## 9.15 Suitability of *Diaphorina citri*, *Toxoptera citricida*, and *Aphis spiraecola* as Prey for *Hippodamia convergens*

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The convergent lady beetle, *Hippodamia convergens* Guérin-Méneville, is an important predator of soft-bodied insect pests. Some citrus producers in Florida initiated releases of commercially available *H. convergens* beetles in their groves mainly against *D. citri*. However, detailed investigations on the performance of *H. convergens* on diets of *D. citri, T. citricida,* or *A. spiraecola* were lacking. Therefore, our objective was to evaluate preference, survival, development, and reproduction of *H. convergens* on these three Homopteran pests of citrus. Larvae preferred *D. citri* over *T. citricida* in two-way choice tests and consumed more *D. citri* than *T. citricida* or *A. spiraecola* in no-choice tests during the first 6 hours of encounters in test arenas. Adults preferred *T. citricida* over *A. spiraecola* in two-way choice tests but consumed equal numbers of all three species in no-choice tests. Development times of larvae at 25.5 ± 0.05°C averaged 11.5 ± 0.9 days on *A. spiraecola,* significantly longer than a cumulative average of 8.4 ± 0.4 days on other diets that were equally suitable. Larval survival and pupation times did not differ among diets. Females lived longer than males irrespective of diet, and there were no statistically significant differences among psyllid and aphid diets for fecundity or fertility of beetles. Thus, *D. citri, T. citricida,* and *A. spiraecola* are all suitable hosts for *H. convergens*. However, we do not yet know how these beetles will respond in the Florida citrus environment.