GENOMICS FOR AUSTRALIAN PLANTS: DEVELOPING GENOMIC RESOURCES FOR THE AUSTRALIAN PLANT COMMUNITY

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The Steering Committee and project management on behalf of the Genomics for Australian Plants Consortium

Australia's unique flora is the result of millions of years of isolated evolution prior to collision with the Asian continent and subsequent floral exchange. Since European settlement some 13% of native vegetation has been completely converted for land use, and a further 62% is subject to varying degrees of disturbance. Genomic approaches offer the possibility of unlocking the enormous information in nuclear genomes for plant evolutionary and conservation studies to significantly improve conservation management decisions.

The Genomics for Australian Plants Initiative is a nationally-inclusive collaboration led by researchers from the Australian State and National Herbaria and Botanic Gardens. The Initiative will be driven by the plant research community and brings together researchers, data specialists, state governments, commonwealth government agencies and plant conservation agencies with the aim of using genomics approaches to understand Australian native plants with cultural, economic, conservation and/or scientific value. The central resource for this initiative will be derived from herbaria and botanic gardens (living collections) around the country, adding significant value to the collections. The genome sequencing data will focus on reference genomes, phylogenomics and conservation genomics, and will contribute to the development of new research methods and capabilities that can be adopted by the national and international plant research communities.

MIND THE GAP

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