

## Impact Assessment Record

Scientific name: *Psoralea pinnata* L.

Common name: Blue psoralea (blue butterfly bush)

QUESTION	COMMENTS	RATING	CONFIDENCE
<b>Social</b>			
1. Restrict human access?	A small tree growing to 4m, reported to occur in riparian areas and able to form dense thickets (Weber 2003). As the plant can grow to 1.5m in one year and has a lasting seed bank, the species may need to be controlled to maintain access which would require significant works (Eliovson 1960; Muys 2001).	<b>H</b>	<b>MH</b>
2. Reduce tourism?	An ornamental tree species which can form dense thickets the species may have some effect on aesthetics (Weber 2003). Unknown if the species potential to restrict access has had any impact on recreational activities.	<b>M</b>	<b>L</b>
3. Injurious to people?	There is no reported evidence of this.	<b>L</b>	<b>M</b>
4. Damage to cultural sites?	An ornamental tree species which can form dense thickets the species may have some effect on aesthetics (Weber 2003).	<b>ML</b>	<b>M</b>
<b>Abiotic</b>			
5. Impact flow?	The species is reported to occur in swamps and riparian vegetation (Hussey <i>et al</i> 1997; Muys 2001). There is no evidence reported of the species impacting water flow.	<b>L</b>	<b>M</b>
6. Impact water quality?	The species is reported to occur in swamps and riparian vegetation (Hussey <i>et al</i> 1997; Muys 2001). There is no evidence reported of the species impacting water quality.	<b>L</b>	<b>M</b>
7. Increase soil erosion?	The species root system is described as being woody and branching but mostly shallow (Muys 2001). Having a shallow root system would limit the species ability to prevent large scale erosion occurring.	<b>ML</b>	<b>MH</b>
8. Reduce biomass?	Described as a fast growing species which can crowd out other shrub species and shade out species of lower strata (Muys 2001). Invasion by this species is overall likely to cause direct replacement.	<b>ML</b>	<b>MH</b>
9. Change fire regime?	Blood (2001) reports that fire stimulates mass germination of this fast growing species, this could increase fire frequency. The flammability of this species is not reported and therefore its affect on fire intensity can't be speculated.	<b>M</b>	<b>L</b>
<b>Community Habitat</b>			
10. Impact on composition (a) high value EVC	EVC= Wet Heathland (V); CMA= Glenelg Hopkins; Bioreg= Greater Grampians; VH CLIMATE potential. <i>P.pinnata</i> is a small tree species, which can form dense thickets, shading out species of the lower strata, crowd out shrub species and impede the regeneration of overstorey species (Muys 2001; Weber 2003). It can also fix nitrogen which can change the soil fertility and affect indigenous species persistence in the long term (Muys 2001). Therefore the species is capable of causing major displacement within layers.	<b>MH</b>	<b>MH</b>
(b) medium value EVC	EVC= Damp Heathland (D); CMA= Glenelg Hopkins; Bioreg= Glenelg Plain; VH CLIMATE potential. <i>P.pinnata</i> is a small tree species, which can form dense thickets, shading out species of the lower strata, crowd	<b>MH</b>	<b>MH</b>

## Impact Assessment Record

Scientific name: *Psoralea pinnata* L.

Common name: Blue psoralea (blue butterfly bush)

QUESTION	COMMENTS	RATING	CONFIDENCE
	out shrub species and impede the regeneration of overstorey species (Muyt 2001; Weber 2003). It can also fix nitrogen which can change the soil fertility and affect indigenous species persistence in the long term (Muyt 2001). Therefore the species is capable of causing major displacement within layers.		
(c) low value EVC	EVC= Wet Heathland (LC); CMA= Glenelg Hopkins; Bioreg= Glenelg Plain; VH CLIMATE potential. <i>P.pinnata</i> is a small tree species, which can form dense thickets, shading out species of the lower strata, crowd out shrub species and impede the regeneration of overstorey species (Muyt 2001; Weber 2003). It can also fix nitrogen which can change the soil fertility and affect indigenous species persistence in the long term (Muyt 2001). Therefore the species is capable of causing major displacement within layers.	MH	MH
11. Impact on structure?	<i>P.pinnata</i> is a small tree species, which can form dense thickets, shading out species of the lower strata, crowd out shrub species and impede the regeneration of overstorey species (Muyt 2001; Weber 2003). It can also fix nitrogen which can change the soil fertility and affect indigenous species persistence in the long term (Muyt 2001). Therefore the species has potential to have a major impact on the middle to lower strata through direct competition and a minor impact through impeding regeneration and alteration of soil chemistry.	MH	MH
12. Effect on threatened flora?	Listed as threatening competitor to <i>Villarsia calthifolia</i> a rare species in Western Australia (Gilfillan & Barrett 2004). There is no data reported however of this species impacting a species threatened in Victoria.	MH	L
<b>Fauna</b>			
13. Effect on threatened fauna?	There is no data of this occurring.	MH	L
14. Effect on non-threatened fauna?	Is managed as a threat to the Southern Emu-wren <i>Stipiturus malachurus</i> (Maguire & Mulder 2004).	MH	H
15. Benefits fauna?	Observed as a food source of the New Holland Honeyeater <i>phylidonyris novaehollandiae</i> (Lepschi 1997). Is reported to be used by the Southern Emu-wren <i>Stipiturus malachurus</i> (Maguire 2005).	MH	H
16. Injurious to fauna?	There is no evidence of this occurring.	L	M
<b>Pest Animal</b>			
17. Food source to pests?	Introduced as a nectar source for bees (Blood 2001).	ML	MH
18. Provides harbor?	Reported to forms thickets (Weber 2003). There is potential therefore for the species to harbour species such as rabbits and foxes. There is no evidence of this occurring however.	MH	M

## Impact Assessment Record

Scientific name: *Psoralea pinnata* L.

Common name: Blue psoralea (blue butterfly bush)

QUESTION	COMMENTS	RATING	CONFIDENCE
<b>Agriculture</b>			
19. Impact yield?	Reported to be becoming a problem in forestry (Blood 2001). The species impact is unknown however.	<b>M</b>	<b>L</b>
20. Impact quality?	Reported to be becoming a problem in forestry (Blood 2001). The species impact is unknown however.	<b>M</b>	<b>L</b>
21. Affect land value?	Reported to be becoming a problem in forestry (Blood 2001). The species impact is unknown however.	<b>M</b>	<b>L</b>
22. Change land use?	Reported to be becoming a problem in forestry (Blood 2001). The species impact is unknown however.	<b>M</b>	<b>L</b>
23. Increase harvest costs?	Reported to be becoming a problem in forestry (Blood 2001). The species impact is unknown however.	<b>M</b>	<b>L</b>
24. Disease host/vector?	<i>Phakopsora pachyrhizae</i> has been identified on the plant and other <i>Phakopsora</i> species are reported to infect a range of legume species (Mennicken & Oberwinkler 2004). Therefore this species may be an alternate host for rusts that effect legume crops, at this stage however there is no direct evidence.	<b>M</b>	<b>L</b>