

Scientific Name: *Moraea flaccida* (see also *M. miniata*)

Common name: Cape tulip, one leaf

QUESTION	COMMENTS	REFERENCE	RANKING
Social			
1. Restrict human access?	An erect perennial herb with annual leaves (usually one) to 2 cm wide, and flowers to 60 cm high. Even in dense infestations, the plant would not inhibit human access.	P & C (2001)	L
2. Reduce tourism?	Dense infestations in open situations cover large areas and, during flowering, look attractive. The presence of the weed would be obvious during this period, but it would have little impact on recreational activities.	P & C (2001)	ML
3. Injurious to people?	All parts of the plant are poisonous if ingested. "There is a known human fatality in South Africa as a result of eating corms."	P & C (2001)	H
4. Damage to cultural sites?	Because of its ability to form dense infestations (patches of up to 7000 corms per square metre have been recorded), the weed would present a moderate negative visual effect if occurring in cultural sites.	P & C (2001)	ML
Abiotic			
5. Impact flow?	Terrestrial species.	P & C (2001)	L
6. Impact water quality?	Terrestrial species.	P & C (2001)	L
7. Increase soil erosion?	Aerial parts of the plant are only present for five to six months each year. However, the root system while not deep is fine and fibrous. With dense infestations (up to 7000 corms per square metre), the soil integrity would not be subjected to significant soil erosion. However, where the plant occurs in seasonal wetland situations someerosion may occur. "Cape tulip corms can be spread by floodwaters."	P & C (2001) Carr <i>et al</i> (1992) Hawkins <i>et al</i> (2001) ¹	ML
8. Reduce biomass?	It grows best in open situations such as grasslands (pasture), competes with and replaces desirable plants in pastures. Direct replacement of biomass.	Hawkins <i>et al</i> (2001)	ML
9. Change fire regime?	Although it can grow at very high densities, the change in fuel load is minimal. Not likely to alter the fire risk.	P & C (2001)	L
Community Habitat			
10. Impact on composition (a) high value EVC	EVC=Plains grassland (E); CMA=Glenelg Hopkins; Bioreg=Victorian Volcanic Plain; VH CLIMATE potential. "Severely impedes the growth and regeneration of indigenous ground-flora." Major displacement of ground-flora.	Muyt (2001)	MH
(b) medium value EVC	EVC=Grassy dry forest (D); CMA=Port Phillip; Bioreg=Central Victorian Uplands; VH CLIMATE potential. It competes with and replaces desirable plants in pastures, but it does not establish well on shaded sites. "Severely impedes the growth and regeneration of indigenous ground-flora." May not establish as large a population as in plains grassland, but still has a high potential to affect ground-flora.	P & C (2001) Muyt (2001)	MH
(c) low value EVC	Not likely to invade low value EVCs in Victoria.		L
11. Impact on structure?	It competes with and replaces desirable plants in pastures, but it does not establish well on shaded sites. "Severely impedes the growth and regeneration of indigenous ground-flora."	P & C (2001) Muyt (2001)	ML
12. Effect on threatened flora?	Threatens ANZECC rated rare or threatened native plant species	Groves <i>et al</i> (2003) ²	H

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Fauna			
13. Effect on threatened fauna?			
14. Effect on non-threatened fauna?	Displaces desirable plants reducing food availability. Reduces carrying capacity. Although it is limited in distribution in natural ecosystems, it is present in medium to large populations where it does infest.	P & C (2001) Carr <i>et al</i> (1992)	MH
15. Benefits fauna?	Cockatoos eat the corms readily after cultivation, apparently without ill effects.	P & C (2001)	MH
16. Injurious to fauna?	All parts of the plant are toxic, whether green or dry.	P & C (2001)	H
Pest Animal			
17. Food source to pests?	Not documented. Cockatoos eat the corms readily after cultivation, apparently without ill effects. Potential for similar birds to also use the corms as a source of food.	P & C (2001)	ML
18. Provides harbor?	Growth habit would not provide harbor.		L
Agriculture			
19. Impact yield?	<i>H. flaccida</i> occurs mostly in grazing areas and is a serious weed of pasture. It replaces desirable pasture plants thus reducing carrying capacity considerably.	Hawkins <i>et al</i> (2001) P & C (2001)	MH
20. Impact quality?	It is not a problem weed in cropping situations. Reduced pasture may impact on the live weight of stock. "The most important method of dispersal at present is in hay or silage cut from infested paddocks." This produce may be rejected for sale. NO serious changes due to this weed being seen in community – product not rejected for	P & C (2001)	MH
21. Affect land value?	"Cape tulips can be difficult and expensive to eradicate." Control on arable land and permanent pasture can be achieved, but "cultivation must be carried out for at least 4 years to exhaust the supply of dormant corms in the soil." Considering the cost and time involved, the presence of this weed is likely to reduce the value of land.	Hawkins <i>et al</i> (2001) P & C (2001)	M
22. Change land use?	"Cape tulips can be difficult and expensive to eradicate." Chemical control may discourage farmers due to associated pasture damage. Land may have to be used for another agricultural activity (e.g. cropping or forestry). Plant is tolerated – stock get resistant to toxic properties – unlikely to change land use	P & C (2001)	ML
23. Increase harvest costs?	No known impact on harvest costs.		L
24. Disease host/vector?	None evident.		L

¹ Hawkins, C., Kruger, E., Lloyd, S. 2001. *Cape Tulip*. Farmnote 10/2001. Department of Agriculture Western Australia. Available <http://www.agric.wa.gov.au/agency/pubns/farmnote/2001/f01001.htm> Last accessed 02/07/03

² Groves, Rh (Convener), Hoskings, JR, Batianoff, GN, Cooke, DA, Cowie, ID, Johnson, RW, Keighery, GJ, Lepschi, BJ, Mitchell, AA, Moerkerk, M, Randall, RP, Razefelds, AC, Walsh, NG, and Waterhouse B. (2003) Weed categories for natural and agricultural ecosystems management. Bureau of Rural Sciences, Canberra