

## The Role Of Understory Species In Agroforestry- Otway Region

1. Nurse Crop- Trees or shrubs used to protect the more valuable commercial species. Usually planted in the outside rows they will help inner tree rows to grow straight without substantial lateral growth and “butt sweep”(curving of trunk close to the ground due to too quick growth and no wind protection). Nurse crop species need to be very quick growing

Suitable species:

Acacia dealbata- silver wattle  
Acacia mearnsii- black wattle  
Acacia mucronata- sallow wattle  
Acacia verniciflua- varnish wattle

2. Soil Nutrient Improvers- All of the trees and shrubs belonging to the Legume family provide nitrogen for themselves, and when their roots die off nitrogen is released in the rotting process to other trees nearby.

Suitable genera:

Acacia- wattles  
Daviesia- bitter peas  
Goodia- golden tip  
Pultanaea- bush peas  
Dillwynia- parrot peas  
Indigofera- Austral indigo  
Platylobium- flat peas  
Viminaria- golden spray

3. Weed Control- plants that mulch the soil either by dropping of plant material to the ground or by shading of soil deterring weed growth.

Suitable species:

Acacia paradoxa- hedge wattle  
Bedfordia arborescens-blanket leaf  
Allocas. littoralis- black sheoak  
Cassinia aculeate- dogwood  
Goodenia ovata- hop goodenia  
Leptospermum continentale- prickly tea tree  
Solanum laciniatum- kangaroo apple

4. Wildlife Habitat- any indigenous plant species provides something for indigenous faunal species whether it be a tall tree or a ground hugging herb. Some species, however, are very important in attracting wildlife to your property and your agroforestry plantation. These species may attract predatory birds or insects that eat the insects that are eating your timber trees. This is a highly complex topic but summarise it by saying the closer your property is to being in tune with the ecology of the region your trees and animals will be more healthy and happy.

Suitable species:

Acacia verticillata- prickly moses  
Acacia mearnsii- black wattle  
Bursaria spinosa- sweet bursaria  
Gynatrix pulchella- native hemp  
Hakea ulicina- dagger hakea  
Leptospermum continentale- prickly tea tree  
Melaleuca squarrosa- scented paperbark

5. Water quality and erosion control- strong root systems that bind the soil and ground hugging, clumping plants filter soil surface run off.

Suitable species:

Acacia melanoxylon-blackwood  
Allocas. littoralis-black she oak  
Poa species- silver tussock  
Goodenia ovata- hop goodenia  
Lomandra longifolia- matrush  
Dianella revoluta- flax lily