Biocontrol of Cape Ivy

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Cape Ivy, *Delairea odorata*

- Perennial, flowering vine
- Native to South Africa
- Brought to California in 1950’s
Cape Ivy currently occupies more than 500,000 acres in California - CalIPC

Cape Ivy

- Found primarily in wet areas
- Smothers vegetation
- Productive in winter
- Flammable when dry
- Spreads easily

Cape Ivy had 36% fewer native plants than plots that had not been invaded by Cape Ivy

A. Koszis and C. Case. *Allelopathy and Biotoxicity of Cape Ivy Delairea odorata*, Biology Department, Skyline College, San Bruno, CA.
Current Control of Cape Ivy
Biocontrol is the use of one organism to control another
The Biocontrol Process

- Identify target organism (often exotic)
- Identify an enemy
- Test and petition for agent approval
  - Choice and No-choice trials
  - Petition the Technical Advisory Group (TAG)
  - USDA review and approval
- Introduce and establish agents
Cape Ivy Fly, *Parafreutreta regalis*
The Cape Ivy Fly is an effective biocontrol

Rearing methods for *Parafreutreta regalis*
Mass Rearing
Field Releases

-ground cover
-canopy cover
-number of flies
-galls produced