



**The complex history of the *Macrozamia plurinervia* complex helps explain the challenges of delimiting species in this group.**

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The *Macrozamia plurinervia* complex is a group of cycads comprising seven described species that are distributed inland in southern Queensland and northern NSW. They occur in small populations, with many isolated by disturbed or cleared habitat. Four members of the complex are listed as either vulnerable or endangered under the EPBC Act. Previous work on morphology and microsatellite variation in the *M. plurinervia* complex has been unable to resolve species boundaries and phylogeography within this group. The recent construction of wind turbines on the Southern Downs (Queensland) has resulted in the translocation of a population of one species, *M. conferta*, highlighting the need to clarify gene flow between and within putative taxa. Here, we use analyses of Single Nucleotide Polymorphisms (SNPs) to test ideas about the history and population structure of the *M. plurinervia* complex. Our increased breadth of genetic data suggests a complex history among populations and reveals discrepancies between gene flow and the current taxonomic classification, underscoring the difficulty of defining species within this group.

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