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Integrated Pest Management Strategies at Southern Woods Nursery®

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INTRODUCTION

For the past 3 years Southern Woods Nursery has been looking at different ways of controlling pests and diseases in the nursery. As a result we have now moved away from the calendar-based spray programme to a more preventative spraying system with an integrated pest management (IPM) approach.

There were several reasons for moving away from the calendar-based spraying approach, these being:

- To minimise environmental impact
- To be safer for the health of people in the nursery
- To reduce the costs of chemicals being used

HISTORY

The basic concepts of IPM have been practiced since the start of human civilisation. However, what really set the ball rolling was a book by Rachel Carson in 1962, "Silent Spring." She addressed a number of issues related to pesticide use in both agricultural settings and home landscapes. Prior to the publication of her book, the application of pesticides was often the only method used to manage insects, mites, and plant diseases. However, continued reliance on pesticides gave rise to resistant pest populations and undesirable environmental effects (Cloyd et al., 2004). The acceptance of IPM as a philosophy and a technology can be traced back to 1970, to the first symposium of agricultural scientists where the concepts, strategies, and tactics of integrated pest management were synthesized and expressed as a philosophy and a set of technologies. The objectives are to manage pests using methods that are economically rewarding, culturally suitable, and environmentally acceptable (National Science Foundation Center for Integrated Pest Management, 2006).

In the United States of America, IPM was formulated into national policy in February 1972 when President Nixon directed federal agencies to take steps to advance the concept and application of IPM in all the relevant sectors. In 1979 President Carter established an interagency IPM Coordinating Committee to ensure development and implementation practices (Biocontrol Reference Centre, 2006).

WHAT IS INTEGRATED PEST MANAGEMENT?

Integrated pest management aims to manage pest populations at an acceptable level while at the same time significantly reducing or eliminating the use of pesticides. Often eradication of a pest is not only impossible but also costly and can have a detrimental effect on the environment. Instead of relying primarily on chemicals, IPM uses a wide range of strategies. These strategies can be identified in the following four-step approach.