## Section 4. Chemical Control/New Products

## CONTROLLING CODLING MOTH WITH WATER

Alan Knight and Brad Christianson ARS, USDA, 5230 Konnowac pass Rd., Wapato, WA 98951

Studies were conducted to examine two aspects of using overhead watering to control codling moth. A season-long program using particle films for the first generation followed by overhead watering with a fog system was evaluated in replicated 0.7 acre plots treated with Isomate C+. Second, the use of microsprinklers run for 4, 8, and 12 h per day for the second generation was examined in both Golden Delicious and Fuji plots. Fruit injury from codling moth at harvest averaged 1.1% in the particle film/water treatment versus 6.8% in the untreated check. Injury in the plots treated with a half season of the particle film alone averaged 2.1% and injury in plots treated only with water during the second generation averaged 3.6%. Fruit injury in plots treated with overhead sprinklers were lowest in the 4 hour timing (6 - 10PM daily) when averaged across both cultivars (4.9%) compared with 35.0% injury in the untreated check. Deposits of minerals occurred in all water-treated plots even though a sulphur burner was installed. Unfortunately, the sulfur burner was not turned on until two weeks after the study began. Studies for next year will evaluate the use of two hour applications and the use of cycling.