

Columbia Gorge Fruit Growers' PESP Strategy

Describe your Organization's Five-Year Goals Related to Pesticide Risk Reduction

Columbia Gorge Fruit Growers is committed to a continually developing program of Integrated Fruit Production (IFP) in the Mid-Columbia Area of Oregon. Emphasis is on maintaining the economic health of the industry while practicing ecologically sound production methods.

Goal 1 and Tactics

Best Management Practices - Columbia Gorge Fruit Growers (CGFG) is working with local packing houses, chemical suppliers, and the OSU Experiment Station and Extension Service to protect our water resources while ensuring the continued availability of chemical crop protection tools. These Best Management Practices have been developed locally to help minimize the possibility of pesticides and herbicides entering waterways.

In 2002, Hood River Grower-shipper Association (now CGFG) received a grant from American Farmland Trust to create a position for a coordinator of the Best Management Practices Program (BMP). The BMP was a two-year project designed to facilitate the adoption of best management practices for a tree fruit production throughout the Hood River Valley. The BMP Project grant was funded through a cooperative effort of the American Farmland Trust and the U.S. Environmental Protection Agency's Office of Pesticide Programs, with local funds provided by the Hood River Grower-Shipper Association. The goals of the project included:

- Providing tree fruit growers in the Hood River Valley with essential information about recommended management practices related to pesticide use
- Reducing the amount of organophosphate insecticides used in the Hood River Valley
- Protecting and enhancing the quality of natural resources, especially local waterways

Essentially, the Best Management Practices (BMP) Project provided local growers with a centralized source of information related to pesticide application practices and the impacts of pesticide use on the surrounding ecosystem. Through outreach and education efforts, the BMP Project enabled growers to make well informed decisions regarding the implementation of recommended pesticide management practices.

2009 Strategy

We will be reviewing the Best Management Practices notebook, updating and revising information as needed, and promoting this guideline to the growers.

Goal 2 and Tactics

Weather Stations

Columbia Gorge Fruit Growers in partnership with Wy'East RC&D funded a program to expand the existing weather station system. Hood River and Wasco Counties consist of numerous unique micro-climates that result in distinctive pest and disease conditions in individual orchards. This system, which consists of 147 weather stations, assists growers in achieving better control of pests and disease with fewer spray applications.

Through a network of weather stations and a web-based interface (www.ifpnet.com), producers following IFP practices use weather and soil moisture data and pest/disease degree-day models to accurately apply low-toxic pesticides. Low-volume sprayers and buffer zones are also used to bring pesticide contamination in Mid-Columbia waterways to acceptable Department of Environmental Quality (DEQ) standards.

The program encourages growers to reduce the use of broad-spectrum organophosphate (OP) pesticides and replace them with new generation, less toxic pesticides. The new generation pesticides reduce the risk of pollution to land and aquatic resources affecting salmon and other endangered species. The use of less toxic pesticides requires growers to be more precise in the timing of the application of these pesticides because they do not persist in the environment like broad-spectrum OP pesticides.

A network of remote weather stations in orchards allows growers to collect precise weather data to calculate pest and disease degree-day models for specific orchard sites. Using a web-based interface, IFP project participants use the degree-day models and data to make better decisions and precise timed application of these new generation pesticides.

2009 Strategy

For 2009, Wy'East RC&D has submitted a series of articles on the weather stations that will be included in the CGFG newsletter. These articles will serve the purpose of further educating the growers on the benefits of the stations and encouraging their use as a management tool.

In 2009, the stations in Wasco County will be linked to Oregon State University, as the stations in Hood River County were in 2008. This project will provide the users with a more reliable access to useful pest and disease models than was available on the previous site and is funded by CGFG.

Goal 3 and Tactics

Backyard Tree Project

One of the projects that the growers have undertaken in the last few years is a codling moth control program that employs pheromone mating disruption which will allow the phasing out of organophosphate pesticides. One factor that can contribute to external codling moth pressure and have a severe negative impact on the level of control achieved in mating disruption orchards is the presence of unmanaged trees nearby. These may be in an abandoned or under-managed orchard, in a neighbor's yard, or located on unmanaged land. Mated female moths can move into mating disruption orchards from these areas and wreak havoc.

Hood River County Ordinance 149 requires that fruit diseases and pests be controlled on host plants, including fruit trees and non-commercial hosts. If pests are not controlled, the County may require destruction of the crop and/or trees at the owner's expense. The Ordinance is administered by the Weed and Pest Division of the Hood River County Parks and Buildings Department with support from Columbia Gorge Fruit Growers.

For the past three years, CGFG has conducted a door-to-door campaign to educate landowners about the problem and better enforce the county ordinance. This project is currently being funded by CGFG.

2009 Strategy:

- A letter will be sent to each of the identified properties in February, reminding them of the need to maintain their trees pest free
- Of the original 1052 properties identified with fruit trees, there remain 375 properties with pear and/or apple trees that have not been removed. Each of these properties will be visited and then receive a follow-up letter
- CGFG will continue to offer coupons for the removal of trees and information on maintaining trees pest free
- Follow-up for compliance verification through Hood River County

Goal 4 and Tactics

Codling Moth Project

In 2007, a collaborative project was initiated implementing an integrated, area wide program for codling moth management in the Dee Flat, Oregon with participation from Dee Flat fruit growers, Hood River area pest control advisors (PCAs), Columbia Gorge

Fruit Growers, and Oregon State University Mid-Columbia Agricultural Research and Extension Center (OSU-MCAREC) personnel. A primary objective of this project was to aid the transition from codling moth management based primarily on OP insecticides to integrated control programs with decision making based on the following IPM principals:

- pest and beneficial monitoring
- pest population thresholds
- pest phenology
- least disruptive treatment options
- area-wide implementation

Grant funds were critical to implementing the comprehensive codling moth monitoring program which consisted of:

- pheromone trapping using one trap per five acres of pear and apple orchard
- fruit sampling between the first and second generation of codling moth
- fruit evaluation at harvest All of the growers utilized mating disruption.

2009 Strategy

Columbia Gorge Fruit Growers is funding the third year of the project. CGFG is also applying for a grant to extend this project to another 300 acre region in Hood River Valley.