

Vitelli, Joseph S. *See* Wearne, Lynise J.

Vogler, Wayne D. Efficacy of herbicides on weedy *Sporobolus* grasses in the glasshouse in Australia. **25**(1), 9

Walker, Steve, Wu, Hanwen and Bell, Kerry. Emergence and seed persistence of *Echinochloa colona*, *Urochloa panicoides* and *Hibiscus trionum* in the sub-tropical environment of north-eastern Australia. **25**(3), 127

Wearne, Lynise J., Clarkson, John, Grice, Anthony C., van Klinken, Rieks D. and Vitelli, Joseph S. The biology of Australian weeds. 56. *Hymenachne amplexicaulis* (Rudge) Nees. **25**(4), 146

Williams, Peter A., Popay, Ian and Gatehouse, Hazel A.W. New Zealand biosecurity legislation and the naturalization of exotic weeds. **25**(2), 95

Williams, Peter A. *See also* Gordon, Doria R.

Worsley, Peter. *See* Dominiak, Bernie C.

Wu, Hanwen. *See* Walker, Steve

Yusof, Mohamad Najib Mohd. *See* Juraimi, Abdul Shukor

Weed Management Society of South Australia



Coolatai grass (*Hypparrhenia hirta*) control at Cobbler Creek Recreation Park

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Cobbler Creek Recreation Park was initially an area of land set aside in the 1970s as part of the metropolitan open space (MOSS) network between the urban areas of Salisbury and Golden Grove. Situated 19 km north of the Adelaide CBD is retains the largest remnant of Mallee Box (*Eucalyptus porosa*) grassy woodland left on the Adelaide Plains according to the Department of Environment and Heritage Management Plan (2003); the vegetation community that reflects what would have existed on a large proportion of what is now Adelaide. The total area of the park is approximately 290 hectares of foothills and hills-face land.

Coolatai was initially introduced into the region as a desirable garden plant being sold at the local nurseries in the 1990s (Taylor, personal communication 4 August 2010). It was first identified in Cobbler Creek Recreation Park in approximately 1998 and has since become well established throughout the park, particularly adjacent to Bridge Road in the north-west.

Plant description

Coolatai grass is a perennial tussock grass, up to 1.5 m tall that readily invades native bushland and forms dense impenetrable

thickets that dominate the understory, displacing any native groundcovers that once occupied the area. It is deep-rooted (up to 3 m) and drought-resistant; readily resprouting from its tough basal crown after defoliation, seasonal dormancy or if it has been sprayed incorrectly (CRC Weed Management Guide, 2007). Its main growth period is in late spring to summer, but where winters are not severe it can remain green all year. The leaves are flat and pale greyish-green in colour, almost hairless, 1–5 mm wide and 10–30 cm long. Correct identification is essential before controlling Coolatai as it looks very similar to many native grasses, particularly when it is juvenile.

Coolatai spread

Coolatai grass spreads by seed and is most commonly dispersed by mowing or water movement. The tiny hairy seeds can adhere to clothing, animals, vehicles and tools, especially when it is wet. Coolatai grass is self-fertile, allowing reproduction to occur if there is only one mature plant in an area. Seeds can germinate from a depth of up to 9 cm according to the CRC Weed Management Guide (2007) and also in areas with a high amount of leaf litter. Despite this Coolatai does find it difficult

to colonize areas where competition with native shrubs and trees is high or leaf litter is thick (Moylan, personal communication 27 August 2010).

Control methods

There are two main treatment methods for Coolatai which are chipping or spray control. To successfully control Coolatai it is very important to regularly monitor and control populations throughout the year because if the weather conditions are right it can produce seed multiple times in one growing season. Early detection and eradication of new Coolatai populations is the best method of control, so developing your weed identification skills is very important.

Hygiene

Since Coolatai is often spread by vehicles, machinery and stock we have an important role in minimizing Coolatai spread when we are in known infestation areas. The CRC Weed Management Guide (2007) lists the following hygiene recommendations:

- Practise weed hygiene in areas that need to be slashed such as roadsides.
- Where possible, slash before seeds develop.
- Slash into rather than away from patches of Coolatai grass.
- Always clean vehicles and clothing before moving to uninfested areas.

Volunteers

The work that we complete as contractors is complemented fantastically by a group of volunteers that regularly control weeds within Cobbler Creek Recreation Park. Thanks to all the members of the "Friends of Cobbler Creek" for all their ongoing work on Coolatai and other weeds.

References

- CRC Weed Management Guide (2007). Coolatai grass (*Hypparrhenia hirta*). Department for Environment and Heritage (2003). Cobbler Creek Recreation Park Management Plan. (DEH, Adelaide, South Australia).