Online Appendix 2: Results of the weed risk assessment for *Asphodelus fistulosus*.

TABLE 1-A2: Australian Weed Risk Assessment Protocol (following Pheloung et al. 1999).

| Question | Answer | Reference/notes | Score | Possible scores |
|--|--------|--------------------------------|-------|-----------------|
| 1.01 Is the species highly domesticated? | No | - | 0 | 0 or -3 |
| 1.02 Has the species become naturalised where grown? | - | - | ? | -1 or 1 |
| 1.03 Does the species have weedy races? | - | - | ? | -1 or 1 |
| 2.01 Species suited to South African climates | 2 | Bioclimatic model. This study. | 2 | 2 |
| 2.02 Quality of climate match data (0 – low; 1 – intermediate; 2 | 2 | Bioclimatic model. This study. | 2 | 0, 1 or 2 |
| - high) | | | | |
| 2.03 Broad climate suitability (environmental versatility) | No | Bioclimatic model. This study. | 0 | 0, 1 or 2 |
| 2.04 Native or naturalised in regions with extended dry periods | - | - | ? | 0 or 1 |
| 2.05 Does the species have a history of repeated introductions | Yes | http://www.hear.org/gcw | 2 | 0, 1 or 2 |
| outside its natural range? | | | | |
| 3.01 Naturalised beyond native range | Yes | - | 2 | -2, -1, 0, 1, 2 |
| 3.02 Garden/amenity/disturbance weed | Yes | - | 2 | 0, 1, 2 |
| 3.03 Weed of agriculture/horticulture/forestry | Yes | - | 4 | 0, 1, 2, 3, 4 |
| 3.04 Environmental weed | Yes | - | 4 | 0, 1, 2, 3, 4 |
| 3.05 Congeneric weed | Yes | - | 2 | 0, 1, 2 |
| 4.01 Produces spines, thorns or burrs | No | Pers. obs. | 0 | 0 or 1 |
| 4.02 Allelopathic | No | - | 0 | 0 or 1 |
| 4.03 Parasitic | No | - | 0 | 0 or 1 |
| 4.04 Unpalatable to grazing animals | Yes | Patterson 1996. | 1 | -1 or 1 |
| 4.05 Toxic to animals | No | - | 0 | 0 or 1 |
| 4.06 Host for recognised pests and pathogens | No | - | 0 | 0 or 1 |
| 4.07 Causes allergies or is otherwise toxic to humans | Yes | - | 1 | 0 or 1 |
| 4.08 Creates a fire hazard in natural ecosystems | No | - | 0 | 0 or 1 |
| 4.09 Is a shade-tolerant plant at some stage of its life cycle | No | - | 0 | 0 or 1 |
| 4.10 Grows on infertile soils | Yes | - | 1 | 0 or 1 |
| 4.11 Climbing or smothering growth habit | No | - | 0 | 0 or 1 |
| 4.12 Forms dense thickets | Yes | Pers. obs. | 1 | 0 or 1 |
| 5.01 Aquatic | No | - | 0 | 0 or 5 |
| 5.02 Grass | No | - | 0 | 0 or 1 |
| 5.03 Nitrogen-fixing woody plant | No | - | 0 | 0 or 1 |
| 5.04 Geophyte | No | - | 0 | 0 or 1 |

| 6.01 Evidence of substantial reproductive failure in native | No | - | 0 | 0 or 1 |
|---|-----|--|----|----------|
| habitat | | | | |
| 6.02 Produces viable seed | Yes | This study. | 1 | -1 or 1 |
| 6.03 Hybridises naturally | - | - | ? | -1 or 1 |
| 6.04 Self-fertilisation | - | - | ? | -1 or 1 |
| 6.05 Requires specialist pollinators | No | - | 0 | 0 or -1 |
| 6.06 Reproduction by vegetative propagation | No | - | -1 | -1 or 1 |
| 6.07 Minimum generative time (years) | 3 | http://www.ellura.info/Reference/Discussion-paper-on-controlling-Onion-Weed-2014-04-06.pdf | 0 | 0, 1, -1 |
| 7.01 Propagules likely to be dispersed unintentionally | Yes | - | 1 | -1 or 1 |
| 7.02 Propagules dispersed intentionally by people | Yes | - | 1 | -1 or 1 |
| 7.03 Propagules likely to disperse as a produce contaminant | Yes | - | 1 | -1 or 1 |
| 7.04 Propagules adapted to wind dispersal | Yes | https://keyserver.lucidcentral.org/weeds/data/media/Html/asphodelus_fistulosus.htm | 1 | -1 or 1 |
| 7.05 Propagules buoyant | Yes | - | 1 | -1 or 1 |
| 7.06 Propagules bird dispersed | Yes | - | 1 | -1 or 1 |
| 7.07 Propagules dispersed by other animals (externally) | No | https://keyserver.lucidcentral.org/weeds/data/media/Html/asphodelus_fistulosus.htm | -1 | -1 or 1 |
| 7.08 Propagules dispersed by other animals (internally) | Yes | - | 1 | -1 or 1 |
| 8.01 Prolific seed production | Yes | - | 1 | -1 or 1 |
| 8.02 Evidence that a persistent propagule bank is formed (> 1 year) | Yes | Smith and Smith, n.d. | 1 | -1 or 1 |
| 8.03 Well controlled by herbicides | Yes | This study. | -1 | -1 or 1 |
| 8.04 Tolerates or benefits from mutilation, cultivation or fire | Yes | Pers. obs. | 1 | -1 or 1 |
| 8.05 Effective natural enemies present in South Africa | No | - | 1 | -1 or 1 |