Biology/Phenology

Polyphagy in codling moth neonates

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Abstract: Previously we reported that codling moth neonates are capable of feeding and development on apple leaves solely (Pszczolkowski et al. 2002. Annals of Entomological Society of Amer. 95:603-607). Recently we investigated codling moth potential for oviposition, feeding, and development on foliage of 10 other species. Foliage of sweet cherry, pear, plum, American walnut, hawthorn, English walnut, maple, birch, oak, and linden was used in experiments. In general, codling moth females laid eggs on foliage of each species, even if given apple foliage as optional oviposition substrate. Codling moth neonates successfully molted to second instar when fed leaves of all tested species, except for maple. Percentage of mortality, duration of the first instar, and maximum larval body weight varied depending on the foliage tested. Our findings contribute to better knowledge of codling moth neonate biology and raise issue of potential codling moth hosts that would be an alternative to apple.