

Seed morphology in *Thysanotus* and related genera of Asparagaceae: Lomandroideae: Cordylineae

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The limited literature on seed morphology in Asparagaceae subfamily Lomandroideae indicates that, although taxonomically useful, seed characters are largely unknown for *Thysanotus* and related genera. Although there are two clear tribal lineages within subfamily Lomandroideae—Lomandreae and Cordylineae—only the former are morphologically readily recognisable. Accordingly, seed morphology in *Thysanotus* and related members of Cordylineae was investigated in order to determine which characteristics may have systematic and/or phylogenetic value. Seed patterns were phylogenetically informative and observed variation in seeds distinguished different species and different groups of species; for example, angular seeds were unique to most of the annual climbing *Thysanotus* species, while elongated seeds with long-stalked arils were restricted to all 3-staminate *Thysanotus* species. All studied Cordylineae (including *Thysanotus*) shared numerous common seed morphological features, such as polygonal epidermal cells and convex periclinal walls. In particular, *Murchisonia* and *Thysanotus* possessed a large number of common seed characteristics, supporting recent molecular results that show *Murchisonia* to be polyphyletic and nested within *Thysanotus*.



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