Progress Report STP 2017-018 (FY 2016-2017)

Evaluation of Gondwana link restoration projects with reference to mycorrhizal communities in remnant and re-vegetated land

Plant Science and Herbarium

Project Core Team

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Approved and active

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Project Team	granted
Program Leader	granted
Directorate	granted

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This project will examine mycorrhizal community parameters (abundance, ratios of arbuscular (AM) and ectomycorrhizal (EM) associations and diversity) of selected host species in re-vegetation areas compared with nearby remnant bushland. The study will fall within the Fitz-Stirling bioregion in the south of Western Australia, in sites that form part of the Gondwanalink restoration initiative. Additionally, a growth experiment will be undertaken using site-collected soils to help further decipher the underlying causes for observed responses. These findings may be used to guide re-vegetation practices in the future, and provide suggestions for the best chance of reinstating or maintaining natural mycorrhizal communities.

To date soil and root samples have been collected from three Gondwanalink sites: Monjebup North; Peniup; and Chingarrup. Isolation of mycorrhizal fungi has commenced from the root samples and seed from *Acacia cyclops* and *Melaleuca acuminata* has been germinated for the growth experiments using site-collected soils.