

**Olfactory Response by the Aphidophagous Gall Midge,
Aphidoletes aphidimyza to Honeydew from
Green Peach Aphid, *Myzus persicae***

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Female adults of the aphidophagous gall midge, *Aphidoletes aphidimyza* (Rondani), showed olfactory response to honeydew excreted by green peach aphid, *Myzus persicae* (Sulzer), under laboratory conditions. The response was elicited only by treatments with honeydew, whereas aphids, aphids with pepper plants or leaves, and pepper plants or leaves were not attractive to the midges. Dose dependent responses were observed using whole honeydew, honeydew volatiles extracted in pentane, and honeydew volatiles captured on Porapak Q®. When honeydew was eluted with three sequential pentane washes a positive response by the midges was observed only for the first wash. Female midges laid more eggs on pepper plants infested with higher densities of *M. persicae*. Olfactory response by midges to honeydew is discussed with respect to hostprey location.