

# Testing the functionality of precloacal secretions from both sexes in the South American lizard, *Liolaemus chiliensis*

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## Resumen

The behavior of lizards can be highly influenced by chemical senses. The most studied pheromonal sources in lizards has been the femoral and precloacal gland secretions, although studies have been focused on male secretions, probably because these glands are usually only present in males or are poorly developed in females when they are present. Here, we aimed to study in *Liolaemus chiliensis*, one of the few *Liolaemus* species in which females have precloacal glands, if female precloacal secretions convey information. We recorded the response of both sexes to secretions from females and males, as well as to control (solvent). The lizards started to explore the secretions sooner than the control. Both sexes moved more when exposed to female secretions than to the control, and males, but not females, explored female secretions more than the other scents. These results suggest that volatile compounds of the secretions allow lizards to recognize the presence of conspecifics, and, at least for males, these trigger the exploration of non-volatile compounds of the secretions that may reveal the sex of the individual that deposited them. This is the first study that explores the response to female precloacal secretions in *Liolaemus*, and data indicate that the female secretions of *L. chiliensis* contain relevant information for social interactions.

## Palabras clave

**Palabras clave de autor:** [chemical signal](#); [epidermal glands](#); [Liolaemidae](#); [sexual recognition](#); [Squamata](#)

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