Effusiella, Elongatia, Lalexia, Mystacorchis, Niphanta, Physosiphon, Physothallis, Rhynchopera, Salpistele, Talpinaria, and *Unciferia*). Based on analyses that have evaluated the phylogenetic relationships of *Stelis*, in this work we compare and discuss both proposals. The concept of *Stelis* s.l. encompasses a monophyletic group with variable morphology among its members but with strong support. Against this, it has been argued that there are no morphological synapomorphies that define the group and, hence, it is preferable to divide it. However, this consideration forgets the fact that morphology is not the only criterion useful in delimiting a taxonomic group. On the other hand, following this approach leads to taxonomic inflation and complicates a classification system that otherwise would be easier to learn and use. Some groups segregated from *Stelis* s.l. are not monophyletic (*Dracontia, Effusiella*); others are monotypic and defined by autapomorphies (*Lalexia, Mystacorchis*). Furthermore, more phylogenetic work is necessary to evaluate the position of some species previously transferred to *Stelis* s.l. that seem to be more closely related to *Pleurothallis* (e.g. *Stelis quadrifida, S. restrepioides*).

A newly recognized clade of *Pleurothallis* with Mesoamerican distribution

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Phylogenetic studies of *Pleurothallis sensu lato* have revealed a previously unrecognized clade of *Pleurothallis* species, including to date: *Pleurothallis aurita*, *P. bitumida*, *P. bogarinii*, *P. cobriformis*, *P. dorotheae*, *P. excavata*, *P. nitida*, *P. saccatilabia*, *P. sanchoi*, *P. scaphipetala*, *P. simulans,* and two as yet undescribed species. These species were previously considered part of *Pleurothallis* subgenus *Pleurothallis* section *Macrophyllae-Fasciculatae*, but this section was segregated from *Pleurothallis* by Luer and along with *P.* section *Pleurothallis* subsection *Acroniae* was raised to generic level as *Acronia*. In an alternate interpretation by Szlachetko *et al., P.* section *Macrophyllae-Fasciculatae* was alone segregated from *Pleurothallis* as genus *Zosterophyllanthos*. The aforementioned species, with the exception of *P. bogarinii*, are listed under these alternate genera in the World Checklist of Selected Plant Families, but the names are considered synonyms of *Pleurothallis*. Samples of these species were obtained from collections in Costa Rica, Guatemala, Mexico, Panama, and the U.S. Analyses of nuclear ITS and plastid *rpoB* and *matK* sequences for these species reveal a well-supported clade which can be interpreted as either sister to or part of the *Pleurothallis sensu stricto* clade but which is distinct both from the clade containing the other species of P. section *Macrophyllae-Fasciculatae* and from the clades containing species of *P.* section *Pleurothallis* subsection *Acroniae*. These phylogenetic data, differences in floral and foliar morphology from other species in *P.* section *Macrophyllae-Fasciculatae*; and, as far as we know, an exclusively Mesoamerican distribution (Costa Rica, Guatemala, Mexico, and Panama), strongly indicate that a new subgenus of *Pleurothallis* is warranted for the clade.