

Orchard Floor Management in The Riverland

Improving soil health and orchard resilience while reducing herbicide use.

Treatments studied as part of this trial:

- A: Herbicide tree-row, Volunteer Sward mid-row
- B: Volunteer Sward – whole floor
- C: Pollinator Mix – whole floor
- D: Medicago and Rye – whole floor
- E: Native species (Prostrate saltbush)
- F: *Festuca arundinacea* (tall fescue) tree-row.

Ground covers and what to select:

Identify your aims – nitrogen fixation, improved soil structure, pollination?
Select seed – Medicago, ryegrass, mustard seed/radish? Mixes of these?

How to establish tree-line ground cover

- Sow cover crop mix as close to the tree line as possible.
- Plant seed mid-autumn. Before the 'rain' arrives.
- Allow cover to establish. Try not to slash for as long as possible! This maximises the benefits you get from the
- Once ground cover has died off, you can slash and side-throw to under the tree line.

What to expect

First year: Pests? Poor germination? Invasive species (thistle, fleabane, plantain etc)?
Be strong! Even weeds are improving your soil health. Watch and wait.

The benefits:

- Improved water infiltration
- Reduced evaporation
- Improved soil structure
- Greater functional diversity
- More beneficial insects
- Reduced herbicide cost
- Reduced labour costs

Further enquiries

Ph: +6 8 8313 8356

Email: thomas.lines@adelaide.edu.au

Web: soilecology.org