



Nomenclatural notes in the Pleurothallidinae (Orchidaceae): *Stelis*

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Abstract

Nomenclatural changes are made in order to place within *Stelis* a series of species that belong to it in the sense of *Genera Orchidacearum*, and without previous available names in that genus. New species, names and combinations are proposed, a short discussion for the reasoning is given.

Key words: *Crocodelanthe*, *Dracontia*, *Effusiella*, *Niphantha*, *Pleurothallis*, *Stelis*, taxonomy

Introduction

Since the publication of the reclassification of subtribe Pleurothallidinae by Pridgeon & Chase (2001), based on Pridgeon *et al.* (2001), several subsequent studies have placed hundreds of additional pleurothallids in a DNA-based phylogenetic context (Stenzel 2004, Abele 2007, Chiron *et al.* 2012, Bogarín *et al.* 2013, Karremans *et al.* 2013, Karremans 2014). Together those studies suggest that although refinement is necessary in many groups, the generic framework presented by Pridgeon (2005) is maintained in general terms. Many alternative generic concepts proposed later although mostly indicative of species' relatedness, frequently lack a phylogenetic framework, and although useful are almost impossible to use by themselves (Luer 2004, 2006, 2007). Not having one stable classification system creates confusion among authors and has led to hundreds of species needing transfers from one system to the other in order to be able to use the names comparably.

Some large and highly diverse genera, such as *Stelis* Swartz (1799: 239), are good candidates for finer splitting. However, for the time being we have no fully comprehensible alternative classification of the genus. On one hand, genera like *Crocodelanthe* Reichenbach (1854: 113–114), *Dracontia* (Luer 1986: 38) Luer (2004: 257) and *Salpistele* Dressler (1979: 6) form natural groups, that are easy to recognize and are largely monophyletic. On the other hand, genera like *Effusiella* Luer (2007: 106) and *Elongatia* Luer (2004: 257) have been amply proven poly- and paraphyletic (Karremans *et al.* 2013). As species of the above mentioned are interrelated, acceptance of the monophyletic genera would require the recognition of several other generic concepts along the way, which can only be done with a much broader and integral systematic study of the whole clade. Even though better defined and informative generic circumscriptions are preferable, for the time being no other stable and all inclusive systematic proposal for *Stelis* is available. A broad circumscription of *Stelis*, albeit harder to define morphologically, is more phylogenetically accurate, and is therefore preferred (Karremans 2014). I am therefore transferring the species that although clearly not belonging to *Stelis* in a strict sense, are embedded within *Stelis* in its broad sense (Pridgeon 2005).

Taxonomic Treatment

Stelis brenneri (Luer) Karremans, *comb. nov.*

Basionym: *Pleurothallis brenneri* Luer (1976: 64).

Stelis hydra (Karremans & C.M.Sm.) Karremans, *comb. nov.*

Basionym: *Dracontia hydra* Karremans & Smith (2012: 13–15).

Stelis lehmanniana (Schltr.) Karremans, *comb. nov.*

Basionym: *Pleurothallis lehmanniana* Schltr. (1920: 235).

Replaced synonym: *Pleurothallis endotrachys* Lehm. & Kränzl. in Kränzlin (1899: 439), nom. illeg.

Stelis oscargrouchi Karremans, *nom. nov.*

Replaced synonym: *Specklinia ximenae* Luer (2005: 103).

Etymology:—The name honors Oscar Grouch, of whom I am reminded by this extraordinary flower.

This species was published originally as *Pleurothallis ximenae* Luer & Hirtz in Luer (2004: 238); nevertheless a second name for the species was published simultaneously as *Specklinia ximenae* (Luer & Hirtz) Luer (2004: 265), invalidating both. It was finally validated by Luer a year later. However the combination of this basionym in *Stelis* is already occupied, thus requiring the new name proposed here.

Stelis patens Luer & Hirtz, *sp. nov.*

Stelis patens Luer & Hirtz in Luer (2002: 19–20), *nom. inval.*

Type:—ECUADOR. Morona–Santiago: west of Macas, new road to Guamote, junction of Río Colombo and Río Upano, alt. 1600 m, 1 Mar. 2001, C. Luer, J. Luer & A. Hirtz 19592 (holotype, MO).

Comments:—*Stelis patens* was not validly published by Luer and Hirtz (Luer 2002) because two holotypes were designated. The specimen Luer 19592 adheres best to the protologue and is annotated as being the holotype at MO, and is therefore selected here as the type.

Stelis pidax (Luer) Karremans, *comb. nov.*

Basionym: *Pleurothallis pidax* Luer (1979: 174–175).

Stelis pileata (Karremans & Bogarín) Karremans & Bogarín, *comb. nov.*

Basionym: *Dracontia pileata* Karremans & Bogarín (2013: 308, 311).

Stelis possoae (Luer) Karremans, *comb. nov.*

Basionym: *Pleurothallis possoae* Luer (2000: 129).

Stelis rostratissima (Luer & J. Portilla) Karremans, *comb. nov.*

Basionym: *Pleurothallis rostratissima* Luer & J. Portilla in Luer (2002: 108).

Stelis selliformis O. Duque, *sp. nov.*

Stelis selliformis Duque (2010: 161–163), *nom. inval.*

Type:—COLOMBIA. Valle del Cauca: El Dovio, alt. 2000. Marzo 2002. O. Duque & L. Gonzaga 2463 (JAUM!).

Comments:—When proposing the name *Stelis selliformis*, Duque (2010) cited multiple specimens as the type thus invalidating the name. The name is here validated using the type specimen that is indicated as “Holotype” at JAUM and which adheres best to the protologue and illustration.

Stelis stergiosii (Carnevali & I. Ramírez) Karremans, *comb. nov.*

Basionym: *Pleurothallis stergiosii* Carnevali & Ramírez (1998: 247).

Stelis tenebrosa (Archila, Szlach. & Chiron) Karremans, *comb. nov.*

Basionym: *Dracontia tenebrosa* Archila, Szlach. & Chiron in Archila, Chiron & Szlachetko (2013: 30).

Stelis tepuiensis (Carnevali & I. Ramírez) Karremans, *comb. nov.*

Basionym: *Pleurothallis tepuiensis* Carnevali & Ramírez (1993: 121).

Stelis vasqueziana Karremans, *nom. nov.*

Basionym: *Crocodeilanthus vasquezii* Luer in Luer & Thorerle (2012: 340, 342).

Etymology: The name honors Roberto Vásquez as was originally intended by the authors.

Comments:—The combination of this basionym in *Stelis* is already occupied, thus requiring the new name proposed here.

Stelis viridiflava (Karremans & Bogarín) Karremans & Bogarín, *comb. nov.*

Basionym: *Dracontia viridiflava* Karremans & Bogarín (2013: 311).

Additional Notes

Effusiella Luer is most frequently considered a synonym of *Stelis* (*sensu* Pridgeon 2005). The phylogenetic analysis of the group proved that indeed most species of *Effusiella*, including the type, are embedded within a broad sense of *Stelis* (Karremans *et al.* 2013). Therefore species of *Effusiella* have been moved to *Stelis* in the preceding pages. Nevertheless, the DNA data in that study showed that a few members of *Effusiella* are related to *Pleurothallis* Brown (1813: 211) instead. Three species that are closer morphologically to *Pleurothallis* than to *Stelis* are here transferred to the first to avoid confusing the reader as to why they were not mentioned before. I expect they are closely related to *Pleurothallis scabrata* Lindley (1859: 176), which is morphologically more similar to the *Pleurothallis* clade, a suspicion confirmed by DNA data (Mark Wilson, *pers. comm.*).

Pleurothallis florianwernerii Karremans, *nom. nov.*

Basionym: *Effusiella wernerii* Luer & Thorerle in Luer (2011: 324, 326).

Etymology:—The name honors Florian Werner as was originally intended by the authors.

Comments:—The combination of this basionym in *Pleurothallis* is already occupied, thus requiring the new name proposed here.

Pleurothallis hamiltonii (Luer) Karremans, *comb. nov.*

Basionym: *Effusiella hamiltonii* Luer (2007: 108).

Pleurothallis scolnikiae (Luer & Endara) Karremans, *comb. nov.*

Basionym: *Effusiella scolnikiae* Luer & Endara in Luer (2007: 108–109).

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