

Keeping of cork-bark leaf-tailed gecko (*Uroplatus pietschmanni* (Böhle & Schönecker, 2004)) at BION Terrarium Center

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Uroplatus pietschmanni (Böhle & Schönecker, 2004) is one of medium-sized representatives of the genus and was described only in 2004. The species is named after German gecko breeder Jürgen Pietschmann (1949–2005) (Beolens et al., 2011). Adult specimens may attain a SVL of 90–100 mm (3.54–3.93 in) and TL of 40–50 mm (1.57–1.96 in) (total length 150–170 mm (5.90–6.69 in). Total length of juveniles is 50–60 mm (1.96–2.36 in).

These geckos have flattened bodies, large heads and well-developed spiny scales found in the occipital area. The dorsal part of the body, limbs and tail are scattered with spiny scales of variable sizes. The fringe of the tail heavily undulates so that its contour resembles a dry oak leaf. These features enable these geckos to stay almost invisible on pieces of bark or trunks of big old trees. The dorsal basic color consists of various brown hues resulting in a bark-like pattern. A whitish line runs from the snout tip to the eye sockets. Irises are partially white. Males can be easily sexed by the presence of hemipenal bulges at the earliest age of 4–6 months (Greenbaum et al., 2007; Gehring, 2020) (Fig. 1). Females don't have the above mentioned bulges and are generally bigger than males.



Figure 1. *Uroplatus pietschmanni* female and natural distribution map (https://en.wikipedia.org/wiki/Uroplatus_pietschmanni#/media/File:Uroplatus_pietschmanni_distribution.png).

This species is found in Fierenana, Ambatovy and Analamay, Madagascar, at 900-1,200 meters a. s. l. (<http://www.edgeofexistence.org/species/uroplatus-pietschmanni/>). They live in the forest canopy at low population densities (Ratsoavina et al., 2013). They are exclusively nocturnal and spend most daylight hours lying on tree trunks or hiding in hollows (<http://reptile-database.reptarium.cz/species?genus=Uroplatus&species=pietschmanni>) (Fig. 2).



Figure 2. Perfect example of *Uroplatus pietschmanni* unique camouflaging ability.

Due to mass deforestation and destroying of their natural habitat they have IUCN Status indicated as “Least Concern” (<https://www.iucnredlist.org/ja/species/172906/6939382>). 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; juveniles are kept only separately – at terrariums of not less than 30*30*30 cm (11,8*11,8*11,8 in). The decoration of the terrarium includes horizontal and vertical branches of medium thickness, lianas, big pieces of bark, hollows, living or artificial plants and various shelters (Fig. 3). Substrate - crushed small pieces of bark with layer of dry oak leaves. Paper with a box of wet coconut substrate as moist chamber is also an option. Water dish is obligatory.



Figure 3. *U. pietschmanni* inside the decorated terrariums.

Lighting. Zoo Med 5 UVB lamp is used during breeding season for 10-14 hours per day; during resting period (Jan - Feb) for 4 hours per day.

Temperature. Daytime temperature is +23 – +25 °C (73.4 - 77.0 F), at night – +20 – +21 °C (68.0 - 69.8 F); at the time of winter dormancy – +16 – +20 °C (60.8 - 60.8 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 60–80% 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 sign 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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