Infestation of apricot by *Rhagoletis indifferens* Curran (Diptera: Tephritidae) in Washington state and British Columbia

Western cherry fruit fly, *Rhagoletis indifferens* Curran 1932 (Tephritidae), is native to the western United States and British Columbia in Canada (Bush 1966) and is known to attack and develop in the fruit of 12 plant species. Ten of these plants are in the genus *Prunus* (Rosaceae), with the four most commonly used or well known being in the subgenus *Cerasus*: sweet cherry, *Prunus avium* (L.) L., sour cherry, *Prunus cerasus* L., mahaleb cherry, *Prunus mahaleb* L. (Wilson & Lovett 1913; Frick et al. 1954), and bitter cherry, *Prunus emarginata* (Doug. ex Hook.) D. Dietr., the fly’s presumed ancestral host (Curran 1932) (subgenera based on USDA 2010). Two host plants belong in the subgenus *Padus*: choke cherry, *Prunus virginiana* L. (Frick et al. 1954), and European bird cherry, *Prunus padus* L. (Yee & Goughnour 2008); one in the subgenus *Laurocerasus*: cherry laurel, *Prunus laurocerasus* L. (Yee & Goughnour 2005); and three in the subgenus *Prunus*: Japanese plum, *Prunus salicina* Lindl., Pacific plum, *Prunus subcordata* Benth. (Ellerton 1961), and cherry plum, *Prunus cerasifera* Ehrh. (Yee & Goughnour 2008). In addition, *R. indifferens* infests black hawthorn (Rosaceae), *Crataegus douglasii* Lindl., and cascara, *Rhamnus purshiana* DC. (Rhamnaceae) (Yee & Goughnour 2005). Although *R. indifferens* is essentially an oligophagous species, its use of 12 plant species as developmental hosts shows that the fly has the plasticity to infest a wide range of plants when its more common hosts are not available. Here we report that *R. indifferens* in nature infests yet another plant, apricot, *Prunus armeniaca* L., an economically important species in the subgenus *Prunus*.

On 30 July 2009, a homeowner brought to Washington State University Extension personnel some apricot fruit from a backyard tree (46°03’18.68” N, 118°20’10.93” W) in Walla Walla, Washington (Figure 1) that were infested with three unidentified larvae. On 10 August 2009, we collected samples of ripe to very ripe fruit (indicated by their softness and red blush) from this tree and from a second backyard apricot tree 267 m away. Fruit was collected both from within the canopy and the ground beneath, for totals of 2426 and 442 fruit from the first and second tree, respectively. On 13 and 17 August 2009, apricots were collected from the canopies of and the ground beneath seven unmanaged trees in yards or roadides found at random over a 29 km distance (center, approximately 46°34’14.38” N, 120°41’21.71” W) in and slightly west of Yakima, Washington (Figure 1). From 55–556 fruit were collected per tree, for a total of 2265. Fruit were abundant on Walla Walla and Yakima trees and were smaller than typical marketed apricots. Apricots from both sites were placed on hardware cloth on tubs. The tubs were checked for larvae or puparia at least once a week for 1.5 months. Puparia were stored in moist soil in 32-ml cups. After 1 week at ~22 °C, puparia were placed at 3–4 °C for 6 months, after which they were transferred to ~27 °C and a 16 L:8 D photoperiod for adult emergence.

Similarly, on 5 August 2009, a homeowner in Kamloops, British Columbia (Figure 1), contacted staff of the Pacific Agri-Food Research Centre (PARC)