

Biological Control of Giant Salvinia at the Lewisville Aquatic Ecosystem Research Facility (LAERF)

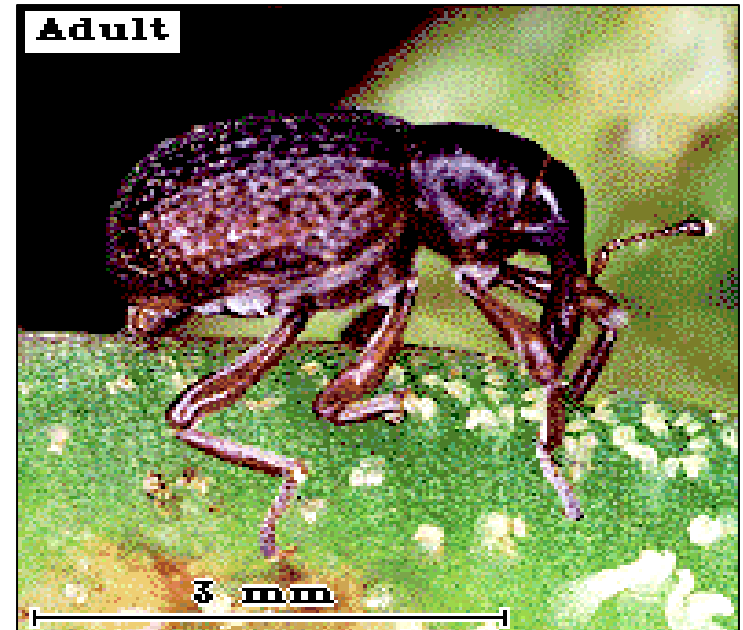
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Cyrtobagous salviniae

- Eggs
 - Hatch in 10 days
- Larvae
 - Tunnel within rhizome
 - Complete development in 3-4 weeks
- Pupate for 2 weeks
- Adults
 - Feed on buds
- Total developmental time
 - 6.5 – 7.5 weeks



REARING METHODS

○ Ponds

- 4 – half acre
- Pros
 - Mass rearing
- Cons
 - Difficult to manage
 - Weevil distribution patchy
 - Difficult to overwinter



○ Culture Boxes

- 20 – 5'x10' – 2' deep
- Pros
 - Easy to manage
 - Successful overwintering
- Cons
 - Less weevils produced overall



Culture Boxes

- Initial set-up
 - Peat moss & sediment
- Maintenance
 - Weekly
 - Fertilize & water
 - Every 3 – 4 weeks
 - Sample weevil population
 - Berlese funnels
 - Provide fresh salvinia for weevils
 - Transfer infested salvinia
 - Screens for weevil transfer



