

Mimosa pigra L. – a new incursion into Western Australia

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Summary In November 2009, *Mimosa pigra* was found for the first time in Western Australia in the remote Kimberley region. An emergency response was called with the first ground and aerial surveillance taking place on 17 November 2009, a teleconference to allocate funding and personnel on 18 November 2009 and the first spraying on 26 November 2009.

Keywords *Mimosa pigra*, incursion, emergency response, eradication.

INTRODUCTION

Mimosa pigra L. is a Weed of National Significance (WoNS) in Australia. The 20 WoNS, which were named in 1999, were determined from over 70 nominated species, based on invasiveness, impacts, potential for spread, and socio-economic and environmental aspects (Thorpe and Lynch 2000).

Mimosa pigra was introduced to the Darwin Botanic Garden in the late 1800s and now infests some 130,000 ha in the Northern Territory, particularly the Adelaide River floodplain, as well as key Ramsar Wetlands including Kakadu. It has been identified as a threat to indigenous cultural activities, the pastoral and tourism industries, and recreation.

On 16 November 2009, Department of Agriculture and Food Western Australia (DAFWA) biosecurity officer Tracey Vinnicombe and WoNS prickly bush coordinator Nathan March found several patches of *M. pigra* while travelling to a *Parkinsonia aculeata* trial site. The plants were scattered over about 1 ha in a seasonal billabong (old Station Billabong) 12 km from Kununurra. From the size of the plants and the fact that they had set seed, it was estimated that they were at least 3 years and possibly up to 5 years old.

An emergency incident response was initiated using the DAFWA's generic incident management plan. This paper gives key dates and a brief description of actions taken.

KEY DATES

November 2009

16 *Mimosa pigra* found by Tracey Vinnicombe and Nathan March; photographs emailed to Sandy Lloyd.

- 17 Surveillance by vehicle and fixed wing aircraft.
- 19 Teleconference to categorise incident and allocate funds and personnel. Chris Hawkins is named as incident manager. A briefing note is prepared for the Minister for Agriculture and Food. Notification of relevant individuals and organisations.
- 23 Samples taken to prepare herbarium specimens and for DNA testing.
- 24 Surveillance by helicopter; first draft of the management plan is circulated for comment.
- 25 Media release goes out with photographs and Freecall number to report any other suspect plants; one radio interview. Flier finalised; distribution commenced. Spray with Starane® Advanced (a.i. fluroxypyr) 180 mL in 100 L water + wetting agent (Uptake) and commence fencing site. Paper submitted for next meeting of the Agriculture Protection Board.
- 26 Second teleconference; action list updated.

December 2009

- 7 Management plan is finalised. Apply Graslan® (a.i. tebuthiuron) 10 kg ha⁻¹.
- 8 Surveillance by helicopter.
- 9 Newly germinated seedlings sprayed.
- 10 Third teleconference; action list updated.
- 14 Another cohort of seedlings sprayed with Starane as before.

January 2010

- 1 Billabong under water.

March 2010

- 18 First time able to access billabong since beginning of wet season, no live plants found.

April 2010

- 12 Surveillance by helicopter, including Parry's Creek Reserve, a Ramsar wetland some 40 km away.

May 2010

- 17 Search billabong for seedlings, none found.

As at 6 August 2010, the billabong was still under water.

DISCUSSION

It is not known how *M. pigra* got to this site. It is an isolated area, not known to be used as a camping site. There was a homestead in the area some 80–90 years ago. Fortunately the billabong is not connected to any creeks, so it is considered that no seeds have been washed into other waterways. Individuals and organisations notified of this significant incursion included traditional owners, the Pastoralists and Graziers Association, the Kimberley Zone Control Authority, all DAFWA staff based in Kununurra, the Department of Environment and Conservation and environment groups. Some 500 fliers were distributed via the local supermarket, fishing tackle shops and fishing clubs, the fuel depot, tree farms, the DAFWA quarantine checkpoint, all cattle stations in the area and neighbouring or ‘sister’ cattle stations in the Northern Territory. The

media release resulted in one radio interview (ABC 2009), coverage on radio news and in the local newspaper, and was used in newsletters produced by ‘Birds Australia’ and ‘Land for Wildlife’. Despite extensive surveillance and publicity, no further infestations of *M. pigra* have been found. The site will be monitored as long as necessary, possibly for some 20 years.

REFERENCES

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