

1999 Report on The Comprehensive Thrips/INSV Management Program in Orange and Ulster Counties

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INTRODUCTION:

Since 1992, the educational focus of the Orange -Ulster IPM program has addressed current issues in greenhouse production while facilitating a bi-directional flow of information between growers and Cornell staff. The relationships that have developed have allowed us to identify cooperators with which to demonstrate innovative monitoring systems.

There has been a wide spectrum of growers participating in the scouting program over the past six years. In that time, it has become evident that one of the most destructive pest complexes in the greenhouse is the thrips and the virus it vectors, INSV (Impatiens Necrotic Spot Virus). In 1998 INSV was detected in two-thirds of the greenhouses in the Orange and Ulster Counties IPM scouting program. Several of these have experienced significant crop losses (up to \$5000) to this disease. A series of procedures have been developed by Cornell faculty and IPM staff for managing thrips and INSV in greenhouses. While growers adopted some of the practices, losses to thrips and INSV continued to occur. We suspected that this was at least in part due to the difficulty growers encountered in adopting all of the recommended practices into a comprehensive program. High incidence of INSV and the losses incurred by growers over the past years reinforced the need to continue our educational efforts and conduct additional greenhouse demonstrations. The purpose of the demonstrations was to show growers that following management practices closely and in a timely fashion would help cut their crop losses due to INSV. Also this demonstration would illustrate that savings in potential crop losses would offset the "extra" time spent carrying out these practices.

Three growers experiencing significant thrips and INSV problems were identified as cooperators in a demonstration of a comprehensive thrips/INSV program. This program combined fallow period monitoring, cleanup steps for a tospovirus- infected greenhouse, Total Crop Management, and other Cornell recommendations for thrips/ INSV management. By closely following this program in 1999, two out of three growers experienced no crop losses to INSV. The third grower who did not follow recommendations as closely, did have INSV in the greenhouse, which resulted in a loss of quality and salability of plant material. A cost analysis of INSV/thrips management practices showed that the expense of grower input was lower than the cost of crop losses over previous years. Over all, incidence of INSV was down in 1999. One third of participating growers had INSV infection detected at their operations as compared to two thirds in 1998. Losses in 1999 were down as well with only moderate losses at three operations. The economics of following the recommended practices and grower acceptance of these practices was documented for three growers during the course of a season.

For a printed copy of the entire report, please contact the NYS IPM office at:

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