

## C1 Weeds in North Queensland

### ***Introduction***

This presentation covered Siam weed (*Chromolaena odorata*), the Four Tropical Weeds (*Miconia spp.*, *Mikania macrantha*, *Clidemia hirta*, *Limnocharis flava*), and *Mimosa pigra*. A description and profile of each weed was given, as well as an overview of its history in Australia, and an update on its current situation and future direction regarding control, research and extension. These weeds were all identified by AQIS as being potentially devastating to Australian industries and the environment. National eradication programs have been established to eradicate siam weed and the Four Tropical Weeds from Australia, with a cost sharing arrangement between the commonwealth and the states/ territories.

### ***Chromolaena odorata***

- A perennial shrub that if supported becomes a scrambling vine that rapidly dominates areas. Can occur in both disturbed and undisturbed habitats
- A native of South America that has become a serious weed throughout tropical Asia, including Indonesia and Timor
- Produces thousands of seeds annually that move with water, animals and vehicles. Long seed viability- 3 years but anecdotal evidence suggests longer.
- In drier times and areas, behaves more like an annual- flowering more opportunistic and prolonged
- Believed to have arrived as a seed contaminant in Tully in 1960's. Control program began soon after discovery in 1994- continues to this day
- Recent change of approach will mean greater involvement of landholders in monitoring and control and will improve community awareness and ownership of siam weed

### ***Limnocharis flava***

- An anchored aquatic that dominates shallow wetlands and watercourse margins, displacing native plants and causing siltation and drainage problems.
- Native to South America but spread throughout tropical world by man as an ornamental- agriculture has been abandoned in some heavily infested areas
- Up to 1.2 m tall, each plant can produce up to 1 million seeds per year, and can reproduce vegetatively if parts of the flowerhead become detached

### ***Mikania macrantha***

- Also known as "mile a minute"- a fairly accurate description of this vine
- Native of South America but a widespread weed throughout the tropical world
- Prefers wetter areas, forest margins or disturbed areas
- Produces tens of thousands of seeds year round peaking in summer- moved by wind, water, animals and vehicles

### ***Clidemia hirta***

- Native of S. America- probably arrived in Australia as seed contaminant

- An aggressive perennial shrub that grows into a tree under favourable conditions- dominates forest canopy when light becomes available
- Enormous leaves- distinctive red- purplish underside of leaf and 3 veins
- Can produce over 50 000 seeds annually- seeds viable in soil for up to 4 years
- Humans are vectors of long distance spread, locally spread by birds and water

### ***Miconia spp***

- Native to South America, serious pest in Oceania with potential to become a serious pest throughout the tropical regions of the world
- Each plant can produce 9 million seeds per year- seeds viable for up to 4 years
- Extremely shade tolerant- seedlings can grow in as little as 0.02% of full sun
- Spectacular germination and growth occur when increased light becomes available due to disturbance- it out competes native plants and dominates areas

### ***Mimosa pigra***

- An invasive woody shrub, 3- 5 metres tall that forms impenetrable stands along watercourses and on floodplains- infests 80 000 hectares in NT
- Grows both in and out of water, thorns along stem at nodes, touch sensitive leaves
- Fast maturation, each plant can produce 220 000 seeds per year, seeds viable for up to 20 years, possibly much longer
- The site at the Peter Faust Dam near Proserpine is the only known site in Australia outside the Northern Territory.

## **Pictures**

Below are some pictures that should be helpful with identification and awareness of these weeds.



***Chromolaena odorata***- Picture 1 of 2 (leaves and flowers)



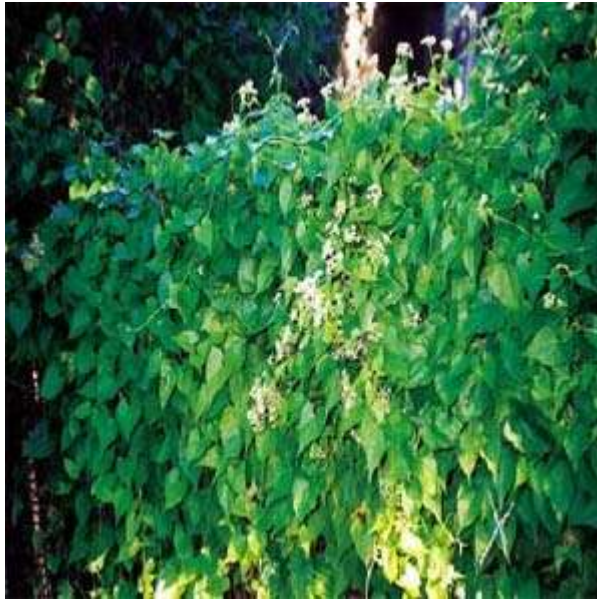
***Chromolaena odorata*** - Picture 2 of 2 (flowers)



*Limnocharis flava*- picture 1 of 2 (infestation)



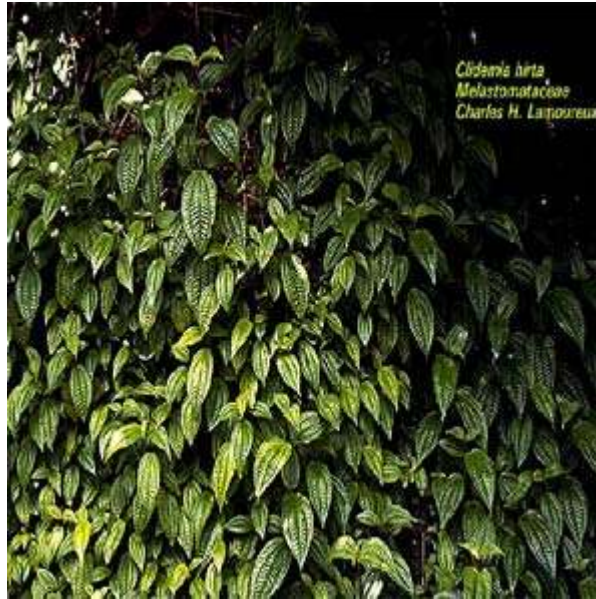
*Limnocharis flava*- picture 2 of 2 (flower)



*Mikania macrantha*- Picture 1 of 2 (infestation)



*Mikania macrantha*- Picture 2 of 2 (flowers)



*Clidemia hirta*  
Melastomataceae  
Charles H. Lajoureaux

*Clidemia hirta*- Picture 1 of 2 (infestation)



*Clidemia hirta*  
Melastomataceae  
Gerald D. Carr

*Clidemia hirta* - Picture 2 of 2 (flowers and leaves)



*Miconia* spp- Picture 1 of 2 (distinctive underside of leaf)



*Miconia* spp- Picture 1 of 2 (leaves and inflorescences)



*Mimosa pigra*- Picture 1 of 2 (seed pods, leaves and thorns)



*Mimosa pigra*- Picture 2 of 2 (plant)