

## MR (Major) *Acacia cyclops*

<b>Date assessed</b>	2020-09-27
<b>Year published</b>	2022
<b>Eicat category</b>	MR (Major)
<b>Justification for EICAT assessment</b>	The indigenous species under <i>Acacia cyclops</i> did not differ significantly from that in uninvaded sites, but species richness was lower under <i>Acacia</i> and soils were very enriched (Gaertner et al., 2011). Native species richness was significantly lower in the <i>Acacia</i> thicket compared to the natural site. Native plant cover did not differ significantly between <i>Acacia</i> thicket and the uninvaded site. Diversity and evenness was significantly lower in the invaded site compared to the uninvaded site. The total N and soil microelement concentrations (Na, C and Mg) were approximately double that of the uninvaded site. Potassium was the only microelement with a higher concentration in the uninvaded site. In the invaded site, temperatures were constantly lower than in the uninvaded sites. In the <i>Acacia</i> invaded thicket relative soil moisture was lower than in the uninvaded site from August to October 2007, between October and December 2007 both sites had similar soil moisture levels except for November, where it was lower in the <i>Acacia</i> invaded site.
<b>Confidence rating</b>	Medium
<b>Mechanism(s) of maximum impact</b>	Chemical impact on ecosystem
<b>Countries of most severe impact</b>	South Africa
<b>Description of impact</b>	<i>A. cyclops</i> had mostly chemical (through soil nutrient enrichment) and structural impacts on the ecosystem; structural having the most by impacting indigenous species richness and abundance, such as birds or insect species. Other mechanism included competition and physical impacts on ecosystems, but were less common. Overall, moderate was the most common impact category (occurred 3 out of 6 times, excluding DD papers).
<b>Assessor</b>	Cally Jansen
<b>Contributors</b>	
<b>Reviewers</b>	EICAT authority
<b>Recommended citation</b>	Cally Jansen. (2025). <i>Acacia cyclops</i> . IUCN Environmental Impact Classification for Alien Taxa (EICAT).

