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AGAMAS

Common Agama

Agama agama

Agama agama is a sturdy, diurnal rock agama from the savannas of western and central Africa, known for the dominant male's orange-red head and blue body. The name long covered a whole group of closely related species, so many animals in the trade are other species. It is robust and lively but needs a spacious enclosure, a very hot basking spot and strong UVB.

Family: Agamidae Former name: *Agama colonorum; Agama occipitalis; Agama smithii; Lacerta agama*

KEY FACTS

THE ANIMAL

Adult size	**20-30 cm** total length incl. tail
Lifespan	**10-15 years**
Active	**By day**
Lifestyle	**Rock-dwelling and terrestrial**
Habitat	**Semi-desert, savanna and rocky terrain**
Difficulty	**Intermediate**

CARE

Min. enclosure	**120 × 60 × 60 cm** L × W × H for 1 adult
Temperature, day	**24-32 °C**
Basking spot	**38-43 °C**
Temperature, night	**18-21 °C**
Humidity	**30-50%**
Water	**Water dish**
UVB	**Essential** Ferguson zone 3
Diet	**Insects and plants**
Kept	**Singly or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**14-24 months**
Clutch size	**5-7 eggs**
Incubation	**56-90 days** at 26-29 °C

PROTECTION AND PAPERWORK

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

About the species

Agama agama is a medium-sized, heavily built agama with a large head, long legs and a long tail. The dominant male has a yellow to orange-red head and neck, a blue body and a tail with pale and dark bands. Females, juveniles and subordinate males are far more subdued: an olive-green head and a brown body with pale spots and a pale stripe down the tail. The underside is pale. The colours change with temperature, mood and social rank, so a cold or suppressed male can look almost uniformly brown.

Adults reach 20-30 cm including the tail, and males are largest, with a broader head than females.

A. agama was long used as a collective name for nearly all red-headed rock agamas in Africa south of the Sahara. DNA studies have split the group into several species, including *Agama picticauda*, *Agama africana*, *Agama lionotus* and *Agama mucosoensis*, and the true *A. agama* is now restricted to western and central Africa. Animals in the trade are still often sold as *A. agama* without reliable identification, and many of them are probably *A. picticauda*. Care is the same for the whole group, but information in older literature may belong to other species.

The species is fast and wary and not an animal for daily handling, but it tolerates calm handling if accustomed to it as a juvenile. It is first and foremost an animal to watch in a well-furnished terrarium. The animal can live 10-15 years in captivity, perhaps longer; lifespan is poorly documented.

Distribution and habitat

Agama agama in the narrow sense lives in western and central Africa: Cameroon, Nigeria, Chad, the Central African Republic, South Sudan and Sudan.

Older literature gives the species an almost pan-African distribution from Senegal to Tanzania. Most of those populations now belong to other species, for example *A. picticauda* in West Africa and *A. lionotus* in East Africa. The introduced populations on Madagascar, the Comoros, Madeira, Cape Verde and in Florida are also now counted as *A. picticauda*. The map shows the narrow distribution; records outside the area are misidentifications or other species.

> **Native range:** Cameroon, Nigeria, Chad, Central African Republic, South Sudan and Sudan.

HABITAT

Agama agama lives in open country: savanna, scrub, rocky areas and dry forest edges, but also in towns, villages and gardens, where it basks on walls, roofs and fence posts. The dominant male stays on a rock, a termite mound or a wall, from which he surveys his territory.

The species is active for most of the day but withdraws into shade when surfaces become too hot in the middle of the day. It lives in groups with a dominant male, several females and some subordinate males. Mating follows the rainy season, but where rain is even, it can breed almost all year. The female digs a hole in moist, sunlit soil for the eggs, and the temperature in the nest hole determines the sex of the young.

Care

THE ENCLOSURE

An adult needs a terrarium of at least 120 × 60 × 60 cm (length × width × height). A male with two or three females needs at least 180 × 60 × 60 cm. Floor area matters more than height, because the species lives mostly on the ground and on low rocks, and the length provides room for a clear temperature gradient.

Use a substrate of sand mixed with a little soil in a layer of 5-8 cm so the animal can dig. Very fine, dusty sand should be avoided. Kitchen paper is easy to keep clean, but offers no opportunity to dig and lay eggs.

Furnish with flat stones, stacked slate, cork and rock-like hiding places so the animal can climb up and keep watch. At least three hiding places in different temperature zones is a good starting point. Everything must be firmly fixed, because the species is energetic and digs things under. A mesh lid gives good ventilation, and the lid must be lockable, because the animal is fast. Remove uneaten insects before the lights go out, and replace the sand completely every 3-4 months.

Read more: Heat and temperature

TEMPERATURE

Agama agama needs a clear gradient. The basking spot should have a surface temperature of 38-43 °C, measured with an infrared thermometer. The warm end of the enclosure is 29-32 °C and the cool end 24-27 °C. Use a halogen spot in a ceramic fitting over a flat rock or slate slab, and put a thermostat on all heat sources.

At night the lamps are switched off, and the temperature may fall to 18-21 °C. If the room is colder, use a ceramic heater on a thermostat, which gives no light.

Too low temperatures cause poor digestion, a weakened immune system and respiratory infections, and the male loses his colours. The figures apply to the whole species group; there are no separate figures for the true *A. agama*.

HUMIDITY AND WATER

Humidity should be 30-50 %. *Agama agama* comes from savanna and scrub, not from true desert, and needs slightly more moisture than the desert species. Mist the walls lightly one or two mornings a week; this keeps humidity up and provides droplets to drink, because agamas prefer to drink droplets rather than from a bowl.

Always provide a low, stable bowl of fresh water in the enclosure, and change the water daily. Air that is too dry causes problems with shedding, especially on the toes and tail tip. Moisture combined with cold causes respiratory infections.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

Agama agama is diurnal and basks a great deal, so it needs strong light and UVB corresponding to Ferguson zone 3. Use a T5 HO tube of 10-12 % in a reflective fitting that covers the basking spot and ideally the warm half of the enclosure. The distance from tube to basking spot is normally 25-40 cm depending on mesh and lamp; check with a UV meter. The cool end should have shade, so the animal can withdraw from the UV light.

Keep 12-14 hours of light a day controlled by a timer. UVB tubes lose their effect long before the light visibly weakens, so replace them according to the manufacturer's instructions, usually every 12 months.

Read more: Lighting and UVB

FEEDING

Agama agama is first and foremost an insectivore but also takes flowers, seeds, grass and leaves. Give a varied diet of well-fed insects: cockroaches, crickets, grasshoppers and, in smaller quantities, mealworms and superworms. Fatty insects such as waxworm larvae are for treats only. The insects should be no larger than the distance between the animal's eyes. Offer some greens every week, for example dandelion leaves, kale and mustard greens, but not lettuce and spinach as a staple.

Juveniles under a year old are fed daily. Adults get insects three times a week, so they do not become fat. Remove uneaten insects before the lights go out.

Dust the insects with calcium without D3 at every feeding when the UVB lighting is in order, and give a vitamin preparation with D3 every other week. If the UVB lighting is inadequate, use calcium with D3 at every second feeding, but it cannot replace UVB.

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

BEHAVIOUR AND HANDLING

Agama agama is fast, wary and territorial. The males defend an area, and two males must never be kept together: it ends in serious injuries. A male can be kept with one or more females in a large enclosure. Females can usually live together, but the male is persistent in the breeding season, so the females need several hiding places. A male that can see another male can lose his colour and stop eating.

The species tolerates handling if it is accustomed to it as a juvenile, but it does not seek contact. Keep sessions short, let the animal walk across your hands, and never take it by the tail. Agamas cannot drop their tails like many other lizards, and a tail that breaks does not grow back. An animal with good hiding places is calmer and shows more colours.

Breeding

SEXUAL MATURITY AND SEXING

The male of *Agama agama* is larger and has a broader head than the female, and the dominant male has a yellow or orange-red head and a blue body, while the female is brownish with an olive-green head and pale spots. The sex is easy to see in adults, harder in juveniles.

The females become sexually mature after 14-18 months, the males after about two years. Do not put a female into breeding until she is fully grown and in good condition.

MATING

In the wild, mating in *Agama agama* follows the rainy season. Place the male with the females in a large enclosure with many hiding places, so the females can avoid him. The male nods his head, approaches the female from behind and takes hold of her nape; the mating itself lasts one to two minutes. A male in breeding dress is persistent, so keep an eye on the females, and separate the animals if a female gets wounds or stops eating.

EGG-LAYING AND CLUTCHES

A gravid female becomes clearly rounder. Give her a laying box with 10-15 cm of slightly moist sand or coconut fibre where she can dig. In the wild she digs a hole about 5 cm deep in moist, sunlit soil and typically lays 5-7 eggs. A female can lay several clutches in a season, and females also lay infertile eggs without a male.

Without a suitable site the female can retain the eggs, and this can become life-threatening. Give her plenty of food and calcium before and after egg laying.

INCUBATION

Lift the eggs carefully without turning them; mark the top with a pencil if you like. Place them in slightly damp vermiculite or coconut fibre in an incubator. At about 29 °C the eggs hatch after 60-90 days, typically 8-10 weeks.

A. agama was the first lizard in which temperature-dependent sex determination was demonstrated: at 26-27 °C the young become females, at 29 °C males. The incubation temperature thus controls the sex ratio. Keep the temperature stable.

Read more: Incubating eggs

REARING THE YOUNG

Newly hatched juveniles are about 4 cm from snout to vent with a tail of 7-8 cm, and they begin to eat quickly. Keep them separate from the adults in an enclosure with the same furnishings, many hiding places and UVB. Feed daily with small insects, dusted with calcium. They grow fast and are fully grown after 18-24 months. Separate the males from each other in good time, because they become territorial.

Health and common mistakes

Most diseases in *Agama agama* are caused by faults in care. Typical problems are:

- Metabolic bone disease from too little UVB and calcium. The signs are tremors, soft limbs and deformed jaws.
- Shedding problems from air that is too dry, especially on the toes and tail tip, where old skin can constrict the blood supply.
- Respiratory infection from too low a temperature or too high humidity: wheezing breathing, mucus at the nostrils and an open mouth.
- Obesity from too many fatty insects and too little exercise.
- Intestinal worms and other parasites. Wild-caught animals often have many, so quarantine new animals, and have a faecal sample examined.
- Egg-laying problems in females without a suitable laying site.

A healthy animal has clear eyes, a plump tail and smooth skin without old shed, and it eats willingly. Reptiles hide illness for a long time, so contact a vet with reptile experience if the animal loses weight, does not eat, breathes with its mouth open or seems lethargic.

Read more: Quarantine and hygiene Read more: Common diseases and signs of illness Read more: Buying animals: captive-bred, wild-caught and transport

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.