

# Chemical Compounds from the Preanal Gland Secretions of the Male Tree Agama (*Acanthocercus atricollis*) (Fam. Agamidae)

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Chemical signals have an important role in the reproductive behaviour of many lizards. However, the compounds secreted by their femoral or preanal glands, which may be used as sexual signals, are mainly known for lizard species within the Scleroglossa clade, whereas compounds in secretions of lizards within the Iguania clade are much less studied. Based on mass spectra, obtained by GC-MS, we found 60 lipophilic compounds in preanal gland secretions of the male tree agama (*Acanthocercus atricollis*) (fam. Agamidae), including steroids (mainly cholesterol, cholest-3-ene, and some of their derivatives), fatty acids ranging between  $n\text{-C}_{12}$  and  $n\text{-C}_{18}$  (mainly hexadecanoic and octadecenoic acids), ketones from  $n\text{-C}_{17}$  to  $n\text{-C}_{25}$ , and other minor compounds, such as tocopherol, squalene, waxy esters, and furanones. We compare the compounds found with those present in other lizard species and discuss their potential function in social behaviour.

*Key words:* Steroids, Fatty Acids, Ketones, Lizards