

THE EMERGING PROBLEM OF COTTON RELATED WEEDS (FAMILY MALVACEAE)

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Which are they?

- * These weeds are related to cotton by being in the same plant family i.e. Malvaceae
 - Velvetleaf (*Abutilon theophrasti*), swamp chinese lantern
 - still relatively uncommon, found in depressions near water.
 - Anoda weed (*Anoda cristata*), spurred anoda
 - commonly found in Qld but now in NSW.
 - Bladder ketmia (*Hibiscus trionum*)
 - both a narrow (dissected) and broad leaf variety are common.
- * Other weeds related to cotton include species of the mallows (*Malva*), *Malvastrum*, *Sida* and native rosella (*Abelmoschus*).
- * Many of these weeds are introduced and are potential or current weed problems in cotton.

The problem

- * Bladder ketmia, the 6th worst weed of cotton is continuing to spread (Charles 1991).
- * Bladder ketmia is a host of cotton diseases e.g. Fusarium and Verticillium wilt.
- * Velvetleaf and Anoda weed, although minor weeds are becoming major problems on some farms and are spreading to previously uninfested farms.
- * Velvetleaf is a major weed in summer crops in the USA.
- * Both Velvetleaf and Anoda weed are difficult to control. This is because of their close physiological and phenological relationship to cotton.

Identification

Bladder ketmia

Divided leaf variety

- * Stems are up to 130 cm high.
- * Plant habit semi prostrate to erect
- * Leaves divided, margins toothed.
- * Flowers cream/white with purple centre.
- * Seeds small and grey.

* Seed produced in bladder like capsules seeds shed summer - autumn

Wide leaf variety

- * Stems are up to 200 cm high.
- * Plant habit erect.
- * Leaves less divided, waxy looking.
- * Flowers cream/white with yellow centre.
- * Seeds larger and black.

Velvetleaf

- * Stems are up to 150 cm high.
- * Leaves velvet-like to touch.
- * Heart-shaped leaves, 2 -30 cm long.
- * Flowers 1.5 cm wide, yellow.
- * Seed heads 1- 2 cm wide, black, awned.
- * Seed produced summer - autumn.

Anoda weed

- * Stems are up to 150 cm high.
- * Leaves triangular/oval, 3 - 10 cm long.
- * Flowers 1 cm wide, purple/lavender.
- * Seed heads 1 - 2 cm wide, brown.
- * Seed heads flattened, spurred.
- * Seed produced summer - autumn

We need to know

- * Where do Velvetleaf and Anoda weed occur?
- * What is the effect the three species have on cotton yield?
- * How are these species currently controlled?

If you have any information which may assist us with this project, please contact:

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Funded by the Cotton Research and Development Corporation.