

# The Response of Two Liolaemus Lizard Species to Ash from Fire and Volcanism

Por: [Mora, M](#) (Mora, Marta)<sup>[1]</sup>; [Labra, A](#) (Labra, Antonieta)<sup>[1,2]</sup>

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## Resumen

Fires and volcanic eruptions produce ash that may negatively affect survivors of the disturbances themselves. Therefore, animals are expected to avoid areas covered by ash when possible. We tested this prediction by determining the substrate selection, ash vs. soil, in two insectivorous Liolaemus lizard species. We exposed each species to the type of ash it is most likely to encounter in its habitat: fire ash for Liolaemus lemniscatus and volcanic ash for Liolaemus pictus. We also determined the ability of these species to track insect scents in ash, as the effectiveness of scent tracking, and hence the ability to find food, may be reduced in ash. Contrary to our expectations, both species explored ash more than soil, and they were able to detect insect scents in ash. We concluded that at least shortly (e.g., days) after a disturbance involving ash production, surviving lizards may not avoid ash that may have negative impact on their health. Lizards would be able to find insects in substrates covered by ash by tracking their scents, however, suggesting that starvation may not necessarily be an immediate cause of mortality after a fire or a volcanic eruption.

## Palabras clave

**KeyWords Plus:** [PHYMATURUS-SPECTABILIS](#); [VISUAL-DISPLAYS](#); [CENTRAL CHILE](#); [WEST-INDIES](#); [SHORT-TERM](#); [PATAGONIA](#); [ERUPTION](#); [SURVIVAL](#); [BEHAVIOR](#); [CLIMATE](#)

## Información del autor

**Dirección para petición de copias:** Labra, A (autor para petición de copias)

+ Univ Chile, Fac Med, Inst Ciencias Biomed ICBM, Lab Neuroetol, Programa Fisiol & Biofis, Santiago, Chile.

**Dirección para petición de copias:** Labra, A (autor para petición de copias)

+ Univ Oslo, Ctr Ecol & Evolutionary Synth, Dept Biosci, Oslo, Norway.

**Direcciones:**

+ [ 1 ] Univ Chile, Fac Med, Inst Ciencias Biomed ICBM, Lab Neuroetol, Programa Fisiol & Biofis, Santiago, C

+ [ 2 ] Univ Oslo, Ctr Ecol & Evolutionary Synth, Dept Biosci, Oslo, Norway

**Direcciones de correo electrónico:** [a.l.lillo@bio.uio.no](mailto:a.l.lillo@bio.uio.no)

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SOC STUDY AMPHIBIANS REPTILES, C/O ROBERT D ALDRIDGE, ST LOUIS UNIV, DEPT BIOLOGY, 3507 LACLEDE, ST LOUIS, MO 63103 USA

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