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***TRIPRION* (*ANOTHECA*) *SPINOSUS* (Coronated Treefrog). PHRAGMOSIS.** Amphibians are commonly associated with defensive strategies involving aposematic signal coloration and chemical defenses, but structural defenses are also employed. Skull ossifications and novel cranial elements of the Central and South American clades of casque-headed frogs (*Triprion* and *Aparasphenodon*, *Corythomantis*, *Osteocephalus*, *Osteopilus*, and *Trachycephalus*, respectively) are associated with a defensive behavior known as phragmosis, where animals position their head to block access to their body (Smith et al. 2007. Evolution 61:2075–2085) and incur indirect water balance benefits (Jared et al. 2005. J. Zool. 265:1–8.; Cajade et al. 2017. J. Zool. 302:94–107).

On 20 June 2016, at 2010 h in the tropical forest of Adolfo Ruiz Cortines along the trail to Las Cavernas, Veracruz, Mexico (18.5438°N, 95.1415°W; 1058 m elev.) we found two male *Triprion spinosus* in a tree hollow ca. 1 m above ground level (Fig. 1). One was severely wounded (MZFC-HE 32736). This individual was in the posterior position in the tree cavity and seemingly anchored in a position which would block access to the bottom portion of the cavity containing water from the anterior individual (not collected). The posterior individual had extensive and visible external injuries surrounding the left orbital (Fig. 2). The left eye was ruptured, and the right eye had a clouded appearance.

FIG. 1. Tree hollow in Veracruz, Mexico ca. 1 m from ground level containing two *Triprion spinosus*.

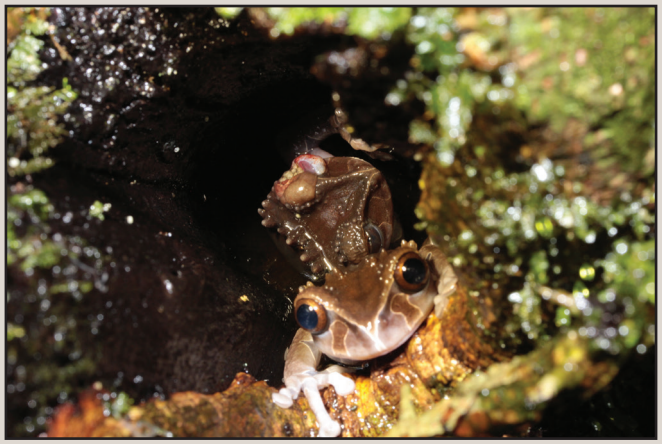

FIG. 2. A severely injured male *Triprion spinosus* anchored at the base of a tree cavity in Veracruz, Mexico possibly preventing encroachment of a rival male.

While Smith et al. (2007, *op. cit.*) reported a significant relationship between novel cranial modifications and phragmosis, they had no evidence for the use of this defensive strategy in *T. spinosus* and indicated it was absent in the species. The use of phragmosis as a defensive behavior was predicted in *T. spinosus* due to their use of tree holes for breeding and the presence of cranial spines by Toledo et al. (2011. Ethol. Ecol. Evol. 23:1–25). In line with this prediction, the injuries incurred by MZFC-HE 32736 are isolated to the head and eyes, suggesting crown to crown combat.

This observation in *T. spinosus* presents evidence the entire clade employs the phragmosis defensive strategy despite differentiated cranial modifications from *T. petasatus* and *T. spatulatus* (Faivovich et al. 2018. S. Am. J. Herpetol. 13:1–32). Behavioral and ecological uses of defensive observations in hylids with highly modified skull ossifications appear to be understudied (Oakley and Theodorou 2021. Herpetol. Rev. 52:123–124) and provide an opportunity to understand adaptive trait evolution in the clade (Paluh et al. 2020. Proc. Natl. Acad. Sci. USA. 117:8554–8562).

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TESTUDINES — TURTLES

***CARETTA CARETTA* (Loggerhead Sea Turtle). SHELL DEFORMITY.** *Caretta caretta* is the most abundant sea turtle species