Lined Leaf-Tailed Gecko (Uroplatus lineatus)

Difficulty: Intermediate

Lined leaf-tailed geckos are medium-large, 10-11" long geckos that have a linear pattern that can range from light beige to dark brown, often displaying multiple tones. They have light-colored eyes, no eyelids, a broad, flat tail, and no dermal fringe, although they do have eyelash-like crests above the eyes. Like other arboreal geckos, they also have wide toes that give them the ability to climb up smooth surfaces.

Lined leaf-tailed geckos are native to Madagascar, a large island off the east coast of Africa. They are most commonly found in forests on the northeastern edge of the island, where they live among the trees.

Lined leaf-tailed geckos can live up to about 15 years when cared for properly. Due to their larger size, poor tolerance of inappropriate husbandry, and low handleability, these geckos are best kept as display animals by more experienced owners.

Shopping List

- Front-opening 18" x 18" x 36" glass terrarium
- 25w white incandescent heat bulbs, x2
- Mini dual dome lamp fixture with ceramic sockets
- Plug-in lamp dimmers, x2
- 12" T5 HO forest UVB bulb
- 14" T5 HO fluorescent hood, with reflector
- Plug-in light timer
- Infrared thermometer
- Pressure sprayer
- Digital thermometer/hygrometer
- 4" naturalistic substrate
- Branches
- Large vines
- Live or artificial plants
- Magnetic feeding ledge
- Small gecko feeding cups (plastic)
- Calcium supplement w/o D3
- Multivitamin supplement

Housing

Lined leaf-tailed geckos need an enclosure that is large enough to let them explore, hunt, and generally exercise natural behaviors. They are also arboreal, which means that they are a tree-dwelling species, and generally prefer terrariums that are as tall as possible. This is why the minimum recommended enclosure size for a single lined leaf-tailed gecko is 18"L x 18"W x 36"H.

When possible, larger is always better. Glass enclosures are best, which enables them to climb the walls, but PVC is also an option. Screen enclosures should generally be avoided.

Can multiple lined leaf-tailed geckos be housed in the same enclosure?

No. Confining multiple lined leaf-tailed geckos to the same enclosure risks the geckos fighting, which can result in severe injury or even death. It's best to keep only one lined leaf-tailed gecko per enclosure, and since they are solitary animals, you don't need to worry about them getting lonely.

Lighting & UVB

Leaf-tailed geckos are crepuscular, which means that they are active at night, but mostly around sunset. This means that they are likely to prefer cooler temperatures, are exposed to low levels of indirect UVB during the day, and have exceptional night vision. Lamps should be on for 12 hours/day.

UVB Lighting

Leaf-tailed geckos are sensitive animals that do best when the conditions of their natural habitat are replicated as accurately as possible. This includes providing appropriate levels of UVB. UVB lighting can be tricky, because in order to get the right strength of UVB (measured by UV Index, or UVI), distance must be considered.

As a rough estimate, to provide appropriate UVB to a lined leaf-tailed gecko in a 36-48" tall enclosure, with branches and vines for climbing, you will need one 12" Arcadia T5 HO 6% or Zoo Med T5 HO ReptiSun 5.0 in a reflective T5 HO fixture. Place the basking area no closer than 6" below the lamp. The lamp itself should overlap with the heat lamp.

(These recommendations are approximations. It is strongly recommended to use a Solarmeter 6.5 to determine the best placement to achieve a UVI of 1.0-2.0 in the basking area at the top of the enclosure.)

Heating

Humans are *warm-blooded*, which means that our body temperature is automatically regulated. Leaf-tailed geckos, however, are *cold-blooded*, which means that they have to move between areas of different temperatures in order to regulate their body temperature. In the wild, leaf-tailed geckos warm up during the day by sleeping in a warm patch of sunlight. In captivity, sunlight can be replicated with a heat lamp as a source of gentle heat.

Basking area temperature: 80-82°F (28-29°C)
Average air temperature: 75-78°F (24-25°C)
Cool zone temperature: 72-75°F (22-24°C)

Generally speaking, it doesn't take much to achieve such a low basking temperature. If your home tends to be warm during the day, you may not even need a heat source. However, if your home is like most and maintains a daytime temperature of 70-74°F, then you'll want a gentle heat source to create a slightly warmer spot in the enclosure. A couple of 25w white incandescent bulbs should be plenty. However, if you notice that the basking area is too cool, you will need higher wattage bulbs.

The basking area should be a vine or branch directly under the heat lamp. Because your leaf-tailed gecko is arboreal and will be living in a tall enclosure, the warmest temperatures will be at the top (near the heat lamp), and the coolest temperatures will be toward the bottom. You will need vines, branches, and foliage at all levels to allow for proper thermoregulation.

To measure the general temperature of different areas of your terrarium, use an infrared thermometer (a.k.a. temperature gun). To passively track basking temperature, use a digital probe thermometer, with the probe placed on the basking surface under the heat source. The <u>Etekcity 774</u> is a good infrared thermometer, and most reptile-brand digital probe thermometers function well.

Humidity

Leaf-tailed geckos do best in a high-humidity environment, with an average humidity of 70% during the day and 80% at night, as measured by a <u>digital probe hygrometer</u> with the probe placed in the middle of the enclosure. Humidity levels that are consistently too high or low can cause health problems for your gecko. However, it is natural for humidity to be lower in the warm area and higher in the cool area. It is also normal and healthy for humidity levels to rise at night and fall during the day.

To raise the humidity in your leaf-tailed gecko's enclosure (and provide a source of drinking water), use a pump-style pressure sprayer to wet down the enclosure every morning and evening. Alternatively you can use an automatic misting system.

It's best to use tap water for misting, rather than distilled or reverse-osmosis water. Tap water contains essential minerals that are important to your gecko's health, and distilled water may actually suck those minerals out of your gecko.

That being said, a small bowl of clean water should always be available for your gecko to drink from.

Substrate

Because leaf-tailed geckos are arboreal (tree-dwelling), they don't spend much time on the ground. Although it's not necessary as a bedding for them, it's very useful for helping to stabilize humidity. It also acts as a cushion if they fall from their perch, which does happen occasionally.

It's best to use a moisture-retentive substrate that is similar to the soil in a leaf-tailed gecko's natural habitat. Here are a few options:

- DIY tropical mix: 60% organic topsoil, 40% coconut fiber
- Lugarti Natural Reptile Bedding
- Zoo Med Reptisoil
- The Bio Dude Terra Fauna

For best results, add a generous layer of leaf litter on top.

Feces and urates should be removed daily, and contaminated substrate should be scooped out and replaced. Substrate should be completely replaced once every 3-4 months.

Décor

Decorations play a vital role in your leaf-tailed gecko's enclosure as environmental enrichment. Enrichment items encourage exercise, stimulate your pet's natural instincts, and help promote overall wellbeing. And, of course, they make the enclosure look nicer! Without décor, your gecko's terrarium is just a glass box with dirt and a feeding ledge.

Branches, vines, bamboo rods, and live or artificial foliage work well as décor in a lined leaf-tailed gecko terrarium. Arrange these items in a way that encourages your gecko to climb and explore, and provides a variety of options for places to sleep during the day. Most of the branches should be placed vertically, like trees, as lined leaf-tailed geckos seem to be most comfortable when they are oriented vertically. However, vertical, horizontal, and diagonal climbing surfaces of varying widths should be used as a way to provide variety and different forms of exercise for your gecko.

Food

Leaf-tailed geckos are *insectivores*, which means that they need to eat insects in order to get the nutrition that they need. Leaf-tailed geckos are avid hunters, so live insects will need to be provided in order to stimulate their appetite.

Juveniles should be fed daily; adults can be fed every other day. Offer as much as they can eat in one night. It's safe and actually healthy to skip a feeding every once in a while for adults.

<u>Best insects:</u> crickets, dubia roaches, discoid roaches, red runner roaches, darkling beetles, snails (captive bred), grasshoppers

Feeder insects should be gutloaded for 24-48 hours prior to feeding to maximize nutrition.

The key to providing a healthy, balanced diet for your pet is VARIETY. Provide as varied of a diet as you possibly can, and you will be rewarded with a healthier pet that always looks forward to mealtime.

Supplements

All feeder insects (excluding snails with shells) need to be "dusted" with a light coating of calcium powder to balance the calcium-phosphorus ratio. There are many options, but <u>Arcadia Earthpro-A</u> and <u>Repashy CalciumPlus LoD</u> are both solid options. For best results, use as directed by the label.