kind of plant is that it can be associated to pollination syndrome shift and its evolutionary consequences, such as future speciation. Populations with the same differences as described above for the variety category but completely and geographically isolated are classified as subspecies (Barros & Batista 2004). All these concepts of infraspecific categories are not applicable when there are specimens with intermediate and continuous caracters between the "typical" category and the putative infraspecific taxon.

This interpretation of infraspecific categories calls for changing the status of some Brazilian orchid taxa. The combinations proposed here are necessary for the correct taxonomic position of some names for the forthcoming volume of the "Flora do Distrito Federal, Brasil".

Microchilus federalensis (Ormerod) Meneguzzo, **comb. et stat. nov.** Fig. 1.B

Basionym: *Microchilus arietinus* var. *federalensis* Ormerod, Harvard Pap. Bot. 14: 118. 2009.

EXAMINED MATERIAL: BRAZIL, Distrito Federal: Brasília, próximo ao Batalhão de Guardas, 9 Jul 1990, *Batista 83* (CEN). Fazenda Água Limpa, ca. 200m da

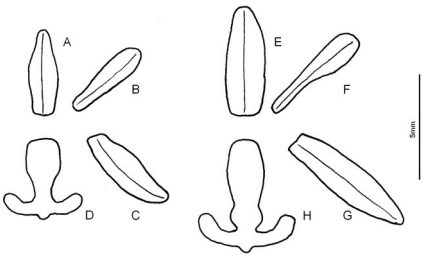

Figure 1. A–D. *Microchilus arietinus* (Rchb.f. & Warm.) Ormerod. E–H. *Microchilus federalensis* (Ormerod) Meneguzzo. Dissected flower. A, E. Dorsal sepal. B, F. Petal. C, G. Lateral sepal. D, H. Lip. (A–D. *Brade 19402*, RB; E–H. *Heringer 9171*, HB – isotype). Drawn by T.E.C. Meneguzzo.

confluência dos rios Taquara e Onça, 25 Nov 1994, *Walter 2293* (CEN). Fazenda Sucupira, rio Fundo, 8 Oct 2000, *Batista et al. 1082* (CEN); 31 May 2001, *Walter et al. 4862* (CEN). Fundação Zoobotânica, 15 Sep 1963, *Heringer 9171* (isotype HB). Reserva Ecológica do Guará, 22 Jul 1990, *Batista 86* (CEN); 22 Sep 1989, *Batista 30* (HEPH); 15 Jun 1989, *Batista 28* (HEPH). Vargem Bonita, 18 Oct 1976, *Heringer 16223* (IBGE); 13 Sep 1978, *Heringer 16160* (IBGE, RB).

COMMENTS: After examining collections of this taxon I decided that it should be changed to species level. The morphological differences between *Microchilus federalensis* and *M. arietinus* (Rchb.f. & Warm.) Ormerod are presented in the key bellow and illustrated in Figure 1. The former is here confirmed to be completely geographically isolated from the second by at least 900 km and they occur on different geological formations. *M. federalensis* is only known from Distrito Federal in the Central Plateau, from 1,000 to 1,200 m of altitude while *M. arietinus* is distributed in the southern part of Espinhaço range in Minas Gerais and Serra do Mar Range in São Paulo, Paraná and Santa Catarina from sea level to 700 m.

Key to discussed *Microchilus* species

1. Lip 2.5–3.0 mm long, hypochile oblong, mesochile narrow-triangular; spur 2.0–3.0 mm long; column 2.5–3.0 mm long; plants from Minas Gerais, São Paulo, Paraná and Santa Catarina ……..... *M. arietinus*

1'. Lip 4.5–5.0 mm long, hypochile elliptical, mesochile transverse-elliptic; spur 4.0–5.0 mm long; column 3.5–4.0 mm long; plants from Distrito Federal .... *M. federalensis*

Sacoila lanceolata f. **luteoalba** (Rchb.f.) Meneguzzo, **comb. et stat. nov.**

Basionym: *Stenorrhynchos australe* var. *luteoalbum* Rchb.f., Otia Bot. Hamburg. 2: 83. 1881.

Stenorrhynchos orchioides var. *luteoalbum* (Rchb.f.) Cogn., Fl. Bras. (Martius) 3(4): 178. 1895. *Spiranthes lanceolata* var. *luteoalba* (Rchb.f.) Luer, Native Orchids Florida: 120. 1972. *Stenorrhynchos lanceolatum* var. *luteoalbum* (Rchb.f.) W.J.Schrenk, Orchidee (Hamburg) 28: 103. 1977. *Sacoila lanceolata* var. *luteoalba* (Rchb.f.) Sauleda, Wunderlin & B.F.Hansen, Phytologia 56: 308. 1984. *Stenorrhynchos lanceolatum* var. *luteoalbum* (Rchb.f.) L.C.Menezes, Orquídeas Plan. Centr. Bras. 281. 2004, *nom. superfl. Stenorrhynchos lanceolatum* var. *aurantiacum* Pabst, *nom. nud.*

EXAMINED MATERIAL: BRAZIL, Distrito Federal: Brazlândia, em uma pastagem, 25 Sep 1990, *Salles s.n.* (CEN 26598). Lago Sul, Cristo Redentor, 14 Sep 1998, *Pereira Neto 87* (IBGE). Rio Preto, divisa Minas Gerais – Distrito Federal, 11 Oct 1976, *Heringer 11562* (HB, UB). Ca. 1 km da ponte do rio Preto, 17 Nov 2002, *Rezende et al. 655* (CEN). Minas Gerais: Paraopeba, 4 Fev 1956, *Heringer 3668* (UB). Fazenda Rasgão, ca. 3 km de Paraopeba, 30 Jan 1959, *Heringer 5062* (UB). Pernambuco: São Lourenço da Mata, engenho São Bento, 26 Dec 1963, Lima 63-

4185 (HB). Rio de Janeiro: Rio de Janeiro, Escola de Agronomia de Santa Cruz, 28 Nov 1940, *Brade 16722* (RB). Instituto de Ecologia, km 47, 30 Jul 1952, *Heringer 2812* (HB, RB).

Bletia catenulata f. **alba** (L.C.Menezes) Meneguzzo, **comb. et stat. nov.**

Basionym: *Bletia catenulata* var. *alba* L.C.Menezes, Orquidário 17: 165. 2003.

EXAMINED MATERIAL: BRAZIL, Distrito Federal: Guará, Nov 2003, *Menezes UB-92* (holotype UB).

COMMENTS. *Bletia catenulata* f. *alba* and *Sacoila lanceolata* f. *luteoalba* are forms that differ from the typical form by a difference in flower color. The former is white flowered (magenta in the typical form), while the latter is yellowish-white flowered (red in the typical form). *Bletia catenulata* f. *alba* is also reported from field observations in Goiandira, Goiás State (F. Silva, pers. comm.), Cuiabá, Chapada dos Guimarães and São Vicente Range, in Mato Grosso State (A. Petini-Benelli, pers. comm.).

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