

**Monitoring Weather Data and Insect Activity to Build a Data Base  
and Assist in Spray Recommendations for Washington County  
Orchards  
Phase II**

**Rick Heflebower, Extension Agent, Horticulture**  
Utah State University/Washington County Extension Service  
197 E. Tabernacle Street, St. George, Utah 84770  
Phone: 435-652-5815  
Fax: 435-652-5870  
E-mail: rickh@ext.usu.edu

**Project Leaders:**

Rick Heflebower, Extension Agent, Horticulture  
Diane Alston, IPM Coordinator, Utah State University  
Bud Scow, Commercial Orchardist, Hurricane, Utah  
Dave Waters, Commercial Orchardist, New Harmony, Utah

**Situation Statement:**

The proper timing of insecticide sprays is essential to the production of clean, marketable fruit. The climate and topography in Washington County are different than anywhere else in the state. Although fruit production is not on a large scale, there remain some productive orchards in the area. The climate is well suited to the production of peaches and apricots. The northern part of the county is more suited to apple production. Growers wrestle as to when to apply insecticide materials to control Peach Twig Borer and Codling Moth.

**Objectives:**

I propose continuing to collect weather data as well as monitoring Peach Twig Borer activity during the 2003 growing season (Scow Orchard). This would allow us to compare the new information with the data collected in 2002. I would like to purchase an additional weather station that could be located in the northern part of the county (New Harmony). This station would be placed in an apple orchard. Pheromone traps would be used to monitor Codling Moth activity.

**Procedures:**

Weather data would be collected and insect monitoring would continue at Scow Orchards during the 2003 season. A new "Watch Dog" weather station would be purchased and placed in the New Harmony area. Pheromone traps would be monitored by growers in both locations to determine biofix. Weather data would be downloaded to a laptop computer every two weeks. During periods that are critical for spray timing, data will be downloaded more frequently.

**Budget:**

Weather Station	\$1,200
Pheromone Traps	\$ 150
Travel	<u>\$ 200</u>
<b>Total</b>	<b>\$1,550</b>

**Summary:**

Until recently, there has been little documentation monitoring pest activity in Washington County orchards. Last year, we were able to identify five generations of Peach Twig Borer and assist with spray recommendations at Scow Orchards in Hurricane, Utah. During the 2003 season, we hope to include an apple orchard and begin building a data base of weather and insect information that will help in timing sprays. We have plans to hold an educational meeting for growers early this Spring. Efforts will be made to make the trapping information and spray recommendations available to growers during the season.

With the phase out of Guthion and Imidan, it is important that growers have a system in place to monitor insect pests and know how to time sprays so they are most effective. As the current products are phased out, it will be critical that universities and chemical companies work with growers to help insure a transition to new products that will be effective. The understanding of pest population dynamics and effective treatment times will be valuable in helping growers produce high quality crops and remain profitable.