

Age Related Differences in Lipophilic Compounds Found in Femoral Gland Secretions of Male Spiny-footed Lizards, *Acanthodactylus erythrurus*

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Although chemoreception plays an important role in social organization of many lizards, only a few studies have examined the chemicals found in secretions used for intraspecific communication. We report the composition of the secretion of the femoral glands of males of the spiny-footed lizard (*Acanthodactylus erythrurus*). On the basis of mass spectra, obtained by GC/MS, we identified 45 lipophilic compounds, including several alcohols ranging from 10 to 29 carbon atoms (mainly hexacosanol and tetracosanol), steroids (mainly cholesterol and dehydrocholesterol), *n*-C₉ to *n*-C₂₀ carboxylic acids, esters of carboxylic acids, and minor components such as lactones, ketones, squalene and α -tocopherol. Some of these compounds are reported for the first time in lizards. Adult and subadult males differed in the composition of secretions, with C₉ to C₁₅ carboxylic acids being more abundant in younger than in older lizards, whereas C₁₆ to C₂₀ carboxylic acids were more abundant in older lizards. Also, older lizards had significant lower proportions of cholesterol and campesterol but higher proportions of dehydrocholesterol.

Key words: *Acanthodactylus erythrurus*, Femoral Glands, Spiny-footed Lizards