



2006 - PRIORITIES INTEGRATED PEST MANAGEMENT FOR PRODUCTION OF ORNAMENTAL PLANTS AND TURF

All Ornamental Commodities

1. Documentation of the pest management, economic and environmental impact of IPM, including the gathering of baseline data
2. Development of software to track pest management activities, (e. g. Trac© software <http://www.nysipm.cornell.edu/trac/>)
3. Development and demonstration of wildlife management techniques

Greenhouse IPM Projects

1. Development of IPM strategies and resources for greenhouse crops including flowers, herbaceous perennials, herbs, and vegetable crops and transplants
2. Management of insect pests, particularly thrips and whiteflies, and the diseases they vector.
3. Management of mites, especially study of confounding influences such as newer pesticides being used for other arthropods in the greenhouse
4. Management of root zone problems (especially high soluble salts, fungus gnats, Pythium root rot, and Thielaviopsis)
5. Development of: diagnostic tools; new or refined cultural methods for pest prevention; physical or mechanical approaches for management of greenhouse pests, including weeds, insects, diseases and vertebrates; and computer programs to aid in decision making and record keeping
6. Biological control trials for efficacy and cost-effectiveness of beneficial insects and microbial products
7. Transfer of knowledge to stakeholders through workshops, new fact sheets, and development of electronic media such as websites, grower listserves, and online courses
8. Development and application of Best Management Practices (BMPs) and IPM Elements (see <http://www.nysipm.cornell.edu/elements/>) to promote environmental stewardship by commercial growers
9. Development of IPM strategies and resources for cut flower production in greenhouses and outdoors

Nursery IPM Projects

1. Investigation and practical application of relationships between woody plant phenology and pest management, including modeling host plant susceptibility; predicting pest emergence, incidence and severity; and incorporation into weather-based forecasting systems (e.g. NEWA at <http://newa.nysaes.cornell.edu/>)
2. Pest biology in relationship to pest management
3. Biorational approaches to pest management
4. Development of procedures for pest scouting and sampling
5. Development of thresholds for plant quality, physiological health, and survival
6. Interactions between abiotic stress and pest management
7. Selection and evaluation of resistant/tolerant plant varieties to environmental and biotic stresses (including pathogens, insects, mites, deer, voles, etc.)
8. Evaluation of new strategies for weed management, including use of species or cultivars with competitive ability

Turfgrass IPM Projects

1. Development and application of Best Management Practices (BMPs) and IPM Elements (see <http://www.nysipm.cornell.edu/elements/>) to promote environmental stewardship by commercial growers
2. Development of enhanced methods of biological control of diseases (including nematodes), weeds, and insects
3. Cultural methods of pest control
4. Assessment of disease and insect resistance among turfgrass cultivars
5. Establishing relationships between soil quality and turfgrass health
6. Developing application technologies for reducing the risks associated with pesticides (e.g., reducing groundwater contamination, personal exposure, etc.)
7. Establishment of safety parameters for turfgrass pesticides (e.g. non-target effects, environmental impact quotients)
8. Development and evaluation of turfgrass species and cultivars with superior competitive ability because of growth habit, tolerance of difficult growing conditions, and/or production of allelopathic chemicals
9. Investigation of pest biology and incorporation into predictive weather-based models, such as NEWA (<http://newa.nysaes.cornell.edu/>)