Yass Area Network Climate Ready Revegetation Project

Trial summary

Project background

The aim of YAN's Climate Ready Revegetation Project is to assist the long-term survival of native plantings under climate change. It is based on the understanding that increased genetic diversity is likely to help species adapt to climate change through the process of natural selection over generations.

The first step in this project is to select species that are more likely to tolerate climate change in our region (i.e., their range extends into hotter areas). Secondly, we introduce greater genetic diversity in the tubestock of these selected species by sourcing seed from multiple locations across eastern Australia, including those that are warmer than the current local climate. Landcare nurseries in the Yass region are cooperating to develop and test these seed sourcing strategies.

CRR trial

The question that the trial addresses is whether there is a difference in short-term outcomes of plants grown from <u>locally sourced seed</u> compared to the <u>non-local pooled ('Admixture') seed</u> collected from a geographically wider range of sites.

Three plant species are part of the trial: Yellow Box (*Eucalyptus melliodora*), Green Wattle (*Acacia deanii*), and Sticky Hop-bush (*Dodonaea viscosa* subsp. *angustissima*).

There are two large sites (on Kangiara and Mountain Vale) hosting formally designed trials, including the three above-mentioned species.

There are six 'supporting sites', with less demanding layouts and monitoring requirements. Three of these sites include all three of the selected species, and three sites include two of the species.

Trial monitoring

The monitoring requirements are to:

- Maintain a means of identifying the treatment (Local or Non-Local/Admixture) of all plants through site markers and a planting plan.
- Record survival (number alive) each year of each species for up to five years. More information such as height and health and photo records are useful, but not necessary.
- Submit survival counts of all plants to YAN each year, together with any important observations of factors that may affect the conduct or outcome of the trial.
- Agree to have occasional visits from the trial organisers from Yass Area Network (YAN) with prior notice.