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ABSTRACT BOOK
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O2 - Effect of exogenous application of methyl jasmonate to corn seedlings on the orientation of two vectors (Hemiptera: Delphacidae) of Mal de Río Cuarto virus

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Delphacodes kuscheli Fennah and *Peregrinus maidis* (Ashmead) (Hemiptera: Delphacidae) are vectors of Mal de Río Cuarto Virus (Reoviridae: Fijivirus), one of the most important diseases that affects corn production in Argentina. These planthopper species have wing polymorphism, producing macropteran and braquipteran forms depending on environmental conditions. Macropteran winged forms are usually responsible for migrating to new crops and establishing new colonies. In this study, we examined the effect of priming jasmonate-mediated plant defenses on the olfactory response of these planthoppers. Macropteran and brachypteran females of both species were tested separately. An aqueous solution of Methyl jasmonate (MeJA) (100 μ M+0,1% TWEEN 80) was sprayed on V2-V3 plants 24 hs before the assays to obtain primed plants and a 0,1% TWEEN 80 aqueous solution was used as control treatment. Head-space samples of plant volatiles were collected and analyzed by GC/MS. MeJA-treated plants versus control plants were offered as odor sources in a two-way olfactometer. The macropterous forms of *P. maidis* exhibited a preference for control plants over MeJA-treated plants ($p=0,02$), whereas the brachypterous forms did not show any significant preference between the two treatments. *D. kuscheli* planthoppers, whether macropterous or brachypterous, did not display a significant preference for any of the treatments, however most of the macropterous females made a choice for the control plants over the MeJA-treated ones ($p=0,07$). MeJA-treated plants released significantly more volatiles than the control treated plants, and the volatile blend was dominated by indol, linalool and other sesquiterpenes (TMTT, B-farnesene, B-elemene and caryophyllene), that were absent in the odors released by control plants. These findings suggest that priming jasmonate-mediated defenses in corn plants may deter macropteran delphacid females from settling on them.