

Crop: Clerodendron
Scientific Name: Clerodendrum spp. (Verbenaceae)

I. Introduction

- A. Clerodendrum is a member of the Verbenaceae family.
- B. *C. thomsoniae* is the species primarily grown. It is a twining evergreen shrub from west tropical Africa also known under the name bleeding heart vine. The flower shave a white calyx and red corolla and the flowers are collected in clusters.
- C. *C. splendens* is a twining shrub from tropical Africa. The flowers are scarlet or yellow colored and 2.5 cm (1-inch) large.
- D. *C. inerme* is an evergreen shrub from Bombay, India with boxwood type leaves and small white flowers.

II. Cultivars, Clones, Breeding, Development

- A. There are no cultivars of *C. thomsoniae*.
- B. Selections exist that have different flowering habits.

III. Flower Induction Requirements

- A. A temperature of 21°C (70°F) and 16-24 hour days promotes vegetative growth.
- B. Photoperiods of 10-12 hour days and temperatures of 16-18°C (60-65°F) promote flower development.
- C. Flower buds are formed in the leaf axils. The apical meristem is always vegetative.
- D. Stem elongation stops when flowering begins and resumes after flowering.
- E. Ancymidol enhances flowering.

IV. Environmental Requirements

A. Light

1. Plants should be grown under high or full light intensities.
2. High temperatures and low light intensity may cause flower bud abscission.

B. Temperature

1. Temperatures higher than 21°C (70°F) promotes vegetative growth.
2. Temperatures of 15-18°C (60-65°F) with short days and growth retardants promote flower development.

C. Water

1. Plants should be kept moist.

D. Nutrition

1. Use a similar program as with poinsettia or chrysanthemum.
2. Iron chlorosis develop at a pH above 6.3. Maintain 5.0 - 5.5 for best growth.

V. Cultivation

A. Propagation

1. Mostly done by cuttings. Although, Clerodendron can also be propagated from seed.
2. Cuttings root in 10-14 days under mist at 21°C (70°F) air temperature and 22-23°C (72-73°F) media temperature.

B. Planting and Media

1. One or more rooted cuttings are planted in a 10 cm (4 inch) pot depending on desired final plant size.

2. Pinching may not be needed if multiple cuttings are planted per pot.

C. Support

1. None

D. Pinching

1. Pinching is required if one cutting is planted per pot.

2. Suitable stage for pinching is a shoot length of 3-5 cm (1 1/2 - 2 inches) long.

3. The lower the pinch, the more flowering shoots and clusters are produced.

4. A hard pinch^a increases branching but may delay flowering by 3-4 weeks.

E. Disbudding

1. None.

F. Growth Regulators

1. Ancymidol promotes flowering, increases the number of flowering shoots, produces darker leaves and a shorter, more compact plant. Plants should be drenched when the new shoots are 5-8 cm (2-3 inches) in length with 30 ml of a 5 ppm solution (0.15 mg).

2. Flower development is delayed by gibberellic acid.

VI. Problems

A. Insect

1. White fly is the major insect problem, but can be controlled by chemical applications.

B. Disease

1. *Botrytis* may occur on older leaves and flowers. Especially under conditions with high humidity and close spacing.

C. Physiological

1. Flower bud abscission may result from high temperatures and low light intensity.

D. Other

1. Tobacco ring spot virus has been found in clerodendron. Discard all infected plants.
2. Some fumigants cause flower bud abscission.

VII. Harvesting, Handling, Marketing

- A. Transporting in darkness for more than 24 hours at temperatures above 21°C (70°F) may cause leaf and bud abscission.

VIII. Scheduling

Growing Time for Cultural Segment	Cultural Procedure	Temperature
	Propagate cutting	21°C (70°F)
3 weeks	↓ V Transplant	18°C (65°F)
2 weeks	↓ V Pinch	18°C (65°F)
2 weeks	↓ V Drench with Ancyimidol	16-18°C (60-65°F)
6 weeks	↓ V Flowering	