

# Effects of Limonoids from *Cipadessa fruticosa* on Fall Armyworm

Andreia P. Matos, Ana C. Leite, Luciane G. Batista-Pereira, Paulo C. Vieira, João B. Fernandes\*, and Maria Fátima das G. F. da Silva

Departamento de Química, Universidade Federal de São Carlos, Caixa Postal 676, CEP 13565–905, São Carlos – SP, Brazil. Fax: +55–16–33 51–83 50.  
E-mail: djbf@power.ufscar.br

\* Author for correspondence and reprint requests

Z. Naturforsch. **64c**, 441–446 (2009); received October 14/December 9, 2008

Six mexicanolide limonoids isolated from the dichloromethane extract of the fruits of *Cipadessa fruticosa* Blume (Meliaceae) were evaluated against *Spodoptera frugiperda* (J. E. Smith). Gedunin was used as a positive control. When incorporated into an artificial diet of neonates at 50.0 mg kg<sup>-1</sup>, febrifugin A showed 73.3% mortality. All the compounds showed moderate insecticidal activity, except for ruageanin A, when compared with the control. Febrifugin also showed growth inhibition and antifeedant activities (at 100.0 mg kg<sup>-1</sup>). The correlation between the insecticidal activity of the isolated compounds and their chemical structure was discussed.

*Key words:* Limonoids, *Cipadessa fruticosa*, *Spodoptera frugiperda*