herpy

POISON DART FROGS

Niceforo's Poison Frog

Ameerega ingeri

Ameerega ingeri is a small, diurnal poison dart frog of 20-27 mm from the foothills of the Andes in southern Colombia. The back is uniformly dark, the flanks have dark blue spots, and there are bright orange spots in the armpits and on the calves. The species is hardly ever kept, so care is based on the climate of its range and on related species.

Family: Dendrobatidae Former name: *Dendrobates ingeri; Epipedobates ingeri; Phyllobates ingeri*

KEY FACTS

THE ANIMAL

Adult size	**20-27 mm** snout-vent length
Lifespan	**10-15 years**
Active	**By day**
Lifestyle	**Terrestrial**
Habitat	**Rainforest**
Skin toxins in the wild	**Mild**
Skin toxins in captivity	**None** Captive-bred animals. Wild-caught animals can keep their toxins for a long time
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 40 × 40 cm** L × W × H for 2 adults
Temperature, day	**24-26 °C**
Temperature, night	**20-22 °C**
Humidity	**70-100%**
Water	**Water dish** depth 1-2 cm
UVB	**Optional** Ferguson zone 1
Diet	**Small invertebrates (springtails, fruit flies)**
Kept	**In pairs**

BREEDING

Reproduction	**Egg-laying**
Development	**Tadpoles carried to water**
Egg-laying site	**On the ground**
Eggs per clutch	**4-16**
Hatching	**10-22 days**
Larval period	**70-90 days** from hatching to metamorphosis
Larval diet	**Algae/plants and complete diet**
Parental care	**Carries the tadpoles**

PROTECTION AND PAPERWORK

CITES	**Appendix II**
IUCN	**Data Deficient (DD)**

About the species

Ameerega ingeri (Cochran & Goin, 1970) is a small, terrestrial poison dart frog. Males reach up to 24 mm from snout to vent and females up to 26 mm; females are on average slightly larger. The largest known animal, the type specimen, measures about 27 mm. The body is elongate, the eyes large and prominent, and the tympanum small but distinct. The fingers are long with small adhesive discs and no webbing, and the toes have at most slight webbing at the base. The skin on the back and head is coarsely granular, while the sides and belly are smooth.

The back is uniformly dark, almost black, and entirely without stripes, which distinguishes the species from most other *Ameerega*. On the flanks there are irregular dark blue spots from the head to the groin, and some animals have a blue stripe from the nostril along the eye. The legs are dark with small blue spots and become pale blue with black spots towards the toes. In the armpits and on the calves there are oval spots, which are bright orange in adults and yellow in young animals. The belly is pale blue with an irregular black net pattern. The male's call is a long series of short notes, mostly coming in pairs; in this it shares the trait only with *Ameerega bilinguis* in the genus.

The species was described as *Dendrobates ingeri* from four preserved animals and has since been placed in the genera *Phyllobates* and *Epipedobates*. The colours of living animals were unknown for decades, and the species has been confused with *Ameerega bilinguis* and *Ameerega hahneli*, which live in the same area. *A. bilinguis* has a dark red back and a pale stripe along the upper lip, and *A. hahneli* has a brown back with pale stripes along the side. Older records from Putumayo have been assigned by some to *A. bilinguis*, but more recent records from there are regarded as *A. ingeri*. Genetically the species is an old, independent lineage with no close relatives in the genus. The species name honours the zoologist Robert F. Inger.

The genus *Ameerega* has alkaloids in the skin, which the frogs take up through their diet in the wild. The toxicity of *A. ingeri* is not documented in detail and is regarded as mild. Captive-bred animals fed on fruit flies and springtails do not become toxic. Wash your hands after contact with the enclosure all the same, and do not touch the frogs unnecessarily.

Read more: Feeder animals: keeping and breeding Read more: Buying animals: captive-bred, wild-caught and transport

Distribution and habitat

Ameerega ingeri is found only in Colombia, at the foot of the eastern slope of the Andes, where the mountains meet the Amazon lowlands. The species is known from the departments of Caquetá, Putumayo and Cauca at 200-1,300 m elevation, and the type locality lies at Río Pescado in Caquetá. The distribution is patchy, and the species is found mostly in the forest remnants that remain.

> **Native range:** Colombia.

HABITAT

A. ingeri lives in secondary forest and in gallery forest along streams in the rainforest at the foot of the mountains. The climate is warm and very wet all year: the mean temperature is around 26 °C, rainfall around 3,700 mm a year and humidity 70-85 %. The frogs are active by day, especially on sunny mornings, and move about in the dry leaf litter on the forest floor; at night they rest on leaves up to 60-70 cm above the ground. Their diet is mostly small ants, supplemented with other small arthropods such as beetles and small wasps.

The species can be fairly common where the forest remains, but forest clearance for cattle ranching, agriculture and mining fragments the habitats. It is listed as Data Deficient by the IUCN.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

Almost nothing is known about the care of *Ameerega ingeri*, and the species is hardly ever kept. Care is based on the climate at the foot of the mountains, which is warm and humid all year, and on the thick leaf litter of the forest floor. *Ameerega bilinguis* and *Ameerega hahneli* live in the same area, are only slightly smaller and are better known in captivity. The figures for eggs, larval period and lifespan are borrowed from *Ameerega bilinguis*, which most resembles the species.

A pair can be kept in an enclosure of at least 60 × 40 × 40 cm. The species lives on the ground, so floor area counts most. Build the substrate bioactive, with a drainage layer of clay balls, a mesh as a separating layer and a moist planting soil of coconut fibre, bark and sphagnum, and lay a thick layer of leaf litter on top. Add springtails and small isopods, which eat waste and provide extra food.

Furnish with root pieces, cork bark, moss and ferns, so that there are plenty of hiding places, and with a few branches as lookout posts. The lid should have large ventilation areas with mesh, so that the air does not stand still.

Read more: Terrarium construction and bioactive substrate

TEMPERATURE

Keep the enclosure at 24-26 °C by day, and let the temperature fall to 20-22 °C at night. The temperature must not exceed 28 °C, because frogs tolerate heat poorly. Place the enclosure out of direct sun and out of draughts, and measure the temperature with a digital thermometer down in the enclosure. There is no winter dormancy.

Read more: Brumation and the seasons

HUMIDITY AND MISTING

Humidity should be 70-80 % in the middle of the day and close to 100 % in the morning and evening. A rain system or a fogger with a timer is easiest; otherwise mist two to three times a day with reverse-osmosis water or rainwater. The leaf litter should be damp, but may dry out a little between mistings, so that mould does not develop. If the air becomes too dry, the frogs withdraw into hiding and the skin dries out.

WATER AND WATER QUALITY

Provide a shallow water dish with 1-2 cm of water, so that the frogs can easily climb out of it, and with stones or moss at the edge. Use reverse-osmosis water, rainwater or dechlorinated tap water, and change it often. Amphibians absorb water and substances through the skin, so avoid soap, cleaning products and chlorine. Scrub the dish with hot water without soap.

LIGHTING AND UVB

The lighting is primarily for the plants: 10-12 hours a day with LED lighting with a plant-suitable spectrum. It is not documented that *Ameerega ingeri* needs UVB. If a weak UVB source (Ferguson zone 1) is chosen, the frogs must have dense leaf litter and hides to retreat under. The light must not heat the enclosure.

Read more: Lighting and UVB

FEEDING

In the wild *Ameerega ingeri* lives mostly on small ants and other small arthropods from the leaf litter. In the enclosure the diet consists of flightless fruit flies (*Drosophila melanogaster* and *D. hydei*), springtails, small isopods, micro crickets and sifted meadow plankton. Adults take *D. hydei* and small crickets.

Young animals are fed daily, adults three to four times a week, with enough flies that they are eaten up by the next feeding. Dust the feeder insects with calcium with D3 at every meal and with a multivitamin once or twice a week. Keep your own cultures of fruit flies and springtails, so that supply is stable.

Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

Ameerega ingeri is diurnal and most active in the morning. It lives on the ground in the leaf litter, but likes to sleep on leaves some way above the ground, so plants with broad leaves are an advantage. Males in the genus defend small territories, so a pair is the safest way to keep them, and two males should not be kept together in a small enclosure. The male calls with a series of short notes for 10-30 seconds at a time. How the species behaves in groups is not documented.

The frogs should not be handled. The skin is thin and does not tolerate soap, salt and cream. If a frog has to be moved, coax it into a clean, dampened plastic tub, and wash your hands before and after.

Breeding

SEXUAL MATURITY AND SEXING

Females are on average slightly larger than males, but the sexes cannot be told apart reliably by appearance; only the males call. Age at sexual maturity is not documented. The easiest way to a pair is to start with several young and let them pair up.

MATING

Breeding in captivity has not been described for the species. In the genus the male calls to the female and leads her to a hidden spot in the damp leaf litter. A period of less misting followed by heavy misting can trigger breeding. Give the frogs a hide on the ground, for example half a coconut shell or a piece of bark, where the female can lay.

EGGS AND TADPOLES

The eggs are probably laid on the ground in the leaf litter or under a hide, and the clutches are small, about 4-16 eggs. After the eggs have hatched, the male carries the tadpoles on his back, several at a time, to shallow forest pools, puddles and slow-flowing streams. The tadpoles reach about 3 cm in length.

In the enclosure the tadpoles can be removed and raised in small, clean containers with rainwater or reverse-osmosis water. Give fine tadpole food and algae, and change the water regularly. If many tadpoles are kept together, they can eat each other, so keep them separate.

Read more: Rearing tadpoles

METAMORPHOSIS

The eggs hatch after 10-22 days, and the tadpoles undergo metamorphosis after 70-90 days.

When the forelimbs appear, the tadpole must be able to get out of the water: lower the water level, and add a piece of cork or bark so that it can climb out. Move the little froglet to a damp rearing enclosure when the tail is almost absorbed.

REARING THE YOUNG

Newly metamorphosed frogs have the same dark back as the adults, but the spots in the armpits and on the calves are yellow and become orange with age. They are small and need springtails and the smallest fruit flies. Furnish the rearing enclosure like the adults', with leaf litter, hides and a shallow water dish, and keep the temperature stable. Feed daily, and lightly dust the food with calcium and vitamins. Growth and age at transfer to the adults are not documented.

Health and common mistakes

Poison dart frogs are sensitive to heat, drought and poor hygiene. The most important mistakes are:

- An enclosure that is too warm or too dry. The frogs become lethargic, lose weight and lose colour.
- Dirty water in the tadpole containers, which causes fungal infections and disease.
- Food without vitamin and mineral supplements, which causes bone problems and weak young.
- New animals that bring infection with them. Quarantine newly purchased frogs for a period.

A healthy frog has intact skin without sores or red, irritated areas, especially around the vent and on the inside of the hind legs, and a clearly rounded belly. Signs of illness are frequent shedding, a bloated body, lethargy, loss of appetite and dull, dry skin. Isolate a sick animal, and see a vet with amphibian expertise promptly.

Read more: Quarantine and hygiene

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.