

AN UPDATE ON PRICKLY ACACIA (*VACHELLIA NILOTICA* SSP. *INDICA*) BIOCONTROL RESEARCH IN QUEENSLAND

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Prickly acacia (*Vachellia nilotica* subsp. *indica*), a Weed of National Significance, is a major weed of grazing areas in Western Queensland. Prickly acacia causes serious detrimental impacts on pasture production, resulting in economic loss. Prickly acacia also poses a threat to rare and threatened animal species by displacing native grasslands. Many natural ecosystems are under threat due to invasion by prickly acacia. Biological control is one of the most important approaches for management of invasive weeds, involving introducing the natural enemies of exotic weeds to reduce their growth and reproductive capacity or even kill them. Seven agents have been released for prickly acacia with three agents, a seed-feeding beetle (*Bruchidius sahlbergi*), a leaf-feeding moth (*Chiasmia assimilis*) and a gall-inducing thrips (*Acaciothrips ebneri*) have established. However, the impact of seed-feeding beetle on prickly acacia has been minimal and leaf-feeding moth has only established in coastal areas, not widely in the arid inland regions where major infestations of prickly acacia occur. The most recent released gall thrips is host specific at the target plant subspecies level and has been approved for field release by Australian Government in 2022, which is the first gall insect released for prickly acacia in Australia. Field releases commenced in January 2023 and are continuing, across sites along inland and coastal areas in Queensland. There are early signs of field establishment and dispersal of the gall thrips. Future research will focus on monitoring its establishment, dispersal and impact on prickly acacia. One of the gall mites (*Aceria* sp.) from Ethiopia/Senegal will be identified and imported into a quarantine facility for host specificity testing into South Africa/Australia if external funding will be secured.