

Biology/Phenology

Without those 'damn' apples!

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Keywords: Apples, pest management, western poplar clearwing moth, *Paranthrene robiniae*, carpenterworm moth, *Prionoxystus robiniae*, Poplar willow borer, *Cryptorhynchus lapathi*, Dimilin, diflubenzuron, Nolo, *Nosema locustae*, Admire, chloronicotinyls

Abstract: Consider how much fun orchard pest management research could be if you did not have to worry about damage to the fruit and you were protecting only the trees themselves. We are using pest management strategies developed in Pacific Northwest orchard systems to protect hybrid poplars in eastern Oregon and Washington that are being attacked by wood burrowing lepidopteran and coleopteran pests. Here we report on the biology/phenology of three pests: Western Poplar Clearwing Moth, *Paranthrene robiniae* (Sesiidae), Carpenterworm moth, *Prionoxystus robiniae* (Cossidae), and the Poplar Willow Borer, *Cryptorhynchus lapathi* (Curculionidae). We share two years of pheromone trap data, mercury-vapor light and pit-fall trapping. We have registered Dimilin® and Nolo® for use against two species of hoppers, *Camnula pellucida*, the smaller of the two, and the Two-striped Grasshopper, *Melanoplus bivittatus*, and demonstrated the successful use of Admire® against *Phylloxera popularia* (Pergande).