

## Neem (*Azadirachta indica*) Seed Kernel Extracts and Azadirachtin as Oviposition Deterrents against the Melon Fly (*Bactrocera cucurbitae*) and the Oriental Fruit Fly (*Bactrocera dorsalis*)

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Neem (*Azadirachta indica* A. Juss.) seed kernel (NSK) extracts, viz., NSK aqueous suspension (NSKS), ethanolic extract of NSK (EtOH. NSK), hexane extract of NSK (neem oil), ethanolic extract of the hexane extract (EtOH. oil) and acetone extract of deoiled NSK powder (Acet. DNSKP) at 1.25–20% concentrations, and pure azadirachtin at 1.25–10 ppm, were evaluated as oviposition deterrents to *Bactrocera cucurbitae* (Coq.) and *B. dorsalis* Hendel. NSKS at  $\geq 5\%$  under choice test conditions, and at all concentrations ( $\geq 1.25\%$ ) in no-choice tests significantly deterred oviposition in both species. Similarly, EtOH. NSK was significantly active at all the concentrations tested for both species in choice and no-choice tests. However, with neem oil and EtOH. oil sensitivities of the two species differed considerably. Both extracts deterred oviposition by *B. cucurbitae* at all the concentrations tested under both choice and no-choice test conditions. On the other hand, with *B. dorsalis*, neem oil was significantly deterrent only at 20% in both test regimes and at 5% and 20% for EtOH. oil under choice and no-choice test conditions, respectively. Acet. DNSKP significantly deterred oviposition by both species at all concentrations tested. Azadirachtin failed to deter oviposition in either species.

KEY WORDS: Neem seed kernel extracts; azadirachtin; oviposition deterrent effect; *Bactrocera cucurbitae*; *Bactrocera dorsalis*.

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