

Mt Lofty Botanic Gardens 2006/07

Background

Mt Lofty Botanic Gardens is located on a large property in the Adelaide Hills, approximately 15 kilometres from Adelaide, South Australia.

A feature of the gardens is the 'Rhododendron Gully', a picturesque valley on the property that has a range of Rhododendron and Azalea species covering an area of several hectares.

Parts of this area each season are infested with Azalea lace bug, causing unsightly damage to leaves, defoliation and even death of plants. Pesticides are applied each season to manage the impacts of lace bug, with timing of sprays determined by observation of damage and pest numbers.



A Different Approach!

In August 2006, in response to interest expressed by the South Australian Rhododendron Society, Bug Central presented information on strategies to control pests at a monthly meeting of the society.

At the time of this presentation, no work had been done in Australia on controlling Azalea lace bug with predators. However, research showed that a similar predator to the lacewing available commercially in Australia had been used successfully in the United States. Additionally, the green lacewing had been used in Australia to control the olive lace bug. Although these were distinctly different pests, they did similar damage to each plant group.

Based on this evidence, and determined to find an alternative strategy to simply applying chemicals, Mt Lofty Botanic Gardens decided to trial the use of lacewings to control this pest.

Three releases of lacewings occurred in spring and early summer. Release ranged from 2000 to 3000 lacewings each time, concentrated in an area of less than 0.5 of a hectare.

Release dates were determined by visual observations of pest activity. Staff regularly checked for new activity of lace bugs, and responded with releases of lacewings.

Results

Staff at Mt Lofty reported very good results from these releases. In the area where lacewings were released, no significant damage was reported. Importantly, no chemicals were applied in these release areas.

In areas where lacewings were not released, damage was said to be at a level typical of a 'normal' season.

Staff also reported a major benefit from this strategy was the time saving. Applying chemical sprays required not only a much larger amount of time, but also equipment costs. Lacewings could also be released when visitors were in the gardens, unlike sprays which need to be targeted at times when the public are not in the vicinity of target areas.

Conclusion

Mt Lofty staff intends to use lacewings again in spring and summer of 2007/08 for control of lace bugs. The success of this program highlights the need to monitor pest and predator activity, and respond with an appropriate control strategy. In IPM, timing is critical, and the efforts of the staff at Mt Lofty resulted in this excellent outcome.

Case Studies are intended to provide information of a general nature only to assist in smarter pest management.

For further information on pest management:
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