

## fact sheet 2. Which Cultivar?

Five cultivars of *Leucaena* are now available for planting by graziers. These include Cunningham, Wondergraze, Redlands, Tarramba and Peru. Each cultivar has specific attributes that provide benefits for individual locations (climate) which impacts on establishment, grazing, height, and insect management requirements.

### Cunningham

Cunningham was developed by CSIRO who crossed the Peru cultivar with another variety from Guatemala. It was released in Australia in 1976.

Cunningham is a highly productive variety with a shrubby growth habit. Cunningham is a prolific seeder and is very susceptible to psyllids and frost which can cause significant productivity losses in the more humid, coastal environments.

Despite being released more than 40 years ago, Cunningham is still widely sown today. Cunningham seed is often harvested by graziers who take the opportunity to harvest and sell seed during favourable seasonal conditions.

### Wondergraze

Wondergraze is an intraspecific hybrid and was released to the market in 2011.

Wondergraze has early seedling vigour and some cold tolerance and is a bushier plant than the other *leucaena* cultivars, putting its growth into foliage and branches rather than woody stems, increasing its attractiveness for grazing and crop maintenance.

Wondergraze seed is under Plant Breeder Rights (PBR) and may only be sourced from one seed supplier.

### Redlands

The Redlands variety is named after the Queensland Department of Agriculture and Fisheries (QDAF) research station where the University of Queensland variety development site is located in Brisbane. Redlands is an inter-specific hybrid between *Leucaena pallida* and *Leucaena Leucocephala subsp. glabrata*. Redlands was released in 2017 for commercial plantings with successful establishment trials undertaken in northern Queensland. On-farm trials investigating palatability and cattle weight gains are currently being conducted with interim results being consistent with weight gains generally achieved with *leucaena*. Redlands has a very high tolerance to psyllids, making it highly suitable for planting in coastal areas or other locations prone to high psyllid incidence.

Redlands seed is governed by plant-breeders rights (PBR) and is available from two seed suppliers.

## Tarramba

Tarramba was bred by the University of Hawaii and released in Australia in 1994. It has a taller, more tree-like (arboreal) growth habit. Specific grazing management is required to promote basal branching during establishment. Once established, Tarramba requires careful grazing management to minimise the need for mechanical trimming.

Tarramba typically produces less seed than other varieties, and while forage yield can be high, stem yield can make up the majority of the total biomass. Other advantages include early seedling vigour and some psyllid and cold tolerance, which can provide production advantages under certain environmental conditions.

Tarramba is under Plant Breeders Rights (PBR) and can be only sourced from one seed supplier.

## Peru

Peru, named after its originating country, was first released as a cultivar by CSIRO in 1962. Peru has shrubby growth with good basal branching. Peru is very susceptible to psyllid damage and produces large amounts of seed.

Peru has been superseded by newer varieties although seed is still available for sale typically from graziers with older stands of leucaena who take the opportunity to harvest and sell seed when seasonal conditions are favourable.

## Seed Quality

Irrespective of the cultivar and the seed provider, it is essential to ensure your seed is of high quality. All seed sold should have a germination and purity test which will determine if further scarification is needed (to reduce the percentage of hard (dormant) seed), or if weed seeds are present (eg parthenium). The uniformity of seed size is an important aspect that may impact seed flow through a planter, the uniformity of placement in the planted row and the planting rate. Grading of the seed is usually undertaken by established seed sellers to ensure seed size uniformity. Other aspects to consider include how long the seed has been stored for and the storage conditions, and whether there is any bruchid beetle damage (small holes in the seed).