## Impacts of the Elimination of Azinphos-methyl in the Apple Industry and Economy of Washington State

**Principal Investigator:** Dr. Thomas L. Marsh

Co-Investigators: Dr. Andrew Cassey; Ms. Suzette P. Galinato; and Mr. Justin Taylor

Collaborators: Dr. David Holland; Dr. Jay Brunner

## Problem addressed

Apples are the leading agricultural commodity in Washington, producing \$1.7 billion in 2007. The ban of azinphos-methyl (AZM) is of concern to the Washington State apple industry specifically, but also to the overall Washington economy. AZM is an organophosphate pesticide currently used to control the codling moth, which is the leading pest in western apple production. The regulation creates a vital challenge for the apple industry as farmers strive to control the codling moth while transitioning from AZM practice to safer pesticides or alternative methods of pest control.

## Goal

The goal of this project is to estimate the economy-wide impact of eliminating AZM in favor of a new pest management alternative in apple production in Washington State.

## **Expected Results**

This study is the first to focus on the elimination of AZM use in Washington State, which accounts for about 58% of the U.S. apple production in 2007 (and 65-75% of the fresh market). This study is also the first to use a computable general equilibrium (CGE) model for estimating the direct, indirect and induced impacts of the AZM ban on the State's apple industry and other economic sectors. Our expected results include the estimates of changes in income and employment for Washington's apple industry and for Washington State in general.