

### 3.13 Successful Aerial Seeding of Progardes Desmanthus at Wambiana

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In late 2011 a paddock at Wambiana, Charters Towers that had previously been pulled and recently burnt was aerially seeded with a mixture of scarified and hard Progardes Desmanthus seed. The land type is a mixed Box/Brigalow/Whitewood/Bauhinia upper story on a light clay loam soil with a ground layer consisting of a mixture of native (Desert blue grass—*Bothriochloa ewartiana* and Black spear grasses—*Heteropogon contortus*) and introduced grasses (Sabi grass—*Urochloa mosambicensis*) with some Seca Stylo and currant bush (*Carissa* spp.) throughout the paddock. Establishment initially appeared slow which coincided with a very wet year followed by many below average rainfall years, however in 2017 a very good population of Progardes is prevalent (the paddock was spelled in 2016) and is now well grazed and the Progardes appears compatible with the grasses and also grows in and amongst the currant bush. At the time of aerial seeding, seed traps were placed at random across the paddock, which yielded a mean of 22 seeds/m<sup>2</sup> (0–73 seeds/m<sup>2</sup>). In June 2017 transect data shows a mean population density of Progardes of 5 plants/m<sup>2</sup> with a frequency of 39% (0–52 plants/m<sup>2</sup>). On inspection a strip pattern of Progardes can be detected across the paddock resulting from the aerial seeding flight paths. Progardes is proving a success on neutral to alkaline clay soils. The hard seed component appears to have been valuable in the long-term establishment and aerial seeding into ash has been demonstrated as a successful planting technique.