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Citation: Parker, B.L., M. Skinner, M. Brownbridge & T. Doubleday. 2008. Greenhouse Manager's Guide to Integrated Pest Management in Northern New England. Entomology Research Laboratory, University of Vermont, Burlington, VT. 91 pp.

ISBN: 0-9752796-0-2

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GREENHOUSE MANAGER'S GUIDE
TO
INTEGRATED PEST MANAGEMENT
IN
NORTHERN NEW ENGLAND

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- August 2008 -

Acknowledgments

This publication was developed in association with the Tri-State Greenhouse Integrated Pest Management Advisory Group. Significant scientific contributions were made by Alan Eaton and Cheryl Smith, University of New Hampshire; James Dill, University of Maine and Cheryl Frank, University of Vermont, Entomology Research Laboratory. Layout and design was done by Michael Bohne, University of Vermont. The photos were provided by James Dill, Alan Eaton, Cheryl Frank, Cheryl Smith, Jack Kelly Clark, University of California; Scott Bauer, USDA, Agricultural Research Service, and Jean L. Williams-Woodward, and Alfredo Martinez, University of Georgia.

Prior to printing, the guide was reviewed by Bruce Watt, University of Maine, Cooperative Extension, Cheryl Smith, and James Dill.

Financial support was received from the USDA, Fund for Rural America, The New Hampshire Plant Growers Association, Vermont Association of Professional Horticulturists, USDA Agricultural Research Service, Vermont IPM Program and the Vermont Extension System.

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FOREWORD

Greenhouse production in Vermont, New Hampshire, and Maine has gained popularity for several reasons, among them: a) a need to diversify crop production to strengthen the economic potential of Northeastern farming systems, b) the increased cost and challenges of maintaining the traditional family farm, and c) increased interest of the public to beautify their homes with greenhouse-grown plants.

It is not an easy matter to grow plants in a greenhouse where a wide range of insect pests and diseases pose a constant threat to production of high quality crops. Both can ruin the most carefully cultivated crops in a few days. Greenhouse ornamentals are purchased for their aesthetic value and thus the public will not buy plants that are infested or ones that show signs of damage. Growers must continually balance the costs of pest management, both economic and environmental, with the demands of their customers.

The University of Vermont places major emphasis on development of integrated pest management (IPM) for growers in this region. No longer is it wise or economically feasible to rely solely on regular pesticide sprays to reduce pest problems. Growers are learning that IPM is a far better approach. It enables them to produce a better crop and often save them money. At the same time, it is better for the environment and protects the health of their workers and themselves. The ultimate goal must be a crop that will satisfy their customers, so they will return for more.

This IPM guide is a valuable addition to the literature currently available. It was written by a team of experts with years of practical experience in greenhouse management. I strongly recommend that you read it from cover to cover and keep it handy for reference during the growing season. It is my sincere hope that it will be of value to you in reducing your losses from insects and diseases and will contribute to increased production and sales of your final product.

Rachel K Johnson

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Grow quality plants with IPM

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INTRODUCTION

In the mid 1940s the chlorinated hydrocarbon insecticides were marketed and rapidly became the “cure all” for any and all insect pest problems. Little did we realize that soon the insect would develop its own strategies for survival. We also did not appreciate the total environmental impact that these compounds would have. Shortly thereafter the organophosphorous and carbamate insecticides were developed. These were more toxic than the chlorinated insecticides but relatively short-lived in the environment.

Chemical insecticides worked well for a while but problems of insect resistance, environmental contamination, hazards to the applicator and the public’s general negative feeling relative to their use became evident. This created a demand for an alternative strategy for the management of insect pests. Thus integrated pest management (IPM) was conceived, drawing together many individual components into a comprehensive approach.

Though each grower may implement IPM differently to accommodate his or her needs and experience, the basic philosophy is the same. IPM is a method of management that “integrates” numerous strategies to maintain or reduce pest populations (insects, diseases, weeds, etc.) to levels where they are not causing serious economic loss or having a significant negative impact upon the environment. Chemical pesticides can be used as part of an IPM program, but only as a last resort, or when other management practices alone are not effective.

The ultimate goal of IPM:
To enable greenhouse growers to produce
high quality plants in a way that is good for
the environment and so customers will be
satisfied and return for more.