

## PREVENTING FLOWERING OF TWO SPECIES OF ORNAMENTAL FIGS

In instances where fruits are a nuisance, it is desirable to remove them or prevent their development.

The experiments reported here were conducted to determine the effectiveness of 2, 3-dihydro-5-6-diphenyl-1, 4-oxathiin (oxathiin) on preventing the development of syconia on 2 species of ornamental *Ficus*, the fruits of which are often undesirable.

The first experiment involved testing oxathiin on preventing flower (syconia) development and resultant fruit set on *Ficus retusa* L., an ornamental fig. Three factors were investigated: chemical concentration, the number of applications, and the presence or absence of pre-mature flowers on the branches.

Five concentrations of oxathiin were utilized, 0, 2000, 4000, 6000, and 8000 ppm. The 3 application frequencies observed were a single application at the beginning of the experiment, 2 applications 1 month apart, and 4 applications 1 every 2 weeks. All combinations of frequency of application, and chemical concentration were studied with both stages of flowering. These stages were a total absence of any visible syconia present on the stem immediately following a

flush of vegetative growth preceding flowering, and the presence of immature syconia up to 2 mm in diameter. Data were taken on the number of syconia reaching a diameter of at least 5 mm on each branch over a period of 2 months.

A subsequent experiment involved testing oxathiin on the flowering, and fruit set of *Ficus macrophylla* Desf. Four concentrations were studied, 0, 6000, 8000, and 10,000 ppm. All branches utilized were devoid of syconia at the time of treatment.

The results of the experiment with *Ficus retusa* indicate that oxathiin is effective in preventing fruit set of this species. Differences due to chemical concentration were highly significant, and concentrations ranging between 4000 and 8000 ppm were all comparably effective. The number and frequency of spray applications, and the presence of immature flowers on the branches at the time of the first treatment did not affect the inhibition placed on fruit set by the chemical.

The results of the single factor experiment with *Ficus macrophylla* indicate that a single application of oxathiin to stems free of flowers will significantly prevent fruit set. Both 8000 and 10,000 ppm were significantly different from the control 1 month after treatment. No phytotoxicity was observed with either species.

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