

The genomic trace of hybridisation between *Eucalyptus globulus* and the rare *E. cordata*



- Latest genomic technologies
- Generous ARC-funded running costs
- Internationally recognised research group

Hybridisation is thought to be an important factor shaping genetic diversity and the evolution of forest tree species. Our research into the genetic interactions between the widespread *E. globulus* and the rare Tasmanian endemic *E. cordata* provides strong evidence that *E. globulus* has assimilated maternally inherited chloroplast DNA and nuclear markers from *E. cordata* into its gene pool.



This project will use short read Illumina sequencing to detect and map (i) species diagnostic markers and (ii) introgressed genomic regions, and estimate the timing of these hybridisation events. Part of this project can be packaged as an Honours project.

Eligibility (for PhD): Domestic and International students with First Class or Second Uppers Honours / Master's degree or equivalent in genetics, genomics, ecology, bioinformatics or related disciplines. Domestic students will need to apply to UTAS for an APA or equivalent Scholarship, while international students will need to apply for a UTAS International Scholarship.

The **Eucalypt Genetics Group at UTAS**, led by Profs Potts and Vaillancourt, has a world-class interdisciplinary research programme that investigates the evolutionary and ecological forces that shape diversity in *Eucalyptus*. The Group consistently publishes in high impact journals, with recent publications in *Nature*, *New Phytologist* and *Molecular Biology and Evolution*. The Group collaborates with other universities and research institutions in Australia and internationally that can bring other skills to a supervisory team.

Learn more at www.eucalyptgenetics.com

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