



*Rebecca Wyman/RAW Reptiles

New Caledonia Mossy Gecko (*Rhacodactylus/Mniarogekko chahoua*)

Mysterious Moss of New Caledonia

The New Caledonian mossy gecko is a medium to large gecko that is also widely known as Chahouas, or “chewies”. They are a medium to large arboreal gecko named for its mossy to velvety greenish, reddish brown, to greenish brown coloration. As with many other geckos, they also have enlarged toe pads for climbing and adhering to surfaces using weak van der Waals forces that are also a large focus of biomimicry. New Caledonian mossy geckos also have semi-prehensile tails that they use to grip onto branches, and if this tail is lost or dropped, will re-grow as in most other geckos. Once thought to be extinct in the wild, they were re-discovered after 1994, along with several other members of the genus *Rhacodactylus/Mniarogekko*, and are now a very popular staple in the pet trade. As with many other geckos, mossy geckos lack eyelids, and use their thick, fleshy tongues to clean their eyes and pupils. Also as with many gecko species, mossy geckos possess enlarged toe pads consisting of several rows of lamellae covered in millions of microscopic hairs known as setae. These setae enable the gecko to cling to, adhere, and climb a wide variety of surfaces with ease. Mossy, or Chahoua geckos are a unique, hardy, and easily maintained species of gecko that has rightfully earned its popularity in herpetoculture.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia

Order: Squamata

Suborder: Lacertilia

Infraorder: Gekkota

Family: Diplodactylidae

Genus: *Rhacodactylus/Mniarogekko*

Species: *Rhacodactylus/Mniarogekko chahoua**

*Taxonomy subject to change and revision.

Lifespan and Longevity

If provided the proper care, mossy geckos can attain longevity of at least 10 to 12 years or more.

Distribution and Habitat

The New Caledonian mossy gecko is a medium sized to large, arboreal species of gecko

indigenous only to the island of New Caledonia near the eastern to southeastern coast of Australia. More specifically, this species occurs in Canala, in south-central New Caledonia. Within this range, mossy geckos occupy primarily arboreal to semi-arboreal environments, being found among the highest peaks and elevations of the islands' tropical rainforests to tropical scrub-forests. During the day, these geckos occupy the thick vegetation near the forest floor to canopy, while at night, while they spend more of their time basking and foraging in the shrubs and lower canopy at night.

Origin/History

Mniarogekko chahoua (Bavay, 1869).

When chahoua were first imported and distributed into the [reptile] hobby, they were just called "chahoua" and there was little to no identification of locales. Many of the first animals started floating around and breeding with no real locale-specific information. Grand Terre chahoua arrived in the mid- to late- 1980s. It wasn't until later in the [19]90s (1997/1996) that a group of animals came into the hobby and was said to be pure lineage from the Isle of Pines that locality would come up.

Everything before that was anyone's best guess or word of mouth. Even then, there was no awareness about two different species of Mniarogekko in existence, so they could have theoretically been both M. jalu and M. chahoua, or just one or the other. We don't know how or where exactly they were collected [Authors Unknown].

Experience Level Required

Novice/Beginner to Intermediate/Moderate.

Size

New Caledonia mossy geckos, or chahouas are fairly medium sized to large geckos which can range from 6.0 to 9.0 inches in total snout-to-tail length, up to 12.0 inches snout-to-tail length maximum as adults. Snout-to-vent length reaches up to 5.5 to 5.7 inches (SVL).

Housing and Enclosure

Enclosure System: Primarily Arboreal. Housing must be sealed and escape proof, and the size of the enclosure recommended will depend on the age and size of the gecko. For hatchlings up to 6 months or so, a 5 gallon tall aquarium, terrarium, or similar enclosure is recommended. Once a gecko reaches or exceeds six months or so, a 10 to 20 gallon tall terrarium or enclosure should be used. Mossy geckos are arboreal, and height is more important than floor space. Provide plenty of live or artificial plants, branches, cork bark, or other furnishings for ample climbing and hiding opportunities. Substrates that retain and hold humidity well are recommended, and naturalistic substrates can include sphagnum moss and fir shavings, natural moss, or similar substrates. To maintain humidity and hydration, daily or regular misting is necessary. They will drink the condensation from the enclosure's furnishings and walls, and a small water dish can also be provided, and must be kept clean, but will usually be seldom used.

Temperature, Lighting, and Humidity

Mossy, or chahoua geckos have fairly simple and undemanding heating and lighting requirements in captivity, and do not require additional UVA/UVB lighting, although providing it in moderated amounts can be greatly beneficial for their health, immune system, and overall wellness. For any supplemental heating that may be needed, use a low wattage incandescent or UVA/UVB bulb, radiant or ceramic heat emitter, or UTH (under tank heating element). Ideal temperatures for these geckos range from 72 to 80 degrees F, or otherwise at room temperature.

Do not keep them at over 85 degrees F or below 65 degrees F. Also be sure to provide a daily photoperiod or light cycle of at least 10 to 12 hours. Spot clean the enclosure for urates, feces, or uneaten food at least twice per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well. Mossy geckos require moderate to high levels of relative humidity, and should be maintained at, or around 50 to 80%.

Feeding, Diet, and Nutrition

Omnivorous to Frugivorous; In the wild, mossy geckos are omnivorous to frugivorous, meaning they eat insects and various fruit and other plant matter. In captivity, many commercially available diets are available that contain most, if not all of the essential nutrients, vitamins, and minerals required for their optimal health and nutrition. These diets are quite simple to use and prepare for your animal(s) as instructed. Feeder crickets, or other small insects of appropriate size can also be given, but should be no larger than the animal's snout to eye. Feeder insects should be gut-loaded in order to increase their optimal nutritional value. Food should be offered in a small dish mounted off of the enclosure's floor, particularly for largely arboreal species that seldom come to the enclosure floor. Be sure that calcium and vitamin D3 supplementation needs are still being met with any diets used for optimal health and development. This is in order to prevent Metabolic Bone Disease (MBD) and other growth and nutritional deficiencies. Their feeding frequency will depend on the age, size, and overall health of your animal. Use care as to not overfeed them, as obesity and other health related issues can become an issue. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

Chahoua geckos generally tolerate moderate levels of handling even as hatchlings. Handle them gently and deliberately but do not drop or injure the animal. Take care to not grab your gecko by its tail or it may detach if your gecko perceives you as a predator or a threat. Most adult chahouas will settle down considerably and become quite docile and easily handled. Allow them to walk or jump from hand to hand.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

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