

Lipophilic Compounds from the Femoral Gland Secretions of Male Hungarian Green Lizards, *Lacerta viridis*

Renata Kopena^a, Pilar López^b, and José Martín^{b,*}

^a Behavioural Ecology Group, Department of Systematic Zoology and Ecology, Faculty of Science, Eötvös Loránd University, Pázmány Péter s 1/C, H-1117 Budapest, Hungary

^b Departamento de Ecología Evolutiva, Museo Nacional de Ciencias Naturales, CSIC, José Gutiérrez Abascal 2, 28006 Madrid, Spain. Fax: 34-91-5 64 50 78. E-mail: Jose.Martin@mncn.csic.es

* Author for correspondence and reprint requests

Z. Naturforsch. **64c**, 434–440 (2009); received February 27, 2009

In spite of the importance of chemical signals (pheromones) in the reproductive behaviour of lizards, only a few studies have examined the role of specific chemical compounds as sexual signals. The secreted chemicals vary widely between species but whether this variation reflects phylogenetic or environmental differences remains unclear. Based on mass spectra, obtained by GC-MS, we found 40 lipophilic compounds in femoral gland secretions of male green lizards (*Lacerta viridis*), including several steroids, -tocopherol, and esters of *n*-C₁₆ to *n*-C₂₀ carboxylic acids, and minor components such as alcohols between C₁₂ and C₂₀, squalene, three lactones and one ketone. We compared these chemicals with those previously found in other closely related green lizard species, and discussed how phylogenetical differences and/or environmental conditions could be responsible for the differential presence of chemicals in different lizard species.

Key words: *Lacerta viridis*, Waxy Esters, Steroids, Tocopherol