



Necrosis in a Canyon Treefrog, *Dryophytes arenicolor* Cope 1866 (Anura: Hylidae), in Central Mexico

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Morphological anomalies have been widely documented in amphibians both globally (Henle et al. 2017) and in Mexico (Venerozo-Tlazalo et al. 2022). Such malformations often are caused by abnormal development triggered by mutations or environmental pollution (Aguillón-Gutiérrez and Ramírez-Bautista 2015; Monroy-Vilchis et al. 2015). However, deformities also can result from injuries caused by predators, parasites, pathogens, or pollutants (Meteyer 2000; Luría-Manzano et al. 2011), and these tend to be more frequent in populations in highly urbanized and contaminated sites (Aguillón-Gutiérrez and Ramírez-Bautista 2015; Henle et al. 2017).

Widely distributed treefrogs in the genus *Dryophytes* (Hylidae) have been documented exhibiting a variety of both developmentally and environmentally induced malformations (e.g., Aguillón-Gutiérrez and Ramírez-Bautista 2015; Monroy-Vilchis et al. 2015; Olvera-Mendoza et al. 2023; Castro-Bastidas et al. 2024). We herein report necrosis of a hindlimb of a juvenile Canyon Treefrog (*D. arenicolor*) (SVL = 23 mm) (CAR-RF-UAQ 3) encountered at 1215 h on 1 October 2024 in xerophilous scrub in San Juan Tilcuautla,

San Agustín Tlaxiaca, Hidalgo, Mexico (20.165833 N, -98.808889 W; elev. 2,655 m asl) (Fig. 1). After taking measurements, the frog was released where initially observed.

The frog was in a protected environment distant from any urban area, suggesting that the injury was due to an unsuccessful predation event. No necrotic lesions were evident on the skin, head, or extremities. When encountered, it moved and tried to escape despite the injured limb. If predation was responsible for the anomaly, a number of documented reptilian, avian, and mammalian predators occur in the area (e.g., Mejenes-López et al. 2010; Ramírez-Bautista et al. 2014). Regardless of cause, morphological anomalies can affect the survival of impaired individuals by limiting escape and reproductive behavior or use of resources such as microhabitats or prey (Johnson et al. 2006).

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Figure 1. A Canyon Treefrog (*Dryophytes arenicolor*) found in xerophilous scrub (left) with necrosis on the right hindlimb (right). Photographs by Raciél Cruz Elizalde.

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