



Tecoma, Kudzu and Honey locust

Emerging Weeds and
what's being done

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Overview

Background

Profile

Where is it?

What's being done?

Future

Background

- Listed as environmental weeds for North Coast in 2001 and noted in BFNS
- Weed Risk Assessment in 2002
- Threaten biodiversity
- Nominated for declaration
 - Due to limited spread vs potential for greater spread
- Finally declared as Class 3 noxious weeds March 2006
- Fully and continuously suppress and destroy

What's being done

- Declaration
- Implementation of co-ordinated control programs
 - LCA's
 - contractors
- Regional Weed Management Plans
- Education and awareness
 - Media – 'Weed of the month'
 - Field days
 - Raise the profile – BFNS, other strategies

Tecoma (Yellow Bells)

- *Tecoma stans*
- Native of Central and South America
- Introduced as ornamental
- Regarded as a weed in Pacific region

- Perennial, woody shrub to 4 m high (and taller)

- readily invades disturbed bushland and riparian areas
- grows in a variety of situations and climates from deserts to tropical areas, sandy to loam soils
- although it prefers good drainage



Leaves grow to 8-25cm long

Made up of 3-7 (and occasionally up to 13) toothed, pointed leaflets

Numerous branches and basal stems

Showy yellow tubular flowers in spring and summer



RL

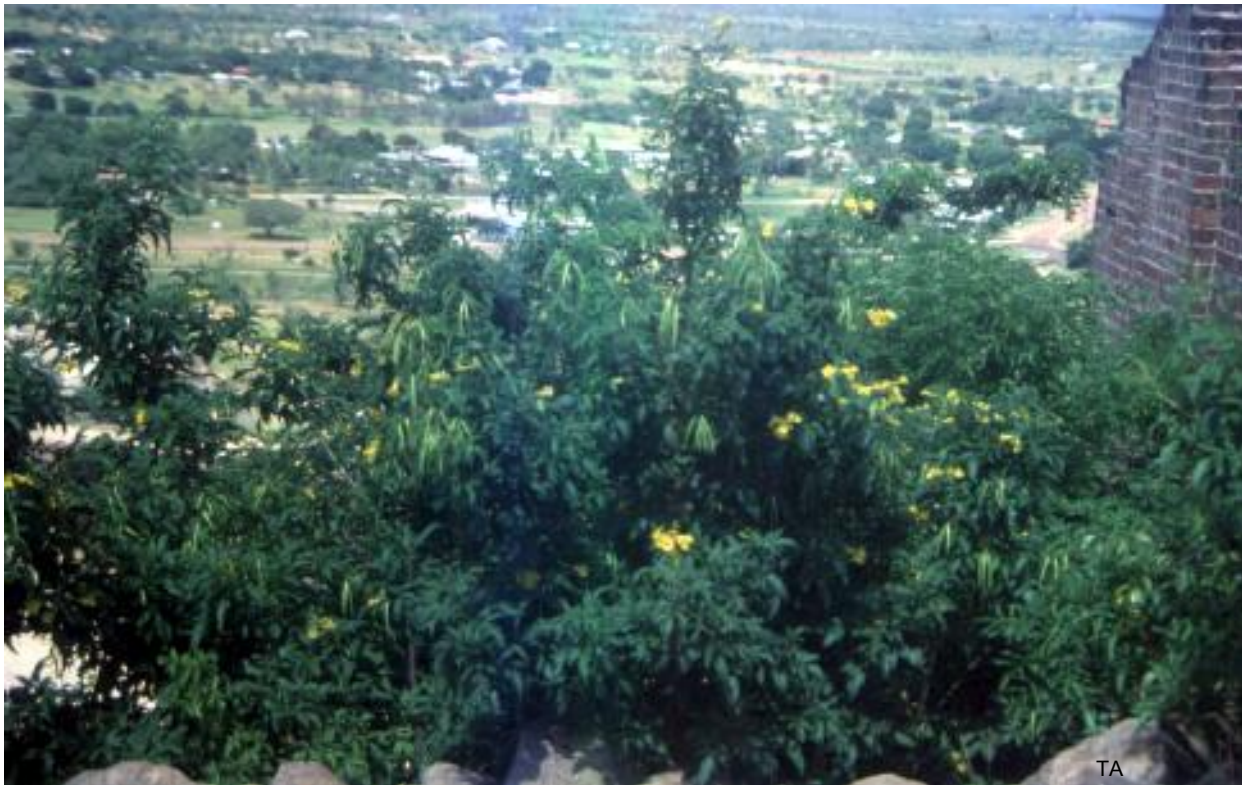
Garden escapee....

Seed pods with papery, wind-dispersed seeds (000's) throughout most of year



TA

Tecoma



All set for taking over the valley....



Creates monocultures

Tecoma (Yellow Bells)

- Where is it?
 - isolated infestations occur surrounding most major coastal and floodplain towns / cities in each LGA - core infestation in Lismore
 - capable of dramatically expanding its distribution in the north coast region
- What's being done?
 - Inspections identifying shrubs in backyards
 - Roadside infestations controlled

Tecoma

- Control
 - Replicated trials by AFRS (T Armstrong)
 - Foliar application – glyphosate 1:100
 - Basal bark application – Fluroxypyr and Access
 - Control through cut stump application
 - Registered controls coming
 - Watch for regrowth, suckers and seedlings



Kudzu

- ***Pueraria lobata* - Fabaceae**
- Native of South East Asia, inc Japan
- Introduced as ornamental and pasture legume
- 'plant that ate Georgia'

- Perennial, semi woody scrambling vine

- large fleshy edible rhizome or tuber which can grow to 1.8 metres in length and 15cm in diameter
- riparian zones originally supporting subtropical and dry rainforests + deep loamy soils



Large trifoliate leaves
alternatively arranged per stem
Green top, grey-green below



IT



RL

Mauve pea-like
flower in
Feb/March

Scented, full sun



IT



RL

Seeds in hairy pods – low viability

Kudzu

- **Why is it a problem?**

- listed among the World Worst Invasive Alien Species
- capable of growing up 30cm a day, 20m per year and can climb trees to a height of 30m
- NC WRA in 2002 – 2nd
- serious potential environmental weed
- actively spreads along watercourses by seed or vegetatively
- main method is by people planting it





IT
14 2 2

Kudzu

- Where is it?
 - Various catchments across the NSW North Coast
 - Listed as naturalised in NSW north of Mullumbimby
 - Also found in Springbrook in SEQ
 - Riparian zones originally supporting subtropical and dry rainforests
- What's being done?
 - NCWAC has CMA-funded programs
 - Tweed, Brunswick, Coffs and Bellingen

Kudzu

- Control
 - Trials by NSW DPI
 - Manual removal of isolated small plants by hand pulling or digging the tubers
 - Use of cattle with other control methods
 - Method used will depend on the site situation
 - No registered herbicides – off label permits
 - Foliar application and cut stump successful



before

Bruxner Park,
Coffs Harbour

Control site



Control work by
Envirotek and
CHCC

Spray work – Grazon
and Brushoff - not
enough to kill the
tubers

after



Note the pencil cedar

Before – April 2004



After – April 2006



Honey locust

- ***Gleditsia triacanthos***
- Native of central and north eastern North America
- Introduced in mid 19th century to Australia
- As ornamental and fodder tree for cattle
- Long-lived tree (125 years) up to 15-25 m tall
- Big problem in riparian areas - favours fertile, alluvial soils
- Spread by water and animals



TW

Deciduous tree, with green leaves to 10-15cm long growing prolifically from spring to autumn

Flowers - yellow hanging stalks to 10cm long in October-November

Thorns broken off the trunk can resprout

Vehicle movement is substantially restricted near infestations due to damage to tyres



NCWAC





Seed pods - brown flattened to 20-40cm long

First produced when the plant is 3-5 years old then seed prolifically every 1-2 years

Trees over 12 years of age may produce in excess of 500kg of pods per tree



Honey locust

- **Why is it a problem?**

- forms dense impenetrable thickets along watercourses, roadsides and on the edges of forest areas.
- NC WRA in 2002 – 35th
- Large spines or thorns are capable of inflicting substantial injuries to humans and animals.
- actively spreads along watercourses by seed
- often found in backyards of homesteads



TW



TA

Honey locust

- Where is it?
 - Isolated distribution on North Coast
 - Upper Clarence, Richmond, Bilambil-Terranora, and in the Upper Orara
 - Core infestation on Mann River – 14km river bank
- What's being done?
 - NCWAC has CMA-funded programs
 - Good work by Wytalibah Landcare/NPWS, Upper Clarence Landcare

Honey locust

- Control
 - Registered control by basal bark application of *Starane 200*
 - Use of cattle with other control methods
 - Main issue is poor access, removal of the dead skeleton and potential erosion if site is left bare
 - Success controlling the upstream edges of infestations and gradually working downstream

Honey locust



Controlled HL at Wytalibah along Mann River

What can you do?

- Mapping – why?
 - Strategic approach
 - Improve coordination
 - Address source of infestation
 - Monitoring
- Note if being sold – garden escapees...
- Know your enemy



Future...

- Northern NSW is still in a position to successfully control the existing infestations due to their limited nature.
- Co-ordinated control must continue while the opportunity still exists
- Integrate control of these species whilst managing other weeds at the same site
- Control current infestations and prevent the future spread of these weeds

Thank you!

Further information

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Photo credits – T Armstrong, R Luxton, M Oakwood, M Swain, I Turnbull, T Woodward

Info sources – NCWAC Regional Weed Management Plans, website