The third-longest sperm storage period in geckos: an observation in a species of *Pristurus* Rüppell, 1835 from southern Yemen (Squamata: Sphaerodactylidae)

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During fieldwork in December 2010 several geckos of the genus *Pristurus* were collected in southern Yemen near the port city of Aden in Al Burayqah. Whereas all individuals superficially resembled *P. rupestris*, they were identified in a molecular study by Badiane et al. (2014) as members of a western clade of *P. rupestris sensu lato*, which represents an undescribed species. Badiane et al. (2014) referred to this form as *Pristurus* sp. 1, which is how we refer to it in this paper. In order to add data about reproduction to the knowledge of this putative new species, one male and one female were exported to make captive-breeding observations. The specific conditions of their captivity, including terrarium setup and acclimation, closely follow the description in Rösler et al. (2017).

The male and female individuals of *Pristurus* sp. 1 co-inhabited their terrarium from 1 July 2011–10 May 2016. During this period the female produced 29 egg clutches, each comprising a single egg. The female was then moved to a separate terrarium where she was found to be gravid during the last week of March 2017. On 9 April, the female laid a single egg and buried it 1 cm deep in the sand-and-clay substrate of the terrarium (see Rösler and Hofmann, 2015). The egg was retrieved, measured, and weighed with the following results: length 7.3 mm, width 5.6 mm, weight 0.12 g. A normally developed hatchling (snout–vent length 13.0 mm, tail length 16.5 mm, weight 0.09 g) emerged from the egg on 18 June 2017. This individual has grown normally (Fig. 1). The still separated female has produced no further clutches to date (14 August 2017).

Taking into account the possibility that the female copulated with the male on 10 May 2016, their last day of cohabitation, and including a deliberately high estimate of gestation period at 14 d, the female stored fertile sperm for a minimum of 320 d.

Species of *Pristurus* are known to have the capacity for long-term sperm storage. In the case of *P. carteri* and *P. flavipunctatus* this period was recorded as 265 d and 286 d, respectively, with similar experimental conditions (Rösler, 2016; Rösler et al., 2017). A sperm storage period of 320 d in *Pristurus* sp. 1 represents a new record for the long-term sperm storage capacity in the genus *Pristurus*. Simultaneously, this observation is the third-longest sperm storage period observed in any gecko species to date, after *Aeluroscalabotes felinus*

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**Figure 1.** Juvenile individual of *Pristurus* sp. 1 (sensu Badiane et al., 2014) on Day 58 post-hatching (snout–vent length 17.0 mm) that hatched from an egg fertilized after 320 d of sperm storage.
(430 d; Wolf, 2009) and *Hemidactylus frenatus* (382 d; Yamamoto and Ota, 2006).

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**References**


