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GECKOS

Malayan forest gecko

Cyrtodactylus pulchellus

A beautifully marked, nocturnal rock gecko from the forests of the island of Penang in Malaysia. It has large, golden eyes, bold bands across the body and toes with claws instead of adhesive lamellae. Only a few documented experiences of care and breeding exist, so the information here is cautious.

Family: Gekkonidae Former name: *Gymnodactylus pulchellus; Cyrtodactylus pulchella*

KEY FACTS

THE ANIMAL

Adult size	**20-25 cm** total length incl. tail
Lifespan	**5-8 years**
Active	**At night**
Lifestyle	**Rock-dwelling**
Habitat	**Rainforest and rocky terrain**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 45 × 45 cm** L × W × H for 1 adult
Temperature, day	**23-26 °C**
Temperature, night	**20-22 °C**
Humidity	**60-80%**
UVB	**Optional**
Diet	**Insects**
Kept	**Singly**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**1-2 eggs**
Incubation	**60-90 days** at 23-26 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Endangered (EN)**

About the species

Cyrtodactylus pulchellus is a slender gecko with a large, flat head, long legs and a long, tapering tail. The base colour is light brown, cream or yellowish, and across the neck, shoulders and body sit broad, dark brown bands with lighter edges. The front band forms a horseshoe-shaped line from eye to eye across the neck. The eyes are large, golden and have a vertical pupil.

The toes are strong and curved and have claws, but not the adhesive lamellae that, for example, day geckos have. The gecko therefore cannot climb smooth glass, but grips rough surfaces such as rock and bark. The genus name comes from Greek and means "curved toe", and the species name is Latin for "beautiful". Males have a groove in front of the vent with a row of pores and another row of pores along the inside of the thighs, 18-20 pores in total on each side.

The species was described in 1827. The name *Cyrtodactylus pulchellus* has since been used for populations across the Malay Peninsula, but several of them have since been described as separate species, and today only the population on Penang is regarded as *C. pulchellus*. It is therefore unclear whether all animals in trade are actually this species.

The gecko reaches about 10 cm from snout to vent and 20-25 cm including the tail. Lifespan in captivity is about 5-8 years. The tail can be shed if the animal is frightened. It is shy, becomes active only after the lights go out, and is more a species to watch than to handle.

Distribution and habitat

Cyrtodactylus pulchellus is endemic to Penang, an island off the north-west coast of the Malay Peninsula. Today it occurs only in the hills and in the western half of the island, where forest still remains.

The name was formerly used for geckos from large parts of the Malay Peninsula and neighbouring countries, and a few older records from, for example, Singapore, India and Myanmar are either errors or unconfirmed. After the split into several species, the range is now regarded as very small. Records outside Penang on the map are due to older identifications or animals in captivity.

> **Native range:** Malaysia.

HABITAT

The gecko lives in forest on rocky ground, especially among large granite boulders in the hills of Penang. By day it hides in crevices, under rocks and in cavities, and at night it climbs about on the rocks and on trunks and branches nearby. Some animals also use vegetation and the outer walls of buildings if they lie close to the forest.

The climate is tropical and humid. The species belongs in the cool, humid understorey and tolerates heat poorly. This is the condition on which husbandry should be built: cool and humid, with many hides.

Care

THE ENCLOSURE

An adult needs an enclosure of at least 60 × 45 × 45 cm (length × width × height), and bigger is better, as the species uses both floor and walls. Floor area matters more than height, because it lives among rocks and not high up in trees.

Furnish with cork bark as a background, rocks, driftwood and stable branches, so that the animal can climb. It has claws and not adhesive feet and cannot climb smooth glass, so rough surfaces are necessary. Provide many hides at different heights and plants that give shade. A moist mix of unfertilised soil, coconut fibre and leaf litter can be used as substrate. The enclosure must have good ventilation, so that the air does not become stagnant, and the animal must be able to retreat into a cool, dark hide all day.

TEMPERATURE

The species tolerates heat poorly. By day the temperature should be 23-26 °C and at night 20-22 °C, corresponding to ordinary room temperature. The temperature must not exceed 26 °C for long periods.

A heat lamp is normally unnecessary and can do harm. Place the enclosure away from sun and radiators and measure with a digital thermometer. If the room is cold in winter, a weak heat mat on the side, controlled by a thermostat, can take the edge off. The animal must always be able to choose a cooler spot.

Read more: Heat and temperature

HUMIDITY AND WATER

The gecko comes from a humid environment and needs a humidity of 60-80 %. The humidity should fluctuate, so that the enclosure can also dry out a little.

Mist the substrate and plants lightly in the evening, so that there are water droplets to drink from, and provide a shallow dish of fresh water. Provide a moist hide where the skin can be shed. Constantly wet conditions cause mould and skin problems, so ventilation must be good. A hygrometer shows whether the level holds.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species is nocturnal and does not need UVB. A weak UVB light is optional, as long as the animal can withdraw completely from it. If you use one, choose a low-output tube over one part of the enclosure and provide shade in the rest.

Keep ordinary light on for 11-12 hours a day, preferably controlled by a timer, and switch the light off completely at night. The animal is most active shortly after the lights go out, so that is a good time to watch it. Avoid strong spotlights.

Read more: Lighting and UVB

FEEDING

Cyrtodactylus pulchellus is an insectivore. Give crickets, grasshoppers, roaches and similar insects of a size smaller than the distance between the animal's eyes. Adults are fed 2-3 times a week and young every other day. Adjust the amount according to the animal's body condition, so that the tail stays plump.

Dust the insects lightly with calcium, and regularly give calcium with D3 and a balanced vitamin supplement. Animals that are about to shed or lay eggs need extra calcium. Feed after the lights are out or late in the day, and remove uneaten dead insects the next morning. Water should always be available.

Read more: Feeder animals: keeping and breeding Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

The species is shy and secretive and spends most of the day in a hide. When the lights go out it comes out and can move quickly and nimbly among rocks and branches. It can drop its tail if frightened, so never grab the tail and limit handling to what is necessary.

There is little documented experience of keeping several animals together. It is therefore best to keep a single animal per enclosure. If two animals are nevertheless kept together, the enclosure must be large with many hiding places, and they must be separated at once if one is stressed, bitten or missing its tail. Two males should not be kept together. New animals should be left in peace for a couple of weeks to settle in.

Breeding

SEXUAL MATURITY AND SEXING

Males can be recognised by a groove with pores in front of the vent and a row of pores along the thighs. In females the pores are not described as distinct, so males are the easiest to recognise. Age and weight at sexual maturity are not documented for the species. As a rule of thumb for the genus, females should be fully grown and in good condition before being bred, as egg-laying drains them of calcium.

MATING

There is almost no documented information on mating in the species. Introduce the male to the female in her enclosure, watch for the first few nights and separate them at once if there are fights or the female bites or hides all the time. Remove the male once mating has taken place, so that the female is not stressed.

In other species in the genus, a cool, drier period with shorter days in winter starts breeding. In any case give the female plenty of food and calcium.

EGG-LAYING AND CLUTCHES

The species lays eggs in small clutches, probably 1-2 eggs at a time, and places them hidden in crevices, under stones or in leaf litter and substrate. How often the female lays, and how many clutches she produces a year, is not documented.

Place a lay box with damp substrate, for example sphagnum or coconut fibre, in a dark corner so that the female has somewhere to lay. Otherwise she buries the eggs in the substrate at the foot of a plant. Give her extra calcium and insects throughout the period, and check the substrate regularly for eggs.

INCUBATION

The eggs are incubated at 23-26 °C and hatch after about 60-90 days; the figures are borrowed from related species in the genus. The eggs must lie relatively moist, but must not become wet, as they easily go mouldy.

Move the eggs carefully to a closed box with moist vermiculite or perlite without turning them, and mark the top side. The box needs small ventilation holes and should stand at a stable temperature. Eggs that collapse or go mouldy are usually dead, but leave them until you are sure.

REARING THE YOUNG

The hatchlings are small and hide from the first day. Keep them singly in a small faunarium with kitchen roll or damp leaf litter, hides and a shallow bowl of water, and mist lightly every day. They live off the yolk for the first few days, and after that they are given small insects such as springtails, fruit flies and small crickets, dusted with calcium.

Growth and feeding rhythm have not been documented for the species, so follow the animal's condition rather than fixed figures. Weigh and check them regularly, and move them to a larger enclosure when they outgrow the old one. Keep them apart until the sex can be determined.

Health and common mistakes

Few health problems have been documented for the species, but the faults resemble those in other geckos from cool, humid environments:

- Too much heat, which causes stress, loss of appetite and, in the worst case, death. Keep the enclosure cool and avoid heat lamps.
- Too little calcium and vitamin D3, especially in breeding females and young animals. It causes soft jaws, bent limbs and tremors. Dust the insects.
- A constantly wet substrate and poor ventilation, which cause fungus, mould and skin problems.
- Shed skin stuck on toes and tail tip. Provide a humid hide, and gently loosen the remnants with lukewarm water.
- Dropped tails, which do not grow back in the same form.

A healthy animal has clear eyes, a plump tail and a good grip. See a vet experienced with reptiles if the gecko loses weight, does not eat for several weeks or looks limp.

Always ask someone who knows

This guide is a good place to start, but it cannot replace experience. Animals differ, and much of what matters most is learned from people who have kept the species for years. Talk to a breeder, an experienced keeper or a vet who knows reptiles and amphibians before you get the animal - and again if anything looks wrong.