

**Title: Supporting Vegetable IPM in the Northeast through the Vegetable IPM Working Group**

(Project Type: IPM Working Group)

*Summary:*

The mission of the Northeast Vegetable IPM Working Group is to foster the development and use of IPM as a means to achieve ecological and economic sustainability of vegetable farms in the Northeast. Our goals are to:

1. Identify and prioritize regional vegetable and strawberry IPM needs, in particular gaps in research, extension and regulation.
2. Represent the views of vegetable and strawberry farmers and other stakeholders to the Northeast IPM Center.
3. Develop, facilitate, or implement appropriate research and educational projects that address work group priorities.
4. Strengthen partnerships and exchange of information among vegetable farmers, agricultural professionals, and other stakeholders throughout the Northeast region.

The Northeast Vegetable IPM Working Group (Vegetable IWG) was established in 2002 under the umbrella of the Northeast Pest Management Center. The group represents diverse types of vegetable farmers, as well as consultants, University, state agency, and other agricultural professionals from the Northeast Region. Several Vegetable Working Group projects have been funded by the Northeast IPM Center, including a vegetable IPM resource database, a regional Sweet Corn Pest Management Strategic Plan, and a project which is building stronger collaboration with Natural Resource Conservation Service personnel and programs to increase the use of IPM on vegetable farms. The Northeast Vegetable IPM Working Group proposes to continue working to increase the use of IPM practices among vegetable growers, with the associated environmental, health and economic benefits in support of sustaining a thriving and diverse vegetable industry throughout the Northeast. We seek to provide practical and accessible tools that farmers will use to help them implement IPM, and to do that by building new partnerships and strengthening existing ones. This proposal seeks funds to hold an annual meeting in 2006, and to coordinate projects that have been initiated by the working group.

## **Problem, Background and Justification**

The vegetable industry in the Northeast consists of at least 12,000 farms that cultivate and harvest over 370,000 acres of vegetables (2002 Census of Agriculture). These figures do not include potatoes, strawberries, or greenhouse vegetable crops, which are important components on many vegetable farms. Farms range in size from 1 acre to >2000 acres, and vegetables are marketed in various ways -- for processing, through wholesale distributors or direct to supermarkets, as well as retail through farmstands, farmers markets, or Community Supported Agriculture structures. Relative to field crops, vegetables have high value per acre, with gross value ranging from about \$1500 per acre for wholesale processing vegetables to >\$30,000 per acre for intensively grown fresh market crops. Thus, as land values increase and farmers seek higher value crops with direct market potential in order to sustain their farms, farmers often turn from other commodities to vegetable production. Quality demands are high, and effective pest management is essential to meet market demand. Integrated pest management, when implemented through an on-farm monitoring program, has proven that it saves money, reduces health and environmental risks and provides effective control of pests.

The Northeast Vegetable IPM Working Group (Vegetable IWG) was established in 2002 under the umbrella of the Northeast Pest Management Center. The group represents diverse types of vegetable farmers, as well as consultants, University, state agency, and other agricultural professionals from the Northeast Region (Attachment A, 2005 membership list). The group has met annually from 2002 to 2005, and has been actively engaged in defining and tackling priority needs. Several Vegetable Working Group projects have been funded by the Northeast IPM Center, including a vegetable IPM resource database, a regional Sweet Corn Pest Management Strategic Plan, and a project which is building stronger collaboration with Natural Resources Conservation Service personnel and programs to increase the use of IPM on vegetable farms. This proposal seeks to follow through with additional components of the latter project, and undertake two new projects that meet priority needs identified by the working group.

At our 2005 meeting, which took place November 29-30 in Harrisburg PA, we reexamined our mission and goals, and defined them as follows:

### **Mission Statement.**

The mission of the Northeast Vegetable IPM Working Group is to foster the development and use of IPM as a means to achieve ecological and economic sustainability of vegetable farms in the Northeast.

### **Goals of the Northeast Vegetable IPM Working Group**

1. Identify and prioritize regional vegetable and strawberry IPM needs, in particular gaps in research, extension and regulation.
2. Represent the views of vegetable and strawberry farmers and other stakeholders to the Northeast IPM Center.
3. Develop, facilitate or implement appropriate research and educational projects that address work group priorities.
4. Strengthen partnerships and exchange of information among vegetable farmers, agricultural professionals, and other stakeholders throughout the Northeast region.

We adhere to definitions of IPM and the goals expressed in the National IPM Roadmap and the IPM Center's mission statement.

At every meeting we return to a major need that growers face: support at the on-farm level in using IPM in their diversified, complex cropping systems. With the decline in Extension infrastructure fewer farmers have direct access to hands-on pest and management consultations. Private consultants have filled this gap in some areas, but for smaller, isolated farmers and for many parts of the Northeast region, there are no independent crop consultants in vegetable crops. Yet, implementation of Integrated Pest Management practices is a knowledge and labor intensive proposition. If we hope to expand adoption of vegetable IPM, we must address this need.

The Vegetable IWG is exploring ways to fill this gap. One approach is to create tools that growers can access wherever they farm. In an associated proposal we will be seeking funds to publish a Northeast *Vegetable and Strawberry Pest Identification Supplement* that expands the *New England Pest Identification Supplement* to include vegetable and strawberry insects, diseases, weeds and non-pathogenic disorders of the full Northeast region. By maintaining the working group, the funds requested in this proposal will help make it possible to complete such projects.

Another approach are taking to meet IPM needs on the farm is to partner with organizations and programs that have resources at the local level to assist growers in using IPM, and to work with those organizations to enhance the effectiveness of those programs. The Natural Resource Conservation Service was identified since our first meeting as a potential partner, and in our 2004-2005 plan of work we began steps to build that collaboration.

**Vegetable IWG Membership.** Our success depends upon being an engaged, energetic group with membership that rotates on a regular basis. We have agreed that members will serve a three year term, renewable for one term. In 2004-2005, we have welcomed six new members and seen some original members step down, while others continue for a second term. New members include three new farmers, a weed specialist, a plant pathologist, a state IPM coordinator, and a county agent. We are seeking additional farmers, a marketing specialist, and a representative of the Natural Resources Conservation service to join us and attend our 2006 meeting. The new members have provided fresh ideas and maintain diverse representation from around the region, while the original members are providing continuity and the functionality of an established team. Ruth Hazzard (MA) has agreed to continue as Work Group leader. Kathy Murray (Maine Dept of Agriculture) is providing leadership for the NRCS collaboration effort. While it takes time for a group to establish a life of its own, this group is working together effectively, and is well positioned to have a growing impact on regional IPM.

**Current projects of the IPM Vegetable Working Group:**

1. The Vegetable IPM Resource Database is being updated and improved with funding from our 2004-2005 proposal. We will work with one contact in each state to ensure that information is current and accurate. We will work closely with the IPM Center to upload the data and make sure the search procedures are functioning well. When all is in order, we will get the word out to vegetable growers and educators through all of the available Extension channels.

2. The regional Sweet Corn PMSP is in draft stage. We conducted the PMSP stakeholder meeting with representatives from across the region in November 2004. The PMSP draft has been written and was reviewed by the working group at its 2005 meeting. After some further editing it will be sent for review to all those who attended the meeting. Our target date for completion is March 1, 2006.

3. Partnerships with the USDA Natural Resources Conservation Service have been moving forward. We just completed a very successful meeting of NRCS staff, working group members, and IPM specialists with a wealth of regional and national experience (Attachment C). This has led to the identification of further steps to take to encourage use of NRCS programs to support IPM adoption on vegetable farms, and reciprocally, adoption of IPM guidelines to define and include specific conservation goals. We will be organizing on-farm tours to highlight farms that are enrolled in NRCS conservation programs and using these resources to help use IPM. Funding in support of this is sought primarily through a Working Group Priorities proposal; however, there were specific requests to use our regional Sweet Corn PMSP and the sweet corn crop profile as a model. That is, we will include as much information about current growing practices and best management practices that will conserve and protect air, water soil, plants and animals, in line with NRCS conservation goals, in our Sweet Corn crop profile and PMSP.

The Vegetable IPM Working Group has demonstrated an ability to engage and work with representatives from a diverse array of agencies, organizations, independent consultants and the farming community as evidenced by its past successes, including development of a resource database (2004), near completion of a pest management strategic plan (2004-2005), and the successful partnership meeting with NRCS staff, working group members, and IPM specialists.

#### **4b.Objectives and Anticipated Impacts**

##### **Objective 1. Maintain and strengthen the capacity of the Vegetable IPM Working Group to accomplish its mission and goals.**

Our mission and goals are stated above. This proposal will provide capacity to do that work: travel funds to meet in 2006, and administrative funds to coordinate our communications, our membership and our projects. The impact of the working group is, we hope, the sum of the impact of its individual projects plus a bit more.

#### **4c. Approach and Procedures**

- 1. We will maintain regionally representative and diverse membership in the working group.** We will invite new members to fill gaps identified by the group, replace departing members, or bring in expertise that is needed to help with a particular project. By the end of this proposed project period (March 2007) we expect most original members to have completed their term of service. At each year's meeting we will assess needs and make plans for keeping a full membership at between 13 and 15 members, each of whom serves at least one three year term.

2. **We will meet annually to evaluate ongoing projects, review priorities and initiate new projects.** An annual face-to-face meeting strengthens the relationships in the group and makes it possible for us to monitor our current projects, review priority pest management needs, and develop our next work plan. The 2006 meeting will take place November 28-29, 2006. Based on experience, we believe that the optimal amount of meeting time is two days, with one overnight. In the past two years we have combined the working group with meetings for special projects (Sweet corn PMSP in 2004 and NRCS in 2005) but at this point we plan a two-day meeting for 2006. Presence of administrative support, which has been in place since September 2005, has greatly enhanced our ability to function effectively as a group.
3. **Engage stakeholders in review of priority pests and needs.** Critical needs for vegetable IPM and specific pest priorities have been re-evaluated annually and posted on the Center website ([http://www.neipmc.org/work\\_vegepriority.cfm](http://www.neipmc.org/work_vegepriority.cfm)). These are used by scientists in preparation of proposals to address IPM issues in vegetables and by regulators to understand needs. They are also discussed with grower organizations and agricultural professionals, and this feedback is reviewed at each meeting and incorporated into the priorities for the following year.
4. **Develop and disseminate information about the working group and its projects.** In 2006 we will see the completion of two regional projects: the regional sweet corn PMSP and the database of vegetable IPM resources. We will also include articles in the Center newsletter and send one or more press releases or articles to vegetable newsletters throughout the region.

#### **4d. Evaluation Plans**

**Objective 1:** We have instituted an evaluation process at each meeting to review the value and success of each meeting. Continued attendance and engagement of members and addition of new members will also be a measure of success. We will receive direct feedback on regional IPM and pest priorities from 3-5 grower groups per year. Completion of the sweet corn PMSP (with additions of conservation measures) and the Vegetable IPM Resources Database will be measures of success; evidence of use of these for research, extension and regulatory goals will be used to measure further impact. Presence of information about our projects will be evidence of outreach success.