Mediterranean House Gecko (Hemidactylus turcicus)

Difficulty: Easy

Mediterranean house geckos (*Hemidactylus turcicus*) are extra-small lizards also known as microgeckos. They're 4-5" / 10-13cm long, with large lidless eyes, bumpy skin, a tapered tail, and sticky toe pads. They have a tan to pink base color with dark bands/blotches down the body and tail, interrupted by pale-colored bumps.

Mediterranean house geckos are native to the Mediterranean and coastal areas of the Middle East, but they have been introduced as an invasive species in the New World. They are nocturnal in habit and naturally occur on rocky cliffs, but have adapted well to coexisting alongside humans in urban areas.

Due to their prolific nature, house geckos are very common in the US pet trade, although they are more often used as feeder lizards than as pets. Despite being perceived as a "cheap" or "disposable" species, it's still important for any keeper of this species to pay attention to Mediterranean house gecko care best practices to enable them to thrive in captivity.

Shopping List

- Front-opening 12" x 12" x 18" glass terrarium
- 12" single-socket incandescent terrarium hood, x2
- Compact coil forest UVB bulb, 13w
- Power strip with digital timer
- Digital thermometer/hygrometer
- Handheld pressure sprayer
- 2-4" naturalistic substrate
- Leaf litter
- Live or artificial plants
- Branches/twigs
- Magnetic feeding ledge
- Calcium supplement w/o D3
- Soft-tipped feeding tweezers

Housing

House geckos need an enclosure that is large enough to give them adequate opportunity to thermoregulate, explore, hunt, and generally exercise natural behaviors. They are also semi-arboreal, which means that as a climbing species, they require a tall enclosure. The minimum recommended enclosure size for housing a single Mediterranean house gecko is 12"L x 12"W x 18"H, or 30 x 30 x 45cm. If possible, however, larger is highly recommended!

For the lizard's mental health and ease of access, it is best to use an enclosure that is front-opening and opaque on all sides but the front. It also must be well-ventilated to discourage stagnation and mold growth.

Can multiple Mediterranean house geckos be housed in the same enclosure?

Yes, but it's not required for their wellbeing, and requires a proportionately larger enclosure to reduce the risk of fighting and injury. The more room you can provide, the less conflict there is likely to be.

- 18 x 18 x 18 ≤3 house geckos
- 18 x 18 x 24 ≤4 house geckos
- 24 x 24 x 24 ≤8 house geckos

Note that housing males and females together will result in eggs, and given that house geckos are egggluers, those eggs are very difficult to remove. If you don't want more house geckos, keep geckos of only one sex.

Lighting & UVB

House geckos are *nocturnal*, which means that they are most active during the night, specifically from about 9pm to 2am. Although they are most active at night, they are still occasionally active during the day, and research suggests that UVB provision is still likely to be beneficial to their mental and physical health.

Light sources should be turned on for 12 hours/day, or better yet, synced with your local sunrise and sunset times. The easiest way to do this is by using a smart timer (I've been happy with <u>Kasa</u>).

UVB Lighting

Because house geckos can and will bask while hanging upside-down on the top mesh of their enclosure, it's safest to use extremely-low output UVB bulbs and fixtures:

- Zoo Med Naturalistic Terrarium Hood + 13w Reptisun 5.0 compact coil UVB
- Zoo Med Reptisun T8 Terrarium Hood + T8 Reptisun 5.0 UVB

The UVB bulb should span most of the enclosure's length to create a vertical light gradient and ample basking sites to reduce competition between multiple individuals.

(These recommendations are approximations based on the assumption that there is mesh between the lamp and basking area. It is strongly recommended to use a Solarmeter 6.5 to determine the best placement to achieve a UVI of around 1.0 - 2.0 in the basking area.)

Heating

Humans are *warm-blooded*, which means that our body temperature is regulated automatically. House geckos, however, are *cold-blooded*, which means that they have to move between areas of different temperatures to regulate their body temperature. In the wild, house geckos generally rely on the ambient temperature of their environment. In captivity, optimal heating is most likely to be provided through the use of low-wattage heat lamps.

Basking area temperature: 80-85°F (26-29°C)

Cool side temperature: 70-75°F (21-24°C)

Nighttime temperature: 65-75°F (18-24°C)

One <u>15w heat bulb</u> housed in a terrarium hood fixture such as the <u>Zoo Med Naturalistic Terrarium Hood</u> or <u>Exo Terra Compact Top</u> should be enough to do the job for one gecko in a smaller enclosure, but for

enclosures 18" or wider, you may want to use two heat bulbs. Alternatively, you may be able to use the <u>Arcadia JungleDawn LED Bar</u> as a lamp that both provides heat for your geckos and light for light plants.

If you notice that the enclosure is getting too warm, raise the heat lamp away from the top of the enclosure with small wood blocks (Jenga pieces work great for this). If your enclosure is too cool, you may need a higher-wattage bulb or increased room temperature.

The basking area should be branch or vine directly under the heat lamp. The warmest temperatures in the enclosure will be at the top (near the heat lamp), and the coolest temperatures will be toward the bottom. You will need to place climbing material at all levels of the enclosure to allow for proper thermoregulation.

To track the temperatures in your terrarium, use digital probe thermometers. One should have the probe secured with a zip tie on the basking surface under the heat source, and there should be another probe in a shaded area near the lower middle of the enclosure. Most reptile-brand digital probe thermometers function well for this purpose.

Humidity

Mediterranean house geckos are quite flexible with the amount of humidity they need in their environment, but based on climate data from their native range, they seem to prefer a total **average humidity between 60-80%**, ranging as low as 30% during the day and up to 90% at night.

Humidity should be measured by at least one digital probe hygrometer with the probe placed in the middle of the enclosure. To raise the humidity in your house gecko's terrarium (and provide an extra source of drinking water), use a pump-style pressure sprayer to wet down the enclosure every evening, preferably when it's dark. If that's not enough, mist in the mornings as well.

Substrate

Mediterranean house geckos are known to spend time both climbing and on the ground. Aside from providing a cushion against falls and a comfortable walking surface, the right substrate can also help maintain healthy humidity levels in your terrarium.

Here are some appropriate Mediterranean house gecko substrate choices, based on what is present in their native range:

- Sandy soil mix: 80% organic topsoil, 20% fine sand
- Zoo Med Reptisoil
- The Bio Dude Terra Firma bioactive kit

Only 2" / 10cm should be needed, unless you are putting plants directly into the substrate. For a 12" x 12" enclosure, that will take at least 5 quarts of substrate. 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, depending on your needs.

Décor

Decorations play a vital role in your gecko's enclosure as environmental enrichment. Enrichment items encourage exercise, stimulate your pets' natural instincts, and help promote overall wellbeing. And, of course, they make the enclosure look nicer!

Branches, twigs, cork tubes, textured backgrounds and live or artificial foliage work well as décor in a house gecko terrarium. You can also use other objects as arboreal hideouts. Arrange these items in a way that encourages your gecko to climb and explore, and provides safe places to sleep during the day.

Food

Mediterranean house geckos are primarily *insectivorous*, which means that they get their nutrients from eating a wide variety of insects. In the wild, they are known to eat crickets, grasshoppers, moths, butterflies, isopods, flies, roaches, spiders, beetles, ants, and snails.

Juveniles should be fed daily, while adults can be fed every other day. Juveniles should be allowed to eat as much as they want per meal, while adults should only get about as many feeders as they can eat in a 5-minute period.

Best feeder insects for Mediterranean house geckos: crickets, dubia nymphs, discoid nymphs, red head roaches, young grasshoppers/locusts, flightless fruit flies, isopods, rice beetles, bean beetles, buffalo beetles

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 should be lightly dusted with a 50/50 mixture of calcium and multivitamin powders to correct the calcium-phosphorus ratio and provide extra nutrition at each feeding. There are many options, but <u>Repashy CalciumPlus LoD</u> is a solid all-in-one supplement for getting started. For best results, use as directed by the label.

Feeder insects should also be gutloaded and hydrated for at 24-48 hours prior to feeding.

Drinking Water

Although your gecko will get drinking water from daily mistings, it's best to always keep a bowl of clean water available on a feeding ledge rather than on the floor.