

TOWARDS A MOLECULAR PHYLOGENY OF GRIFFINIA KER GAWL. (AMARYLLIDACEAE)

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The Griffinieae is the only endemic tribe of American Amaryllidaceae found in Brazil. It consists of two or three genera: *Griffinia*, with ca. 15 species, and two monotypic genera, *Worsleya*, and putatively *Cearanthes* (the latter whose phylogenetic position has not yet been determined). *Griffinia* is marked by its petiolate to sub-petiolate leaves that are sometimes spotted, non-phytomelanous seeds with elaiosomes, and has been treated as two subgenera, *Griffinia* and *Hyline*. Subgenus *Griffinia* with small to medium-sized purple-blue or white flowers are Atlantic coastal rain forest understory herbs (*G. liboniana* also occurs in more inland seasonally dry forests). It is distributed from Ceará to northern São Paulo states. The smaller subgenus *Hyline* are plants of cerrado and caatinga primarily, with ephemeral and fragrant large white flowers. It is found from Piauí to Rio de Janeiro coast and inland to Pará, Tocantins, Goiás, Minas Gerais, Mato Grosso and possibly Mato Grosso do Sul. In this paper, we present results of the first molecular phylogeny of *Griffinia* using DNA sequences of the nuclear ribosomal RNA Internal Transcribed Spacer (ITS). *G. parviflora* is the first branch in *Griffinia*, sister to all other species in both subgenera. The next clade represents a distinct *G. liboniana* group but includes *G. rochae*, followed by *G. aracensis*. Neither subgenus resolves as monophyletic. Subgenus *Hyline* is polyphyletic, with *G. gardneriana* sister to *G. alba*. *G. nocturna* resolves as the sister clade to a large trichotomy consisting of the *G. alba*/*G. gardneriana* clade, and two clades of blue flowered Atlantic rain forest species. Tests for reticulation were negative across the alignment. Future plans will incorporate sequences of 10 low copy nuclear genes and plastomes for all collections, and will also include sequences of *Cearanthes*.

Keywords: molecular systematics, Griffinieae, nrDNA, Brazilian endemics