

## **INTEGRATING PEST MANAGEMENT PRACTICES IN EASTERN OREGON TO CONTROL THE INVASIVE POTATO TUBER MOTH**

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Potato tuber moth (PTM), *Phthorimaea operculella* (Zeller), is one of the most important potato pests worldwide. Typically found in tropical and subtropical regions, PTM was first detected in Oregon in 2002. By 2005, PTM spread extensively across Oregon and Washington and currently threatens about 200,000 acres of potatoes valued at more than \$500 million. Because it is a new pest in this region, information on the distribution and biology of PTM in the Pacific Northwest is incomplete, hindering the development and implementation of effective control measures. We are developing integrated management practices to control this pest in the region. We will present data from a region-wide pheromone trapping network that began in 2004 and results from our cultural and chemical control trials. Our observations indicate that PTM has increased its geographical range in 2005, although numbers in late fall and early winter of 2005 are lower than the previous year in most areas. We also found that: several pesticides are effective at reducing PTM damage; cultural practices, such as irrigation after vine kill and the use of certain desiccants, reduce PTM tuber damage; and little to no damage occurs in tubers when the foliar canopy is green.