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AGAMAS

Armored Pricklenape

Acanthosaura armata

Acanthosaura armata is an olive-green to pale green forest agamid with two pairs of spines on the head and nape. It lives in the lowland and foothill forests of the Malay Peninsula, southern Thailand and Myanmar, Sumatra and Hainan. The species reaches about 30 cm and is rare in captivity, so its care draws on the related *Acanthosaura capra* and *Acanthosaura crucigera*, adjusted for a warmer climate.

Family: Agamidae Former name: *Agama armata*

KEY FACTS

THE ANIMAL

Adult size	**25-30 cm** total length incl. tail
Lifespan	**5-10 years**
Active	**By day**
Lifestyle	**Arboreal and terrestrial**
Habitat	**Rainforest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**100 × 50 × 120 cm** L × W × H for 1 adult
Temperature, day	**24-28 °C**
Basking spot	**30-32 °C**
Temperature, night	**21-24 °C**
Humidity	**70-90%**
Water	**Water section** depth 5-15 cm
UVB	**Recommended** Ferguson zone 2
Diet	**Insects and worms/snails**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**6-12 eggs**
Incubation	**110-130 days** at 25-27 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Least Concern (LC)**

About the species

Acanthosaura armata is a robust, laterally compressed forest agamid with a long tail and short legs. The ground colour is olive green to pale green with dark spots on the sides. The male's throat is orange, sometimes with purple stripes. The skin consists of small, granular scales mixed with larger, knobbly ones, and the eardrum is exposed. The head has two pairs of spines: one behind each eye and one on the side of the nape. The two pairs of spines distinguish the species from *A. capra*, which has only the spine by the eye. A crest of spines runs along the nape and back.

The species grows to about 30 cm in length including the tail. It was described in 1827 by John Edward Gray as *Agama armata* and is the type species of the genus *Acanthosaura*. The scientific name comes from the Latin *armatus*, armed. The type locality of Singapore is an error, as the species does not occur there.

The genus is difficult to identify to species level, and several species are sold under the same trade name, including *A. capra*, *A. crucigera* and *A. lepidogaster*. Check which species you have before adjusting your care to a guide: *A. armata* needs to be kept warmer than the mountain species. Animals in the trade are mostly wild-caught and stressed. The lifespan is not documented; the 5-10 years in the box is borrowed from the better-known species of the genus.

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

Distribution and habitat

Acanthosaura armata occurs in southern Thailand, southern Myanmar, on the Malay Peninsula and on Sumatra. It has also been found on Hainan in China and on the Malaysian islands of Penang and Tioman. In Thailand it is known from the southern part of the country, including Hala-Bala in Narathiwat province on the border with Malaysia.

The species is assessed as Least Concern (LC).

> **Native range:** China, Myanmar (Burma), Thailand, Malaysia and Indonesia.

HABITAT

Acanthosaura armata lives in tropical rainforest from the lowlands up into the foothill forests, including lowland dipterocarp forest in the southern Malay Peninsula. It is diurnal and stays in dense, humid forest, where it sits on the ground or in low bushes just above it. It is cautious, rarely basks and does not seek out open, sunlit places. The forest floor is damp and covered in leaves, and the habitat is often close to water.

The climate in the lowlands of the Malay Peninsula is warm and very humid all year, at 23-32 °C with only small differences between the seasons. This is warmer than in the mountain forests where the best-known species of the genus live.

Care

THE ENCLOSURE

Little is known about the care of *Acanthosaura armata*, and the species is rare in captivity. Enclosure size, furnishing and humidity are borrowed from the better-known species of the genus: *Acanthosaura capra*, *Acanthosaura crucigera* and *Acanthosaura lepidogaster*. They live in the mountains, so the temperatures are set higher to suit the lowland climate.

A single adult needs a tall enclosure of at least 100 × 50 × 120 cm (length × width × height). A male with two females needs at least 100 × 60 × 120 cm, and two males should not live together. A mesh lid and large ventilation panels provide the air exchange needed when humidity is high.

Furnish with vertical and sloping branches and roots, at least as thick as the animal's body. Dense plants such as climbers, ferns and epiphytes provide cover and hold droplets. The species uses both trunks and the ground, so there should also be roots, bark and hides on the floor. A shallow water area with still water is used for drinking and bathing. The water must be no more than 15 cm deep, because the animals are poor swimmers and can drown, especially at night.

The substrate is a mixture of potting soil and sand, at least 15-20 cm deep, so the female can dig and lay eggs. Remove droppings daily.

Read more: Humidity, misting and ventilation

TEMPERATURE

Acanthosaura armata needs 24-28 °C by day and 21-24 °C at night. A weak heat lamp provides a small basking spot at 30-32 °C high up at one end; the animal basks only a little, but must be able to choose between several temperature zones. The figures are an estimate based on the lowland climate and are a couple of degrees above those for the genus' mountain species.

The species comes from shady forest floor, so the air must not exceed 30 °C for any length of time. Measure with digital thermometers both at the lamp and down in the enclosure. In hot summer spells, the room alone can make the enclosure too warm; move it to a cooler room or use a fan. The climate varies only slightly over the year, so a cool winter period is not necessary.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity for *Acanthosaura armata* should be 70-90%, highest at night; the figure is borrowed from the other species of the genus and suits the humid lowland forest. Mist the enclosure thoroughly with soft water daily, so that droplets hang on the plants and walls. A timer-controlled rain system keeps the level steady. The animals drink from droplets and from running water and enjoy being showered.

Daily misting is necessary because it is the main way the animal drinks. Without it, the animal can become dehydrated and have problems shedding. At the same time, the enclosure must not become wet and muggy: good ventilation is just as important as humidity, so that mould does not form.

LIGHTING AND UVB

Acanthosaura armata is diurnal but lives in the shade of the forest. UVB is beneficial; Ferguson zone 2 is borrowed from *A. capra*. Use a UVB tube in a reflective fitting above the mesh, and let the animal retreat from the light into the foliage. Turn the light on 12 hours a day.

Supplement with a daylight lamp so the plants thrive. Replace the tubes according to the manufacturer's instructions.

Read more: Lighting and UVB

FEEDING

Acanthosaura armata feeds on insects and other small animals, and the genus is especially fond of worms. Give a varied diet of crickets, cockroaches, grasshoppers, beetles, larvae, earthworms and slugs. Waxworms and morio worms are fatty and are given only occasionally, because the genus easily becomes overweight. Do not use compost worms, and collect small animals only from natural areas free of pesticides. Adults are fed according to body condition, and juveniles have a large appetite and are fed more often.

Dust the food with calcium and a multivitamin at every feeding. The genus feeds by day but may also eat at night. Newly arrived animals often take only food that moves, so leave them in peace while they settle in.

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

BEHAVIOUR AND HANDLING

Acanthosaura armata is a secretive animal that sits still on a branch or on the ground and relies on its camouflage. If it is discovered, it rears up, inflates its throat pouch and opens its mouth. These are signs of stress, and it needs to be left in peace. It flees downwards between roots and stones.

Give a new animal 1-2 weeks of peace. Keep handling brief and infrequent. Wash your hands with soap after any contact with the animal and enclosure, because reptiles can carry Salmonella.

Males of the genus are territorial and should not live together. One male can be kept with two females in a large, densely planted enclosure with many hides. Gravid females can react aggressively towards the others and should then be separated until after egg laying. The species also does perfectly well on its own.

Read more: Quarantine and hygiene

Breeding

SEXUAL MATURITY AND SEXING

In *Acanthosaura armata*, the male has a thicker tail base than the female and an orange throat. In young animals the sex is hard to see. The age at sexual maturity is not documented for *Acanthosaura armata*. Do not breed a female until she is fully grown and in good condition.

MATING

Breeding of *Acanthosaura armata* in captivity is not documented, so the advice is borrowed from *Acanthosaura crucigera* and *Acanthosaura capra*. In them, a cool period of 6-8 weeks triggers mating, but they live in the mountains. *A. armata* comes from the lowlands, where the seasons hardly change, so a cold period is probably not necessary.

The male nods his head, approaches the female and holds her with a bite to the nape during mating. Remove the male if the female is wounded or becomes stressed.

EGG-LAYING AND CLUTCHES

The female of *Acanthosaura armata* probably lays 6-12 eggs; the figure is borrowed from *A. crucigera*. A few days beforehand she stops eating and goes down to the floor to make trial digs. She digs a hole of up to 10 cm, lays the eggs and scrapes it shut again. The genus lays under rotting wood and bark and in moist soil or peat.

The substrate should be at least 15-20 cm deep and moist enough for a hole to hold its shape. Give the female plenty of food and calcium before and after egg laying.

INCUBATION

Carefully dig up the eggs of *Acanthosaura armata* and place them in the same orientation in a closed container with moist vermiculite or perlite. At 25-27 °C the eggs hatch after 110-130 days, and the figure is borrowed from *A. crucigera*. Do not turn the eggs, and check regularly for mould; unfertilised eggs that collapse are removed.

REARING THE YOUNG

In the genus, the young are 5-8 cm long at hatching. The young of *Acanthosaura armata* are moved to a rearing enclosure with the same furnishing and climate as the adults'. The water area must be no more than 5 cm deep, so the young do not drown. In *A. crucigera* the young can grow up together, even males, as long as the enclosure is large enough, but separate them if they start fighting.

Young animals have a large appetite: small crickets, worms and small snails. In *A. crucigera* the young reach about 15 cm in 12 months; growth is not documented for *A. armata*.

Health and common mistakes

Animals of *Acanthosaura armata* in the trade are mostly wild-caught, stressed and heavily infested with parasites, so a faecal sample examined by a vet with reptile experience is the first thing a new animal should have. The typical problems are:

- Dehydration and shedding problems from low humidity and too little misting.
- Heatstroke, if the enclosure stays above 30 °C for any length of time.
- Obesity from too many fatty larvae.
- Internal parasites, especially in wild-caught animals.
- Drowning in water that is too deep, especially at night.
- Mould and respiratory problems, if the enclosure is wet and poorly ventilated.

See a vet if the animal loses weight, stops eating, sits on the floor or breathes with its mouth open.

Read more: Common diseases and signs of illness

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.