PMTP Field Days

The WSU Pest Management Transition Project (PMTP) and Tree Fruit Extension Team will be holding a series of field days in early summer 2009 focusing on apple pest management. Training on monitoring, biological control, and sprayer technology will be offered at each of the two-hour events (see box to the right for dates and locations). All field days will begin at 3:00 PM. For more information visit the PMTP website at: http://pmtp.wsu.edu/tours; send email to pmtp.info@wsu.edu; or call the WSU Tree Fruit Research & Extension Center at 509-663-8181. See you there!

Monitoring

A monitoring plan for pests that utilizes degree-day models, trapping, and visual inspections can improve the efficiency of pesticide use by optimizing application timing and identifying specific areas that need, or do not need, pest controls. Degree-day models use site-specific temperature data to predict insect development, which is important when timing applications of pesticides that are effective against a specific life stage. A good trapping system measures the density and distribution of the population, which can help with decisions about the type of controls that will be necessary and the size of the area that will need to be treated. Visual inspections provide confidence in pest control programs and alert growers to problem areas and ‘hot spots’. Tactics and approaches for building a monitoring plan will be a focus of this year’s field days.

Biological Control

New pesticides have not all been as ‘soft’ or selective as had initially been hoped. Enhancing Western Orchard Biological Control (EWOBC) is a collaborative project between Washington State University, USDA-ARS, Oregon State University, and the University of California at Berkeley. The team’s focus is to improve the stability of IPM programs in apple, pear, and walnut orchards by enhancing biological control. Among the objectives of the EWOBC are: evaluation of the effects of newer pesticides on key natural enemies, characterizing the seasonal biology of key natural enemies, and evaluating methods for monitoring natural enemy presence and abundance over time. The role of biological control, identification of key natural enemies, and EWOBC progress on developing monitoring tools for key natural enemies will be part of the summer field days.
The WSU Pest Management Transition Project is working with Washington apple growers to facilitate the adoption of new pest control technologies as azinphos-methyl is phased out. Though there have been many new pesticides registered as alternatives to azinphos-methyl, integrating these new pesticides has brought new challenges. PMTP is working to overcome these challenges through a comprehensive program of education, training, and assessment. The summer field days offer an opportunity to demonstrate IPM practices in the field that will help tree fruit growers build successful pest management programs. Tree fruit producers, pesticide applicators, and field representatives are invited to come and learn about pest management practices and current pest management research from leaders in tree fruit research and extension.

Improving deposition within the orchard canopy while reducing drift can save money and provide better pest control. A high-tech instrument designed to assist growers in improving pesticide application efficiency will be demonstrated at PMTP field days. The instrument has hoses that are attached to the sprayer nozzles, which confines any nozzle output to the test system. Spray that is discharged by the individual nozzles is carried through the hoses to collection tubes where sensors measure the nozzle output. The unit also conducts an analysis of the vertical distribution of spray during a calibration session. The instrument consists of a 4-foot wide by 15-foot tall screen with spray collectors to catch the nozzle discharge. The spray emitted from the sprayer onto the stand is collected in beakers with sensors that measure the amount of spray applied at each height above the ground. The instrument will be available, by appointment, for calibrating grower sprayers. Visit the PMTP website (http://pmtp.wsu.edu/tours) for more information about the calibration equipment and schedule.