

## fact sheet 3. Location

### Climate

Although established leucaena can tolerate extended dry spells and droughts, the plant performs best in tropical climates (hot wet summers and mild winters with an average rainfall above 600mm).

The majority of plant growth occurs in the warmer months with growth slowing when daily maximum temperatures fall below 25°C. Growth stops entirely when minimum temperatures fall below 10°C .

The optimum growing environment is in a sub-humid area with 700 – 800mm annual average rainfall which not only provides the plant with the necessary climate but reduces psyllid insect pressure associated with the more humid areas.

The new 'Redlands' psyllid-tolerant variety is now enabling plantings in coastal areas with rainfall above 800mm.

### Location

Leucaena grows best on deep, fertile, well-drained neutral to alkaline soils. Leucaena is well suited to Brigalow and scrub soils, black basalt soils, red volcanic soil and deep, fertile alluvial soils.

Leucaena is difficult to establish or provides limited production in heavy grey clays (Brigalow melon-hole country) and infertile sandy or sandy-loam soils (Cypress pine, light box country). Leucaena is unproductive in shallow infertile soils (Narrow-leaf ironbark forest country) or soils where prolonged waterlogging can occur (heavy clay flood plains).

Soil temperature needs to be above 18°C for leucaena seed to germinate rapidly. Plant leucaena in a deep fertile soil but avoid cold hollows or flats that regularly frost. Frost can kill seedlings and can severely reduce the productivity of established plants. Mild frosts (0°C to -3°C) result in leaf drop whilst severe frosts (below -3°C) will kill above-ground stems to ground level although established plants can grow vigorously from the root crown in spring with adequate soil moisture. If your paddock has frost-prone and frost-free areas, consider fencing to allow for management of each area. Alternatively, if areas of your paddock are prone to frost, graze the entire paddock evenly prior to the first frost and then rest to allow regeneration in the warmer spring season.

Ensure planting is undertaken in accordance with the Leucaena Code of Practice and avoid planting near watercourses such as creeks, rivers and flood ways. Keep Leucaena some distance away from boundary fences and never plant leucaena in areas where livestock will be excluded.