

The Argentine ant, *Linepithema humile* (Hymenoptera: Formicidae: Dolichoderinae) is sensitive to semiochemicals involved in the spacing behaviour in the bird cherry-oat aphid *Rhopalosiphum padi* (Sternorrhyncha: Aphididae)

Córdova-Yamauchi, Leslie

Gianoli, Ernesto

Quiroz, Andrés

Niemeyer, Hermann M.

The behavioural response of an aphid-tending ant, the Argentine ant *Linepithema humile*, to semiochemicals related with spacing behaviour in the aphid *Rhopalosiphum padi* (L.) was used evaluated. The compounds involved were 6-methyl-5-hepten-2-one (MHO), 6-methyl-5-hepten-2-ol (MHOH), and 2-tridecanone (2-T). Hexane solutions of these semiochemicals either singly or mixed, and extracts obtained by trapping volatile compounds from wheat seedlings either alone or infested with two different densities of aphids were used as stimuli in olfactometric bioassays. Ants showed attraction to volatile extracts from plants infested at both densities, and slightly preferred volatile compounds from lightly over heavily infested plants in a choice tests. On the other hand, while a dose-dependent repellence response was elicited by the naturally-occurring mixture of MHO, MHOH and 2-T, single compounds did not elicit significant responses in olfactometric bioassays. The function of these semiochemicals