

Keeping of mossy leaf-tailed gecko (*Uroplatus sikorae* Boettger, 1913) at BION Terrarium Center

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Mossy leaf-tailed gecko (*Uroplatus sikorae*, Boettger, 1913) is a medium-sized leaf-tailed gecko. Adults may attain a SVL of 85–123 mm (3.35-4.84 in), TL of 65–77 mm (2.56-3.03 in) (total length 150–200 mm (5.90-7.87 in). Total length for juveniles is about 60–70 mm (2.36-2.75 in). Body is strongly flattened. Relatively large head is also flattened and terminates in a rounded snout. Less than 35 supralabial scales are present. Coloration is extremely variable: moss green, lichen and bark color, rarely reddish and a black buccal membrane (<https://www.reptifiles.com/uroplatus-leaf-tailed-gecko-care/uroplatus-leaf-tailed-gecko-species/>). The ventral part of the body and limbs are white to reddish with numerous fine black spots. The iris is yellowish. A marked dermal fringe runs along the whole body. Males are easy to sex thanks to their hemipenial bulges (Svatek, van Duin, 2001; Gehring, 2020) (Fig. 1). These arboreal geckos have the ability to change their skin color to match their surroundings and possess dermal flaps which break up their outline when at rest (Ratsoavina et al., 2013). A dermal flap lines the body and legs enabling to hide their outline when fully utilized.



Figure 1. *Uroplatus sikorae* male and female. Main distinguishing features are shown.

U. sikorae inhabit higher elevation forests (>1000m a.s.l.) in the Eastern and Northern areas of Madagascar (<http://uroplatus.info/archives/65>) (Fig. 2).

U. sikorae is easily distinguished from *Uroplatus sameiti* (Bohme & Ibish, 1990) by examining the color of the buccal membrane near the back of the animal's mouth (<http://uroplatus.info/archives/65>). Buccal membrane in *U. sikorae* is black or dark brown (Fig. 3) while in *U. sameiti* it is pink or flesh colored. They spend most of the daylight hours hanging vertically on tree trunks, resting mainly upside down. Their activity peak can be observed from late evening and during the whole night. During the night, they venture from their daylight resting spots, and go off in search of prey or pair (Pianka, Eric, 2006).



Figure 2. *U. sikorae* natural range. Map from (<http://uroplatus.info/archives/65>)



Figure 3. Black buccal membrane of *U. sikorae*.

Due to mass deforestation and destroying of their natural habitat they have IUCN Status indicated as “Least Concern” (<https://www.iucnredlist.org/species/172820/6924215>). The species is also listed in CITES Ap. II. Therefore development of breeding methods and creation of ex situ populations is extremely important (Dubyna et al., 2019).

Keeping and breeding requirements

Keeping. We keep adult males and females separately or in pairs, at 70*50*50 cm (27.5*19.7*19.7 in) terrariums; babies are kept only separately at terrariums of not less than 30*30*45 cm (11.8*11.8*17.7 in). The decoration of the terrarium includes horizontal and vertical branches of medium thickness, lianas, layers of bark for climbing, hollows, living plants and shards as shelters. Substrate - crushed small pieces of bark with layer of dry oak leaves (Fig. 4). Paper with a box of wet coconut substrate as moist chamber is also an option. Water dish is obligatory.



Figure 4. *U. sikorae* juveniles inside decorated terrariums.

Lighting. Zoo Med 5 UVB lamp is used during breeding season for 10-14 hours per day; during period of winter dormancy (2 months) for 4 hours per day.

Temperature. Daytime temperature is +24 – +26 °C (75.2 - 78.8 F), at night – +19 – +21 °C (66.2 - 69.8 F); at the time of winter dormancy – +18 – +21 °C (64.4 - 69.8 F). Heating with 25W incandescent lamp is used only during wintering months to maintain daytime temperature. During breeding season we use no heating source. UVB is important for successful breeding.

Humidity. Humidity is 75-90% both for babies and adults with double spraying during the day.

Diet. Diet for adults contains Turkestan cockroaches (*Shelfordella tartara*), and crickets (Jamaican field crickets (*Gryllus assimilis*) and Mediterranean field cricket

(*Gryllus bimaculatus*). Locusts and soft-shelled snails are used as additional food and treats, which are given 1-2 times per month. We offer 2–3 insects per head 1–2 times per week. If the animal shows signs of obesity, the frequency of feeding is reduced to 1 time per 2 weeks.

It is strictly recommended not to use wild caught insects. Sometimes if an animal is still hungry we can offer one or two additional feeding items. We offer soft-shelled snails for females during ovogenesis. All insects should be gut loaded and dusted with vitamin-mineral supplementation every other feeding. Sepia or cuttlefish “bone” powder works well as a source of calcium. Insects are dusted with it prior to the feeding session. We gutload the insects with fruit, greens and vegetables and sometimes bee pollen as an additional source of vitamins and bioactive elements.

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