KEEPING AND BREEDING OF UROPLATUS EBENAUI IN CAPTIVITY

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Introduction

Uroplatus ebenaui, also commonly known as the “Spearpoint leaf-tailed gecko”, is the smallest species of leaf-tailed gecko and is endemic to the island of Madagascar. The entire genus are camouflage specialists. While some of the larger species, like Uroplatus sikorae, specialize in blending into the bark of trees, ebenaui are dead leaf mimics. Ebenaui spend their days sleeping on thin branches or curled up inside of leaves. At night they become active, prowling through foliage in search of their small invertebrate prey. The way this species moves through the branches is actually very chameleon-like. Like chameleons, they wrap their fingers around thin branches to slowly and purposefully move through their environment. Unlike chameleons they do not have a projectile tongue though and so will lunge at their prey in typical gecko fashion.

As the smallest species of Uroplatus gecko they only reach a maximum size of 6.3 cm. This small size is partially due to their particularly short pointed tail. This species is strongly sexually dimorphic. Females are approximately 10-20% larger than the males and are much more smooth in appearance. Males have a much more “spiky” appearance in both body and tail structure. Ebenaui are also very phenotypically variable with many leaf-like patterns being possible. Coloration can vary greatly from nearly black, gray, brown, yellow, and orange.

Uroplatus ebenaui are primarily found in the north of Madagascar and are not a true tropical rainforest species. Instead their habitat is a highly seasonal deciduous forest that is subject to a range of temperatures, rainfall, and humidity throughout the year. This makes this small species more tolerant of a variety of conditions than other leaf tailed geckos.

Uroplatus ebenaui serve as an excellent introduction to the Uroplatus genus due to their many appealing characteristics to herpetoculture. They are small and so require only modest housing, they are hardier than most other Uroplatus, and they are extremely active and enjoyable to observe. The author has bred hundreds of this species and disseminated them into herpetoculture and all that keep them have reported how enjoyable they are to keep.

Keeping

The author keeps Uroplatus ebenaui in 31 cm x 41 cm x 61 cm terraria. This size enclosure is appropriate for pairs or individuals. Larger enclosures can also be used. The terrarium should be

vertically oriented as ebenaui are arboreal lizards and rarely come down to the ground except to catch insects or to lay eggs. A thin branched live plant such as *Ficus benjamina* should be the central focus of the habitat. Many thin dead branches should also be added throughout the habitat at a variety of heights and angles. The author always uses bioactive enclosures with large colonies of springtails and tiny land snails in the substrate. Isopods can also be used but the species used should be chosen carefully to avoid predation on the geckos' eggs. A 2-3 cm layer of leaves can be used on the bottom of the terrarium for egg deposition by breeding females.

Uroplatus ebenaui are more heat and dry tolerant than other members of the genus. For approximately two-thirds of the year the author keeps the geckos warmer and wetter. Temperatures range from 21-29 C during the warmer season and the enclosure is misted heavily two times a day. The interior of the enclosure should always dry out between misting cycles and the substrate should not be allowed to become saturated. During the simulated winter period temperatures range from 16-23 C and mistings are only provided once a day or every other day. A water bowl is never utilized.

Lighting is provided via a high output LED full spectrum fixture in the 6500 K range. This bulb simulates daylight and is needed for plant growth. Ultraviolet lighting is provided by a Zoo Med Reptisun 5.0 bulb. During the warm/wet season the lights are on for 12 hours a day. During the cooler/dryer season the lights only operate for 10 hours a day. A heat light is not used.

The adult geckos are fed three times a week (Monday, Wednesday, and Friday). Approximately six feeder insects are fed per gecko each feeding. The primary feeders used are small crickets and dubia roaches. The author free range feeds the crickets but will only feed dubia roaches from a bowl. Insects are gut loaded with fresh vegetables, greens, and fruits before feeding and are lightly dusted with Repashy Calcium Plus supplement before being offered.

Breeding

Breeding of this species is fairly simple although there are several aspects of care that must be taken into account to ensure the long term health of the breeder animals. Before pairing the male and female both individuals must be fully grown and healthy. With proper care ebenaui are typically fully grown by six months old although it is likely good practice to wait until the animals, especially the females, are eight months old. A good indicator of female readiness to breed is when she starts to lay infertile eggs on a near monthly basis even without being paired with a male. No special changes or considerations need be made when pairing the animals. They can simply be kept together when old enough to breed. It is vital that both the male and female are able to eat as much as they want during the breeding season. Furthermore, every insect should be dusted with a calcium based supplement. The author keeps the

male and female together for nine months out of the year. During the winter the pairs are separated for three months so that both the male and female can recuperate and focus on feeding and not breeding. Females will also usually stop laying eggs during this time although they may continue to lay eggs throughout the winter in some cases. Typically females will lay a clutch of two eggs approximately once a month. Occasionally a single egg is laid. Some females may lay more frequently and some less so. Eggs are almost always laid under leaf litter in the terrarium. Rarely a female will dig into the soil to deposit her eggs. The egg shells are hard but are extremely fragile so care must be taken when removing them from the terrarium for incubation. The author does not incubate the eggs in situ as predation by feeder insects can occur.

Eggs are incubated via a suspension method. The eggs are half buried in a lid full of dry vermiculite. This lid is then placed in another clear container with a 2 cm layer of moist vermiculite in the bottom. The container is then sealed with a tight fitting lid. One small pinhole is created in the lid to create some air flow without reducing humidity. The author does not utilize an artificial incubator as he believes that temperature variation from day to night is beneficial and natural. The egg container is placed in a dark drawer in the author's facility where temperatures range from 18-25 C depending on the time of day and year. Under these conditions the eggs hatch in approximately 90 days.

When the babies hatch they are either raised individually or with their clutchmate in a small terrarium (18 cm x 38 cm x 25 cm). The terrarium is furnished and kept exactly like the adult terrariums. The juveniles are fed five or six times a week with small crickets. All other aspects of care are identical to the adults.

Conclusion

Uroplatus ebenaui are an ideal candidate for the home terrarium and for herpetoculturists. Their small size, active nature, fecundity, and ability to withstand a variety of conditions make them an enjoyable display species or breeding project. However, they are not a good "pet" species. Their small size does make them delicate and they should not be handled unless needed. For hobbyists with some experience looking for a Madagascan species that can be kept and enjoyed in a tabletop vivarium they are an excellent choice.

Sources

1. Uroplatus Information Center (https://uroplatus.info/uroplatus-ebenaui)

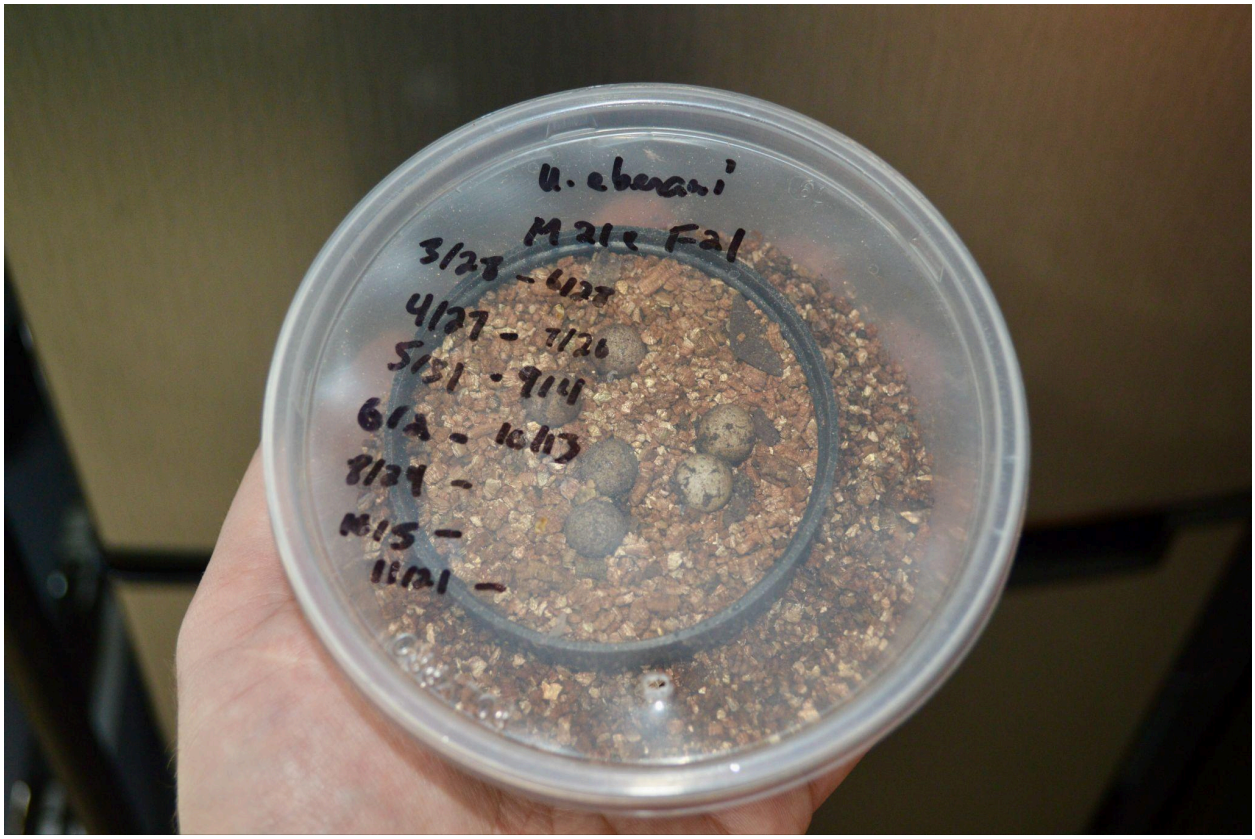
Images

Adult female

Adult male

Juvenile Female

Egg Incubation



Part of the author’s breeding facility

Adult Enclosure

Juvenile Enclosures