

Keeping of common leaf-tail gecko (*Uroplatus fimbriatus* (Schneider, 1797)) at BION Terrarium Center

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Common leaf-tailed gecko (*Uroplatus fimbriatus* (Schneider, 1797)) is a member of a so-called “*U. fimbriatus* group” of leaf-tailed geckos, that includes also *Uroplatus giganteus* Glaw, Kosuch, Henkel, Sound & Böhme, 2006, *Uroplatus henkeli* Böhme & Ibish, 1990, *Uroplatus sameiti* Bohme & Ibish, 1990 and *Uroplatus sikorae* Boettger, 1913 (<http://uroplatus.info/uroplatus-fimbriatus>).



Figure 1. General appearance of *U. fimbriatus*.



Figure 2. Eyes of *U. fimbriatus*.

It is a gecko that is active during the night and has a large size. Its SVL is 220–230 mm (8.66-9.06 in), TL is up to 110–120 mm (4.33-4.72 in) (total length 310–330 mm (12.21-12.99 in)). Due to its highly light-sensitive eyes, which are 350 times more sensitive than the human eye, this species can perceive colors even in low-light conditions. This species has camouflaging coloration with fine dark (in rare cases bigger white) spots, dots and dashes which form a net-looking pattern on grey, light-brown or olive background color (Fig. 1, 2). Males can be easily distinguished from females due to presence of well-seen hemipenial bulges under the tail base. They can be seen in males at the age of 1,5 years.

U. fimbriatus and *Uroplatus giganteus* Glaw, Kosuch, Henkel, Sound & Böhme, 2006 are both variable and very similar. The only consistent difference in colour variation between the two species is the whitish iris with rather indistinct brown vertical lines in *U. giganteus*, versus a yellowish iris with more distinct, continuous lines of typically a more reddish brown tone in *U. fimbriatus* (Fig. 3) (Gehring et al., 2018; <https://reptile-database.reptarium.cz/species?genus=Uroplatus&species=fimbriatus>).



Figure 3. Differences in eyes of two close species.

Among the *Uroplatus* species, *U. fimbriatus* has the widest distribution. However, this alone does not ensure their long-term survival in their natural habitat. *U. fimbriatus* inhabits a broad range compared to other *Uroplatus* species. They are found across the eastern rainforests of Madagascar, extending into the northern regions and onto islands such as Nosy Be, Nosy Bohara, and Nosy Mangabe. Due to their extensive distribution (Fig. 4), they exhibit significant variations in color and pattern. However, it can be challenging to pair geckos from geographically distant locations, possibly due to genetic or morphological differences, which further emphasizes the need for comprehensive genetic analysis to determine specific variations and compatibilities within different locales.

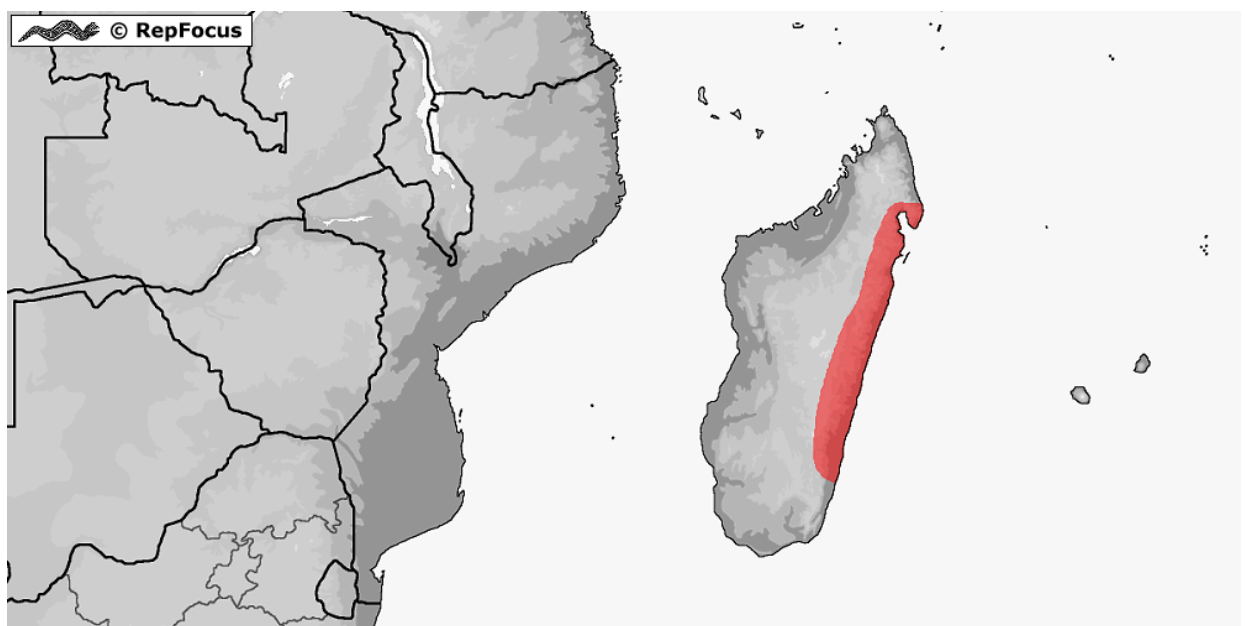


Figure 4. Geographical distribution of *U. fimbriatus* (http://repfocus.dk/maps1/TAX/Sauria/Gekkonidae/Uroplatus_fimbriatus_map.html).

Recognizing the current situation has led us to focus on this genus, and breeding should always be a goal for any dedicated enthusiast interested in working with

Uroplatus. It is now time for us to start working towards restoring what we have taken, even if it is only a small part, and hopefully maintaining the species while we seek to improve our sustainability efforts. During the day, it attaches itself to a small tree trunk and rests with its head facing downward. When disturbed, it responds by raising its tail and head, opening its mouth, and emitting a scream.

Keeping and breeding requirements

Keeping. We keep these big lizards separately or in pairs (1.1) in 60*60*90 cm (23.62*23.62*35.43 in) vertical terrariums of a “breeze” type. During the first 1.5–2 months of life we keep babies in 30*30*30 cm (11.81*11.81*11.81 in) terrariums or plastic containers, that have good ventilation, with further moving to bigger boxes. The decoration of the terrarium consists of large vertical and horizontal branches for adult individuals and medium vertical and horizontal branches for juveniles, as well as lianas, living or artificial plants. We use paper towel instead of substrate and a box (10 cm (3.93 in) deep) filled with coconut substrate, covered with a layer of oak leaves. This box serves as a moisture chamber and as an egg-laying place. We keep juveniles for the first 6 months with a paper towel instead of bark substrate. Decoration includes thinner branches and smaller pieces of bark (Fig. 5). Water dish is obligatory.



Figure 5. Terrarium for *U. fimbriatus* pairs.

Lighting. We use Zoo Med 5.0 UVB (10.0 old) tubes or full spectrum lamps for lighting: at mating season for 12-14 hours a day; during other part of the year and prior to wintering it is 9-10 hours a day.

Temperature. We keep *U. giganteus* with daytime temperature of +24 – +26 °C (75.2 – 78.8 F), and nighttime temperature – +19 – +21 °C (66.2 – 69.8 F). We do not provide a basking spot.

Humidity. For both juveniles and adults we maintain air humidity of 75–90% with double spraying during the day.

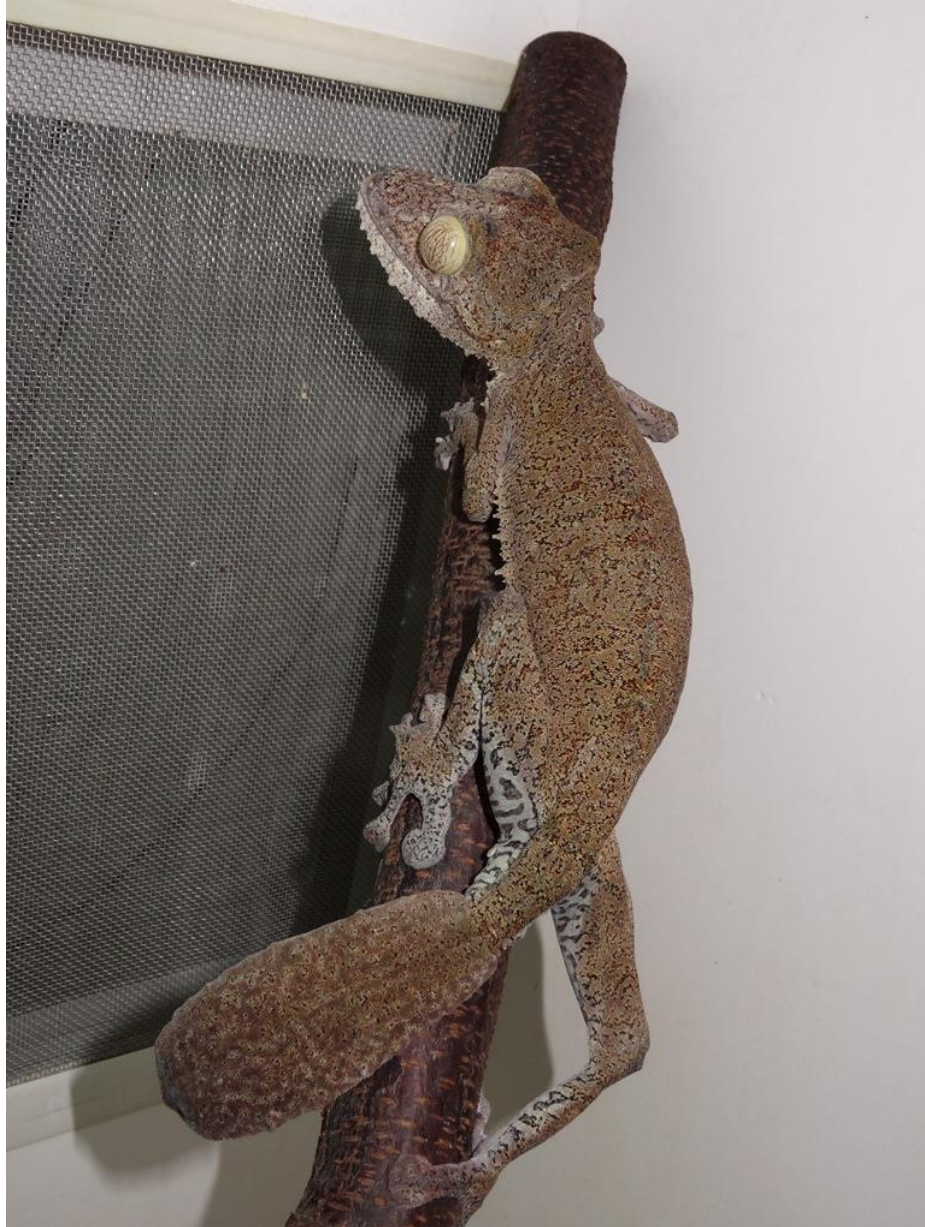


Figure 6. *U. fimbriatus* female holding on a branch.

It is important to remember that *U. fimbriatus* are very nervous, even compared to *U. giganteus*, and they should see a lot of visual barriers on the walls of the terrarium

they are kept inside. If the walls are transparent – they usually don't see the barrier and damage their snouts. Despite the fact that the snouts recover quickly, opaque walls or plenty of decorations will prevent these unwanted health problems.



Figure 7. *U. fimbriatus* male with an injured snout.

Diet. For adult animals the diet consists of big locusts, Turkestan and marble cockroaches and crickets of adequate size. We offer 1–2 insects per animal 1–2 times per week and reduce the feeding sessions' frequency to 1 time per 2 weeks in case any signs of obesity are seen. Sometimes if an animal is still hungry, we can offer one or two additional feeding items. For females during ovogenesis we offer soft-shelled snails. Diet of juveniles is the same as for adults. Frequency of feeding: 2-3 insects per 1 young gecko 3 times a week. 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 as well, but snails (*Helix pomatia* Linnaeus, 1758 or *Cornu aspersum* (O. F. Müller, 1774)) works much better.

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