

**Yellow Mimosa (*Vachellia farnesiana*)**  
**Feral Native Species Information for Listing**

Under Cl.17 of the *Native Vegetation Regulation 2005*

July 2011

## Feral Native Plant Species Listing under Clause 17 NV Regulation 2005

A feral native plant species is a species of native vegetation that is outside its natural range, and is listed as a feral native species for specified land.

Under the *Native Vegetation Act 2003* (Section 6.2) native vegetation means any of the following types of indigenous vegetation:

- (a) trees (including any sapling or shrub, or any scrub),
- (b) understorey plants,
- (c) groundcover (being any type of herbaceous vegetation),
- (d) plants occurring in a wetland.

Vegetation is indigenous if it is of a species of vegetation, or if it comprises species of vegetation, that existed in the State before European settlement.

Natural range is not defined in the *Native Vegetation Act 2003* or *Native Vegetation Regulation 2005*. The Macquarie Dictionary defines natural as “existing in or formed by nature, not artificial”. Hence, natural range means the range of the species formed by nature, and not formed by introductions by human (ie, artificial) activity.

The Central West CMA area is outside the natural range of Yellow Mimosa. The natural range of the species is Central America and Mexico. It is likely that the species was introduced to New South Wales before European settlement (see NSW FloraOnline, <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Vachellia~farnesiana>). Thus, for the purpose of this listing, Yellow Mimosa is considered indigenous to New South Wales by definition, but outside its natural range in the whole State.

Under cl.17(2)(b) of the *NV Regulation* the Central West Catchment Management Authority (CWCMA) recommend Yellow Mimosa (*Vachellia farnesiana*) be listed as a feral native plant species for the Central West Catchment area. The following information supports the claim to list this plant as a feral native plant species for Central West Catchment Area and provides advice to the Expert Panel who assess proposed listings of feral native species.

**Frame 1: Yellow Mimosa encroaching upon native open woodland on the Macquarie floodplain**

**Frame 2: The form of Yellow Mimosa and its ability to exclude native groundcover**

**Frame 3: Landscape dominated by Yellow Mimosa on the Macquarie floodplain**

## Feral Native Plant Species proposal to list Yellow Mimosa (*Vachellia farnesiana*) under Clause 17 NV Regulation 2005

The Central West Catchment Management Authority recommends the listing of Yellow Mimosa (*Vachellia farnesiana*) as a feral native plant species under clause 17 of the *Native Vegetation Regulation 2005*.

CMA contact person: Carolyn Raine

### 1. Brief description of the species

Yellow Mimosa (*Vachellia farnesiana*) is a spreading shrub ranging from 1.5 to 4 m in height. The bark is smooth or finely fissured and grey-brown in colour. The branchlets can be zigzagged in shape and are often hairy towards the apex. With age, the branchlets become hairless and have prominent lenticels, which are small raised corky spots through which gaseous exchange occurs (Kodela 2010). The leaves are compound and are especially hairy on the upper surface. The inflorescence comprises 22 – 95 flower heads that are bright yellow or orange-yellow in colour and there are 1 to 3 or more inflorescence in the axil of leaves. The seed pods are cigar-like in shape and are either straight to strongly curved.

Yellow Mimosa usually flowers from June - September, however the flowering period can be irregular. Yellow Mimosa is also referred to as Cassie, Farnese Wattle and Thorny Acacia (Kodela 2010). The foliage and young green pods of Yellow Mimosa are palatable to cattle and sheep. The species grows in open woodland, shrubland and grassland, on alluvial clay soils and sandy loams, on open plains and near watercourses (Kodela 2010). The capability of the species to behave as a weed is increased by its ability to grow in a variety of soil types and vegetation communities, and because its seed pods are palatable to livestock.

### 2. Information to identify natural range of species

Yellow Mimosa is widespread through the tropics and subtropics of central America, where it is native (Kodela 2010). Its point of origin is Mexico and Central America (Clark 1989). The species now occurs in Africa, Asia and Australia. Yellow Mimosa probably arrived in Australia prior to European settlement, although there is some uncertainty about this (Kodela 2010). Yellow Mimosa now occurs in many parts of Australia. In New South Wales Australia, Yellow Mimosa occurs in areas north of Jerilderie (Kodela 2010) in the southern Riverina region (Appendix 2). Mapping has identified Yellow Mimosa as being occasional and widespread north of Dubbo NSW, to abundant and widespread in the (mid) north west region of the Central West CMA Area (NSW Department of Primary Industries undated, see Appendix 2).

The species is a serious pest plant in parts of Australia, including mid north-west New South Wales, where it covers thousands of hectares (Anonymous 2010). It is steadily spreading south from Queensland, in association with cattle which carry the seeds.

The natural range of the species is Mexico and Central America. New South Wales is outside the natural range of the species.

A major infestation of Yellow Mimosa is present in the Macquarie floodplain of the Darling Riverine Plain Region (IBRA); see frames 1, 2 and 3 below. The dense spread of this plant reduces native groundcover across the land.

**3. Identify the area or land to which the listing will apply. The area or land to which the listing will apply is the area outside the species range as shown above.**

The Central West CMA area is outside the natural range of Yellow Mimosa; hence the listing should apply to the entire Central West CMA Area. The natural range of the species is Mexico and Central America. Because the species was probably introduced to Australia before European settlement, it is indigenous to Australia by definition, but is outside its natural range in New South Wales.

**4. Proposed management conditions (if any) that may restrict how clearing of the species may be undertaken**

The following information prescribes the management of Yellow Mimosa.

- a. Clearing of Yellow Mimosa may be undertaken by burning, clearing of individual plants with no or minimal disturbance to groundcover (eg, chemical spot treatment), clearing of individual plants with minimal disturbance to groundcover (eg, grubbing), or by clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover (eg, spraying plants at paddock scale).
- b. Where the groundcover comprises 50% or more of indigenous species of vegetation, Yellow Mimosa plants may only be cleared with a method that has no or minimal disturbance to native groundcover.
- c. The clearing of Yellow Mimosa does not result in the clearing of native groundcover where the groundcover comprises greater than 50% of indigenous species. In the event native groundcover is cleared, all native groundcover regrowth is deemed protected regrowth and exotic pastures or crops are not to be established.
- d. Clearing may only be undertaken by burning, clearing of individual plants with no or minimal disturbance to groundcover and clearing of individual plants with minimal disturbance to groundcover if the clearing is on land with slopes greater than 18 degrees.

Note: Advice on controlling Yellow Mimosa is in Appendix 1.

**5. Expert Panel Determination**

The expert panel has determined that the species, *Yellow Mimosa (Vachellia farnesiana)* is eligible to be listed as a Feral Native Plant Species in the Central West CMA Area, with the management conditions in 4. above.

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**6. Reasons for the Expert Panels Decision**

The Expert Panel outlines the reasons for their decision on the listing of the species as a Feral Native Plant Species in the area of the listing.

**7. Management conditions (if any) that may restrict how clearing of the species may be undertaken**

Expert Panel advises the management conditions that may restrict how clearing of a species

is undertaken.

## References

Anonymous (2010) "Mimosa bush - briar bush".

Website: [http://www.northwestweeds.nsw.gov.au/mimosa\\_bush.htm](http://www.northwestweeds.nsw.gov.au/mimosa_bush.htm). Viewed 05/07/11.

Australia's Virtual Herbarium (2010). Distribution of Yellow Mimosa (*Vachellia farnesiana*) Map, Council of Heads of Australasian Herb. Viewed 05-07-2011.aria Inc., Canberra.

Website: <http://www.chah.gov.au/avh/avhServlet>. Viewed 05/07/11.

Clarke, H.D., Seigler, D.S., Ebinger, J.E. (1989). *Acacia farnesiana* (Fabaceae: Mimosoideae) and related species from Mexico, the southwestern U.S., and the Caribbean. Systematic Botany 14, 549-564.

Kodala P.G. (2006). *Vachellia farnesiana* (L.) NSW Flora Online. Royal Botanic Gardens & Domain Trust, Sydney.

Website: <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Vachellia~farnesiana>. Viewed 05/07/11.

NSW Department of Primary Industries (undated). *Vachellia farnesiana* (Mimosa Bush) Map. Map incorporates data courtesy of: 1. NSW Noxious Weeds Local Control Authorities [2007-2008], 2. NSW Department of Lands, Bathurst.

Website: [http://www.dpi.nsw.gov.au/data/assets/pdf\\_file/0009/339048/vachellia-farnesiana.pdf](http://www.dpi.nsw.gov.au/data/assets/pdf_file/0009/339048/vachellia-farnesiana.pdf). Viewed 05/07/11.

# Appendix 1

## NOTES

### 1. Restrictions on use of Clearing of feral native species RAMA

The RAMA "Clearing of feral native species" does not apply on protected riparian land, ie, on land that is within 20 metres of the bed or bank of a watercourse marked in blue on the Vulnerable Land Map for NSW.

See: <http://www.environment.nsw.gov.au/vegetation/vulnerable.htm>  
and <http://www.environment.nsw.gov.au/resources/vegetation/nvinfosheet11.pdf> for further information.

### 2. Provisions of National Parks and Wildlife Act 1974 and National Parks and Wildlife Regulation 2009 in relation to Aboriginal objects and Aboriginal places

The provisions of Part 6 of the National Parks and Wildlife Act 1974 and Part 8A of the National Parks and Wildlife Regulation 2009, in relation to Aboriginal objects and Aboriginal places, must be complied with when clearing feral native plant species.

Refer to the following:

<http://www.environment.nsw.gov.au/resources/cultureheritage/ddcop/10798ddcop.pdf>

<http://www.environment.nsw.gov.au/licences/AboriginalHeritageInformationManagementSystem.htm>

Contact your local CMA office for further advice in relation to Aboriginal objects and Aboriginal places.

### 3. Information on methods for controlling Yellow Mimosa

There are a number of control options available to treat Yellow Mimosa. This includes mechanical disturbance to a variety of chemical treatments. It is recommended that professional advice is sought prior to any treatment as a range of methods may be required for the long term control of Yellow Mimosa.

When using any chemical, the user must be certified in chemical application and read the manufacturers' labels and material safety data sheets. For further information on the application of herbicides consult with the chemical reseller, the Department of Primary Industries, Local Council Weeds Officer or the Australian Pesticides and Veterinary Medicines Authority.

Depending on the original vegetation community, local native tree, shrub species and/or groundcover may be established after the Yellow Mimosa plants have been removed, to enhance the local environment and provide habitat for native wildlife. Contact the Central West CMA for more information and advice.

Refer to the following information sheets through internet web sites for advice on controlling Yellow Mimosa.

Wattle (*Acacia species*) Collated by HerbiGuide. For Wattle refer to:  
[http://www.herbiGuide.com.au/Descriptions/hg\\_Wattle.htm](http://www.herbiGuide.com.au/Descriptions/hg_Wattle.htm) Copyright © 1988-10 HerbiGuide  
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"Mimosa bush - briar bush".

[www.northwestweeds.nsw.gov.au](http://www.northwestweeds.nsw.gov.au)[http://www.northwestweeds.nsw.gov.au/mimosa\\_bush.htm](http://www.northwestweeds.nsw.gov.au/mimosa_bush.htm)

<http://www.woodyweedspecialists.com.au/Portals/18/Images/Common/WeedTechSheets/MimosaBush.pdf>