

Effect of ursolic acid from epicuticular waxes of *Jacaranda decurrens* on *Schizaphis graminum*

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Ursolic acid from *Jacaranda decurrens* showed toxicity and feeding deterrence towards the greenbug *Schizaphis graminum*. Biological activity was determined by analyzing ursolic acid effects on the survival, reproductive index, and population growth rate of the greenbug. Survival and reproductive index decreased in direct proportion to ursolic acid content in the diet. The population growth rate decreased markedly when the aphids were fed on barley leaves sprayed with ursolic acid dissolved in DMSO, in comparison to leaves sprayed only with DMSO. The feeding behavior of the greenbug was also affected by ursolic acid. Ingestion time on diet with 0.1 mM was reduced about 30% in relation to the ingestion time on control diet. © 1992, American Chemical Society. All rights reserved.