Could *Harmonia conformis* be an important predator of *Bactericera cockerelli*?

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The tomato-potato psyllid (TPP), *Bactericera cockerelli*, is a new major pest of solanaceous plants in New Zealand. Both nymphs and adults may cause damage to plants by feeding on leaves and stems, and by also transmitting a bacterial pathogen, *Candidatus Liberibacter solanacearum*. TPP infestations affect the quality and yield of important crops such as potatoes, tomatoes, capsicums and tamarillo. Existing natural enemies of insect pests in these crops may be important in controlling TPP, particularly in winter and spring when TPP populations are low. In confined no-choice cage tests in the laboratory, it was established that all life stages of *Harmonia conformis* readily eat all life stages of TPP. *Harmonia conformis* was tested in choice trials to assess predation of TPP when offered an alternative food source, green peach aphid (GPA), *Myzus persicae*. Predators were offered equal numbers of TPP and GPA, ranging from 25 to 50 per species. Larvae and adults of *H. conformis* ate all life stages of TPP, even when other food (GPA) was available. This study is part of a larger project, partly funded by Horticulture Australia (HAL), investigating the potential effectiveness of selected predators against TPP.

Seasonal sex ratio of *Bactericera cockerelli* in potato and tomato crops in Hawke's Bay and Canterbury

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Since its discovery in New Zealand in 2006 the tomato/potato psyllid (TPP), *Bactericera cockerelli* (Sulc) (Hemiptera: Trioizidae), has been regarded as a significant pest of solanaceous crops in the horticultural industry. To date there is little knowledge of the population dynamics of male and female TPP in the field. An understanding of these dynamics will aid in the potential use of traps as pest management tools. During the 2010–11 growing season, weekly yellow sticky trap catches were used to assess the male:female sex ratio of TPP in a total of nine tomato and potato crops in Hawke's Bay and mid Canterbury. More male TPP were caught on traps at all nine sites throughout the season. Furthermore the TPP male:female ratio was highest early in the season. This male-biased dominance may suggest several things: an uneven proportion of males compared with females in the population, that male TPP are more attracted to the hue of yellow than females, an increased activity by males as a consequence of mate-searching behaviour and/or a decrease in activity by egg-laying females.