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POISON DART FROGS

Red Uakari Poison Frog

Ranitomeya uakarii

Ranitomeya uakarii is a very small, diurnal poison frog of 13-16 mm from the Amazon basin. It is black with red to orange stripes, yellow flanks and blue legs, and it is rare in the hobby. The care advice is based on experience with the genus, and the species suits an experienced keeper with patience and a steady supply of tiny feeder insects.

Family: Dendrobatidae Former name: *Dendrobates uakarii*

KEY FACTS

THE ANIMAL

Adult size	**13-16 mm** snout-vent length
Lifespan	**5-6 years**
Active	**By day**
Lifestyle	**Arboreal and 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	**45 × 45 × 45 cm** L × W × H for 3 adults
Temperature, day	**21-25 °C**
Temperature, night	**18-21 °C**
Humidity	**70-100%**
Water	**Water dish** depth 1-2 cm
UVB	**Optional**
Diet	**Small invertebrates (springtails, fruit flies)**
Kept	**In pairs or in groups**

BREEDING

Reproduction	**Egg-laying**
Development	**Tadpoles carried to water**
Egg-laying site	**In leaf axils (e.g. bromeliads)**
Eggs per clutch	**2-7**
Hatching	**10-14 days**
Larval period	**60-100 days** from hatching to metamorphosis
Larval diet	**Algae/plants and complete diet**
Parental care	**Carries the tadpoles**

PROTECTION AND PAPERWORK

CITES	**Appendix II**
IUCN	**Least Concern (LC)**

About the species

Ranitomeya uakarii is one of the smallest poison dart frogs. Adults measure 13-16 mm from snout to vent. The pattern is striking: red to orange stripes along the sides and back on a black background, broad yellow stripes on the flanks and a black U-shaped mark on the head. All four legs are blue with fine black dots and spots, and the iris of the eye is black. A few populations have pure yellow instead of red stripes. In related species females are usually slightly larger and sturdier than males, but sexing is difficult.

The species was described in 2006 by Brown, Schulte and Summers as *Dendrobates uakarii* and was later moved to the genus *Ranitomeya*. It belongs to the genetic group around *R. reticulata* and was long confused with *R. ventrimaculata*, but is easily recognised by the yellow stripes on the flanks, which *R. ventrimaculata* never has. It is far less widespread in captivity than the

well-known *Ranitomeya* species, and there is almost no species-specific husbandry experience. The rest of this guide is therefore based on experience with the genus as a whole, and the text shows where figures are borrowed. In captivity frogs of the genus live up to 5-6 years.

Skin toxicity: *R. uakarii* does not make its own toxins. Wild poison dart frogs take up toxins from small arthropods in their diet, e.g. ants and millipedes, and store them in the skin. In the genus the toxicity is typically low, but for this particular species the potency is not documented, so the rating mild is a cautious estimate. Captive-bred animals fed on fruit flies and springtails lack the toxins. Even so, the frogs should not be handled, and you should wash your hands when you have worked in the enclosure.

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

Distribution and habitat

Ranitomeya uakarii is widely distributed in the Amazon basin, mostly south of the Amazon River. Most records come from the Loreto region in north-eastern Peru, but the species is also known from Madre de Dios in southern Peru, from the catchment of the Pachitea River in central Peru and from western Brazil. At the tripoint between Peru, Colombia and Brazil it occurs on both sides of the Amazon River and reaches into southern Colombia. Frogs that presumably belong to the species have also been found in central Guyana. The species has been seen from the lowlands up to about 500 m above sea level.

The species is assessed as Least Concern (LC) on the IUCN Red List, because the range and population are large. Locally, deforestation for agriculture and collection for the international pet trade can threaten populations, but most of the range lies in sparsely populated areas.

> **Native range:** Brazil, Colombia and Peru.

HABITAT

Ranitomeya uakarii lives in undisturbed rainforest and in old secondary forest, but is not tied to these habitats. It is first and foremost a ground-dwelling species, although it can climb up into the vegetation and has been seen several metres above the forest floor. The male sits high up and calls with a buzzing voice to lure the females. The eggs are laid in bromeliads of the genus *Guzmania*, which are common in the area, and the tadpoles presumably grow up in the bromeliads' pools of water. The species can breed all year round, and it is the food supply and the number of suitable bromeliads that set the limit.

The climate in the area is warm and humid all year. The exact humidity, rainfall and temperature in the species' own habitats are not documented.

Read more: Humidity, misting and ventilation Read more: Rearing tadpoles

Care

THE ENCLOSURE

A pair or trio of *Ranitomeya uakarii* needs an enclosure of at least 45 × 45 × 45 cm. The size is borrowed from the genus. If you use juveniles, the safest approach is to start with at least four, so that both sexes are included.

Furnish the enclosure like a clearing in a tropical rainforest: a drainage layer, a substrate of e.g. pine bark or lava rock and a thick layer of leaf litter. Provide sturdy branches to climb on, and plant densely with Java moss, vines and bromeliads. Place out black film canisters or similar small containers as egg-laying sites and pools of water for the tadpoles. Springtails and small isopods in the substrate clean up and are food at the same time.

Keep only one form in the enclosure, and never mix species of the genus, so that you avoid hybrids.

Read more: Terrarium construction and bioactive substrate

TEMPERATURE

Keep the enclosure at 21-25 °C during the day and 18-21 °C at night. The figures are borrowed from the genus.

Extra heat is rarely necessary in a heated living room. Never place the enclosure in direct sunlight, because overheating can be fatal. Measure with a digital thermometer both low down and high up. A cool resting period is not documented.

HUMIDITY AND MISTING

Humidity should be 70-100 %. Mist daily, so that humidity is close to 100 % morning and evening and 70-75 % in the middle of the day. This lets the terrarium dry out a little between sprayings.

Use reverse-osmosis water or rain water, and provide a little air exchange, so that there is no stagnant, musty air.

WATER AND WATER QUALITY

A shallow water dish or a bromeliad with water in the leaf axils is enough. Keep the water 1-2 cm deep, so that the small frog can sit in it with its head and upper body above the water; the depth is borrowed from the genus. Change the water when it becomes cloudy, and use reverse-osmosis water, rain water or dechlorinated tap water. Amphibians absorb substances through the skin, so never use soap or cleaning products in the terrarium; rinse with hot water instead.

The water in film canisters and bromeliads holding tadpoles should be still, but changed regularly so that it does not become murky.

LIGHTING AND UVB

Ranitomeya uakarii is diurnal, and the lighting is first and foremost for the plants. Provide 12-14 hours of light a day with fluorescent tubes or LED and darkness at night. It is not documented that the species needs UVB. If you choose a weak UVB source anyway, make sure there is plenty of shade, so that the frogs can choose for themselves.

Read more: Lighting and UVB

FEEDING

The staple diet is small arthropods: wingless fruit flies, springtails, small white woodlice and newly hatched crickets. The species is so small that it is entirely dependent on a constant supply of very small feeder insects, so start the feeder cultures before the frogs move in. Ants from the local area cannot be used as food.

Feed both adults and juveniles daily with exactly so much that it is eaten up before the next feeding. Dust the feeder insects with a suitable vitamin and mineral supplement, and follow the manufacturer's instructions. Frogs of the genus are often shy and can be hard to see eating, so check that all animals get food.

BEHAVIOUR AND HANDLING

Ranitomeya uakarii is diurnal. In a densely planted terrarium with many hiding places you typically see more of the frogs than in a barren terrarium, but the small frogs are often shy and hide when you approach the glass. The male calls from a high spot. Poison frogs do not have true amplexus; if it looks like it, it is typically two frogs of the same sex in a territorial dispute.

The frogs should not be handled. The skin is thin and permeable, and residues of soap, cream and oil from the hands can harm them. If a frog has to be caught or examined, use a transparent tub.

Breeding

SEXUAL MATURITY AND SEXING

Sexing small *Ranitomeya* frogs is difficult. Females are usually slightly larger and more robust than males, and only the male calls. Age at sexual maturity is not documented for *Ranitomeya uakarii*. The safest way to a pair is to start with several juveniles and let them find each other.

MATING

The male calls from a high perch, and the female follows him around the terrarium, nudging and pushing him towards a suitable egg-laying site. There is no true amplexus. Provide several black film canisters and bromeliads to choose from, and leave the animals in peace.

Stable temperature with a slightly cooler night, high humidity and plenty of food are the most important. The species can breed all year round, and the number of suitable egg-laying sites and the food supply limit how often this happens. A specific trigger in captivity is not documented.

EGGS AND TADPOLES

In the wild the eggs are laid in bromeliads of the genus *Guzmania*, and in the terrarium film canisters and bromeliads are used. *Ranitomeya uakarii* lays 2-7 eggs per clutch, and with plenty of food the female can lay about four times a month. The male carries the hatched tadpoles to separate pools of water. Whether he also guards the eggs has not been described for the species.

In some related species the female lays unfertilised eggs in the water as food for the tadpoles, but this is not documented for this species. Tadpoles can be reared on tadpole food, dry food for aquarium fish or pieces of earthworm. Let the adults look after the eggs and transport, and only then remove the tadpoles. Keep them separately in small containers with clean reverse-osmosis water, and change about two thirds of the water every two to three days.

METAMORPHOSIS

The eggs hatch after 10-14 days, and at a constant approx. 24 °C it then takes approx. 60-100 days until the forelimbs appear. Both figures are borrowed from the genus.

When the forelimbs appear, the tadpole stops eating. Give it an easy way out of the water, e.g. a small piece of cork on the surface, and move it to a container with a moist land area when the tail is nearly absorbed.

REARING THE YOUNG

Newly metamorphosed frogs are tiny. Keep them in a small, moist rearing container with dead leaves, cork and a shallow water dish. Feed daily with springtails and the smallest fruit flies, lightly dusted with vitamins and minerals.

Juveniles of even size can go together in a group. Watch for aggression and egg eating as they approach sexual maturity, and split up the group if necessary.

Health and common mistakes

Diseases have not been described separately for *Ranitomeya uakarii*, so the advice is borrowed from the genus:

- Heat from sun through a window can quickly become fatal, so never place the terrarium in sunlight.
- Low humidity without access to water dries the frogs out, while a terrarium that is far too wet and stagnant causes skin infections and mould.
- Feeder insects without a vitamin and mineral supplement weaken the bones.
- A thin frog without a round belly is often due to too little food or competition. Check that all animals get food.
- Fights between animals of the same sex and females eating each other's eggs.

A healthy frog has intact skin without sores or red, irritated areas, especially around the vent and on the inside of the hind legs. Skin that looks cottony or fungal-like indicates an infection. Other signs of illness are frequent shedding, a balloon-like body, lethargy or restlessness, loss of appetite and dull, dry skin. Isolate the animal, and quickly seek a vet with amphibian experience.

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.