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HELODERMA SUSPECTUM (Gila Monster). PROBABLE COURTSHIP AND MATING BEHAVIOR. Documentation of reproductive behaviors in wild helodermatid lizards is rare (Beck 2005. *Biology of Gila Monsters and Beaded Lizards*. University of California Press, Berkeley, California. 211 pp.). Beck (1990. *J. Herpetol.* 24:54–68) provides detailed descriptions of male-male agonism of *Heloderma suspectum* in nature. However, courtship and mating behaviors in wild *H. suspectum* have not been documented; thus, our understanding of these behaviors is based exclusively on animals in captivity. Courtship and mating in the wild is assumed to take place primarily within burrows or rock shelters (Beck 2005, *op. cit.*). Herein, we report a single observation of probable courtship and mating attempts between two wild *H. suspectum* outside of a rock shelter in the Rincon Mountains, east of Tucson, Arizona, USA (32.2170°N, 110.6757°W, WGS84; 1020 m elev.).

On 17 May 2014, at 0740 h, ERZ observed an adult *H. suspectum* (hereafter, the male) approach a shallow rock shelter that was occupied by another adult *H. suspectum* (hereafter, the female). The male entered the shelter, and < 1 minute later the female left the shelter with the male in pursuit. ERZ observed both individuals for the next 70 minutes, during which time they remained active on the surface. The female walked away from the male repeatedly. In each instance, the male followed in the exact path of the female while tongue-flicking constantly. Occasionally, when the male was < 1 m away from the female, he would follow the circuitous route taken by the female rather than walking directly to her. This behavior suggests the male was following a pheromone trail left by the female (Mason and Parker 2010. *J. Comp. Physiol. A* 196:729–749).

The pair was in contact 5 or 6 times during the 70 minutes, with each encounter lasting approximately 3–8 minutes. Generally, the male walked around the female before crawling on her and then used his front and hind limbs to alter slightly the position of his body relative to hers (Fig. 1A). The male clasped the base of the female's tail with his hind limb, seemingly rotating her pelvis towards him, a position observed commonly during mating of captive individuals (Fig. 1B; MTS, pers. obs.). During one encounter, the male extruded a hemipenis, but ERZ was unable to determine if he achieved intromission. Coitus under captive conditions lasts for hours (Beck 2005, *op. cit.*), thus it was unlikely in the present case. On 2 or 3 occasions, the male briefly mounted her backwards, with his head above her tail, and tongue-flicked repeatedly (Fig. 1C). The female did not appear to be receptive to the male. When the male mounted the female, she flattened her body to the ground, making it difficult for the male to manipulate the positions of their bodies relative to one another. On two occasions, the female responded agonistically towards the male, even biting him as he approached. At 0850 h, the female walked away from the male again, but this time the male pursued her only briefly and then walked in the opposite direction. ERZ ceased observations at 0900 h, when both individuals were on the surface, but separated by >200 m.

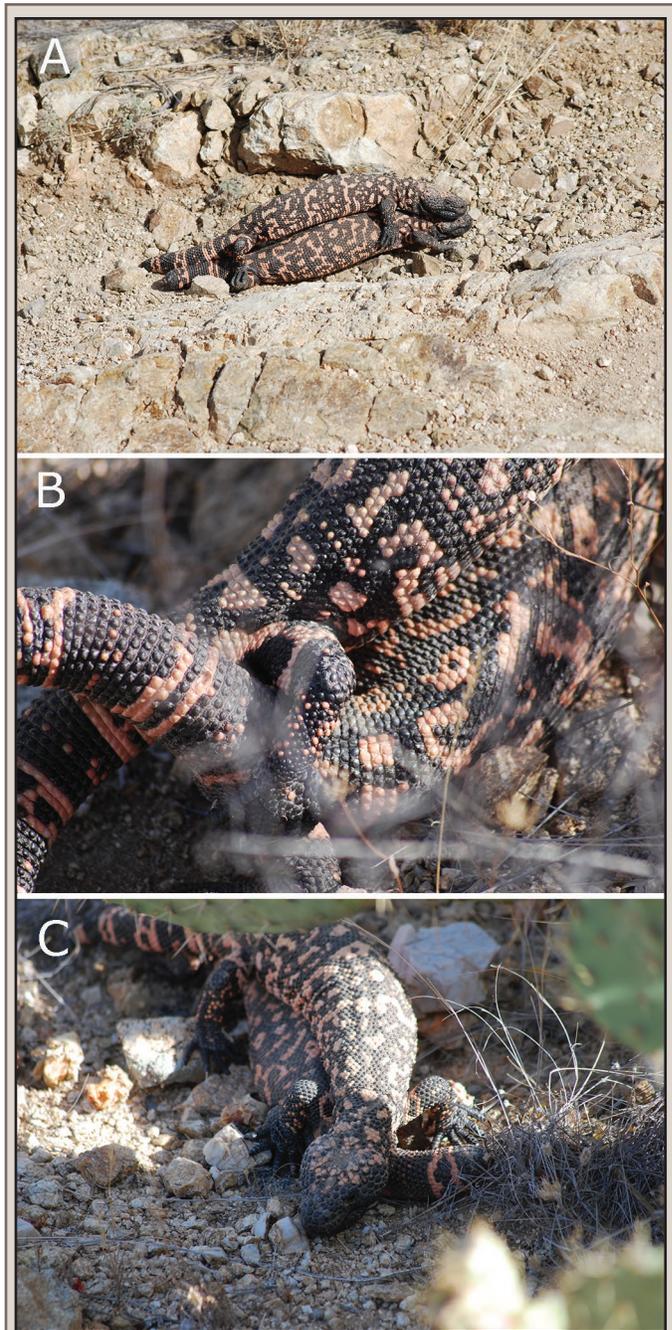


FIG. 1. Probable courtship and mating behaviors between two wild *Heloderma suspectum* in southern Arizona, USA. A) Common position during interactions (“dorsal straddle”), with the male on top of the presumed female. B) Right hind limb of male clasping the base of the female’s tail. C) Male on top of the female, with his head positioned above her tail.

Although we were unable to directly verify the sex of the second *H. suspectum* or observe copulation, evidence suggests this was courtship and a failed mating attempt rather than male-male combat. First, the observations were entirely consistent with extensive observations of courting and mating activities of captive *H. suspectum* (Beck 2005, *op. cit.*; MTS and GWS, pers. obs.). Second, most of the observed interactions were not aggressive or typical of combat behaviors observed previously in the wild (Beck 2005, *op. cit.* and references therein). Very few attempts were made by either lizard to dominate the other by

pressing it to the ground (e.g., “head shove,” “head raise,” or “body twist” described by Beck 1990, *op. cit.*), behaviors that are common in combat rituals. The male repeatedly initiated a “dorsal straddle” (a typical male-male combat behavior; Fig 1A), but the female never did so. In previous observations of male-male combat by *H. suspectum*, both lizards actively participated in dominant behaviors, whereas in the encounter described herein only one lizard, the male, seemed interested in maintaining a superior position or initiating repeated contact. A majority of time was spent with the male in pursuit of the female.

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LARUTIA TRIFASCIATA (Three-banded Larut Skink). ENDO-PARASITE. *Larutia trifasciata* is known from parts of the Banjaran Timur and the Cameron Highlands, Malaysia (Grismer 2011. Lizards of Peninsular Malaysia, Singapore and their Adjacent Archipelagos. Edition Chimaira, Frankfurt am Main. 728 pp.). One *L. trifasciata* (SVL = 148 mm) was collected in West Malaysia, Pahang, Cameron Highlands (4.03333°N, 101.36666°E) 25 June 2008 and deposited in the herpetology collection of La Sierra University (LSUHC), Riverside, California as LSUHC 9077. In this note we establish the initial helminth list for *L. trifasciata*.

A midventral incision was made in one *L. trifasciata*. The digestive tract was removed, opened, and the contents were examined for helminths utilizing a dissecting microscope. One nematode was found in the small intestine. It was placed on a microscope slide, cleared in lactophenol, coverslipped, studied under a compound microscope and identified as *Orneoscaris sandoshami*. The sample of *O. sandoshami* was deposited in the Howard W. Manter Laboratory of Parasitology (HWML) University of Nebraska, Lincoln, Lincoln, USA as HWML 64637.

Orneoscaris sandoshami was previously reported in *Megophrys montana* (Megophryidae) (Sprent 1985. An. Mus. Hum. Comp. 60:33–35; Baker 1987. Mem. Univ. Newfoundland, Occas. Pap. Biol. 11:1–325). *Orneoscaris sandoshami* in *L. trifasciata* is a new host record.

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PLESTIODON EGREGIUS ONOCREPIS (Peninsula Mole Skink). ALBINISM. On 30 June 2014, we trapped an amelanistic hatchling *Plestiodon egregius onocrepis* (28 mm SVL) along a drift fence in sandhill habitat in Ocala National Forest, Marion Co., Florida, USA (29.3819°N, 81.7929°W, WGS84; 10 m elev.). Albinism has been reported in *P. fasciatus* (Brungs 1960. Copeia 1960:369–370) and *P. reynoldsi* (Catenazzi et al. 2008. Herpetol. Rev. 39:228) but



Fig. 1. Amelanistic (top) and normal (bottom) phenotype *Plestiodon egregius onocrepis* hatchlings from the same site in Ocala National Forest, Marion Co., Florida, USA.

not in *P. egregius*. Most of the head and sides of the body were pink-colored, the dorsum was a paler pink, and the labial scales were white. The short dorsolateral stripes that ran from the pale snout were cream-colored, the lower hind legs and feet were pale orange, and the irises of the eye were red. The tail transitioned from pale pink to light orange, with the distal half being a reddish pink color (the tip was missing). Some internal organs were faintly visible through its venter and sides. A digital color photograph is deposited in the Florida Museum of Natural History (UF 173267).

Although albinism is generally considered a deleterious trait because of increased visibility to predators, this may not be the case for this species because of its semifossorial habits. The brown coloration of the normal phenotype blends with fallen leaves, whereas the light coloration of the amelanistic specimen blends with the sand of its upland habitat (Fig. 1). The colorful tail, which probably distracts potential predators, was slightly less vivid in the amelanistic specimen than in another hatchling from the same site (Fig. 1), but there is individual and ontogenetic variation in tail coloration.

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PLESTIODON GILBERTI (Gilbert's Skink). PREDATION. *Plestiodon gilberti* occurs in a variety of habitats including grasslands, broken chaparral, oak woodlands, and open pine forests (Stebbins and McGinnis 2012. Field Guide to Amphibians and Reptiles of California. University of California Press, Berkeley. 538 pp.). In the Sierra Nevada foothills of California the lizard occurs mainly in the Blue Oak zone and the Blue Oak-Gray Pine zone. Aerial predators, such as Northern Pygmy-Owls (*Glaucidium gnoma*; Sibley 2014. The Sibley Guide to Birds, 2nd ed. Alfred A. Knopf, New York, New York. 599 pp.), are opportunistic