

QUESTION	COMMENTS	REFERENCE	RANKING
<b>Social</b>			
1. Restrict human access?	“An erect biennial, sometimes perennial, commonly 30 to 60 cm high.” It occurs in mallee shrubland and lowland grasslands & grassy woodland. The plant can cause skin irritation and may be a minor annoyance to humans.	Muyt (2001) P & C (2001)	<b>ML</b>
2. Reduce tourism?	The presence of this weed is obvious to the average visitor particularly during flowering.	Groves, et al. (1995)	<b>ML</b>
3. Injurious to people?	Similar properties to <i>E. plantagineum</i> . “Some medical practitioners have established a link between the plant and hay fever.” “...the rough hairy texture of the leaves and stems causes skin irritation.”	P & C (2001)	<b>MH</b>
4. Damage to cultural sites?	Dense infestations of the plant would create a moderate negative visual effect.		<b>ML</b>
<b>Abiotic</b>			
5. Impact flow?	Terrestrial spp.		<b>L</b>
6. Impact water quality?	Terrestrial spp.		<b>L</b>
7. Increase soil erosion?	Similar properties to <i>E. plantagineum</i> . “...in heavily grazed pasture, [it leaves] bare ground when it dies back in summer.” Potential for erosion from both wind and water.	MLRAPCB <sup>1</sup>	<b>ML</b>
8. Reduce biomass?	Invasiveness similar to <i>E. plantagineum</i> . Invader replaces biomass.	P & C (2001)	<b>ML</b>
9. Change fire regime?	“...it flowers several weeks later than <i>E. plantagineum</i> and flowering extends over a longer period.” But similar to <i>E. plantagineum</i> , it leaves little residue after it dries off. No change to fire regime.	P & C (2001) Groves, et al. (1995)	<b>L</b>
<b>Community Habitat</b>			
10. Impact on composition (a) high value EVC	EVC=Grassy woodland (E); CMA=North Central; Bioreg=Goldfields; VH CLIMATE potential. Similar properties to <i>E. plantagineum</i> . Early growth rate outcompetes other seedlings; rosette leaves shade and smother most other species. Major displacement of ground covers/grasses.	P & C (2001)	<b>MH</b>
(b) medium value EVC	EVC=Grassy dry forest (D); CMA=Goulburn Broken; Bioreg=Northern Inland Slopes; VH CLIMATE potential. Similar impact as in 10(a) above. Forest canopy cover may limit population density. Major displacement of ground covers/grasses.	P & C (2001)	<b>MH</b>
(c) low value EVC	EVC=Lowland forest (LC); CMA=Corangamite; Bioreg=Central Victorian Uplands; VH CLIMATE potential. Similar impact as in 10(b) above.	P & C (2001)	<b>MH</b>
11. Impact on structure?	Properties of Viper's bugloss are similar to Paterson's curse and, “Paterson's curse can form very extensive, persistent populations in disturbed areas, competing vigorously with smaller indigenous plants and impeding overstorey regeneration.” Major impact on lower strata.	P & C (2001) Muyt (2001)	<b>MH</b>
12. Effect on threatened flora?			

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<b>Fauna</b>			
13. Effect on threatened fauna?			
14. Effect on non-threatened fauna?	"[ <i>E. vulgare</i> ] appears less palatable to stock [than <i>E. plantagineum</i> ]." Changes to structure may have minor effect on non-threatened fauna by limiting food source.		<b>ML</b>
15. Benefits fauna?	No documented benefits assume provides no benefits.		<b>H</b>
16. Injurious to fauna?	Similar properties to <i>E. plantagineum</i> . "...presence of pyrrolizidine alkaloids contained in the plant cause cumulative chronic liver damage." "Stiff bristles on all parts of mature plants irritate the udders of cows." Potentially toxic; may cause allergies in fauna.	P & C (2001)	<b>H</b>
<b>Pest Animal</b>			
17. Food source to pests?	Not known as a food source to pest animals.		<b>L</b>
18. Provides harbor?	A biennial. Unlikely to provide permanent harbor for pest animals.	P & C (2001)	<b>L</b>
<b>Agriculture</b>			
19. Impact yield?	Similar properties to <i>E. plantagineum</i> . "...most graziers argue that the weed's presence reduces both quantity and quality of useful fodder in pastures." However, "...it is less competitive [than <i>E. plantagineum</i> ]."	P & C (2001)	<b>MH</b>
20. Impact quality?	"...most graziers argue that the weed's presence reduces [the] quality of useful fodder in pastures grazed by sheep."	P & C (2001)	<b>MH</b>
21. Affect land value?	Similar properties to <i>E. plantagineum</i> . The cost of control and eradication would add to farm operating costs over several years. Land value may decrease somewhat.	P & C (2001)	<b>M</b>
22. Change land use?	Similar properties to <i>E. plantagineum</i> . "Sheep find Paterson's curse more palatable than do cattle and horses." However, "...[ <i>E. vulgare</i> ] is less competitive [than <i>E. plantagineum</i> ]." This may dictate a change in stock until the plant is controlled.	P & C (2001)	<b>M</b>
23. Increase harvest costs?	Not known to affect crops or harvesting.		<b>L</b>
24. Disease host/vector?	None evident		<b>L</b>

1. . Mount Lofty Ranges Animal and Plant Control Board, South Australia. [http://www.mlrapcb.net/pest\\_salvationjane.htm](http://www.mlrapcb.net/pest_salvationjane.htm), viewed 05/03/03.