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AGAMAS

Green Crested Lizard

Bronchocela cristatella

Bronchocela cristatella is a pale green, very slender arboreal agamid from the forests of South-East Asia, where the tail makes up over three quarters of the length. It reaches 50-58 cm, is diurnal and hunts insects in the trees. It can change from clear green to brown when it becomes agitated, and it is fast, a strong jumper and shy.

Family: Agamidae Former name: *Calotes cristatellus; Agama cristatella; Agama moluccana*

KEY FACTS

THE ANIMAL

Adult size	**50-58 cm** total length incl. tail
Lifespan	**5-10 years**
Active	**By day**
Lifestyle	**Arboreal**
Habitat	**Rainforest**
Difficulty	**Experienced**

CARE

Min. enclosure	**120 × 60 × 150 cm** L × W × H for 1 adult
Temperature, day	**25-30 °C**
Basking spot	**32-38 °C**
Temperature, night	**22-25 °C**
Humidity	**70-90%**
Water	**No water dish**
UVB	**Recommended** Ferguson zone 2
Diet	**Insects**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**2 eggs**
Incubation	**47-80 days** at 27-31 °C

PROTECTION AND PAPERWORK

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

About the species

Bronchocela cristatella is a slender, green agamid with a small head, a laterally compressed body, long, thin limbs and an unusually long, thin tail that makes up over 75 % of the total length. The body measures 12-13 cm from snout to vent, and the whole animal 50-58 cm. The ground colour is a clear grass green, sometimes with a bluish tinge on the head. The male has a short nuchal crest of pointed scales that resembles the points of a crown.

When the animal is threatened or excited, the colour changes to brown. The colour change is rapid and reverses when the animal calms down, so a brown colour in the enclosure is a sign of unrest or stress.

The species was described by Heinrich Kuhl in 1820. The name has been used for several related green agamids from South-East Asia, and confusion with *Bronchocela jubata* is common. Animals in southern Myanmar are now assigned to *Bronchocela burmana*, and on Luzon it is unresolved whether the animals belong to *B. cristatella* or *Bronchocela marmorata*. The genus *Bronchocela* is closely related to *Calotes*.

The species is shy and unsuitable for handling. Lifespan is not documented, and the figure in the care sheet is an estimate.

Distribution and habitat

Bronchocela cristatella lives in South-East Asia: in southern Thailand, on the Malay Peninsula with islands such as Langkawi, Pangkor and Tioman, in Singapore, on Sumatra and the Natuna Islands, on Borneo and further east to Sulawesi and Halmahera. It also occurs on many of the islands of the Philippines, from Palawan and Mindanao to the Visayas and possibly Luzon.

The species does not occur on Bali, nor in India. In Singapore it has declined, probably because it is outcompeted by the introduced *Calotes versicolor*.

> **Native range:** Malaysia, Singapore, Indonesia, Philippines, Thailand and Brunei.

HABITAT

The species lives in primary and secondary forest, but also in disturbed areas, parks and gardens. It is diurnal and arboreal and stays mostly a few metres up in bushes and trees, where it clings to branches and trunks with its long toes and jumps quickly from branch to branch. It is widespread, but not numerous.

The climate is tropical lowland: warm and humid all year with many downpours, about 24-32 °C over the course of the day and high humidity. The species also sits at forest edges and in clearings, where it gets sun. When in danger it presses itself against a trunk or disappears into the foliage, where the green colour hides it well.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

Little is known about the care of *Bronchocela cristatella*. Its care is based on the climate in the range, on the habitat in bushes and trees and on experience with other arboreal agamids such as *Calotes versicolor* and *Gonocephalus grandis*.

An adult animal needs a tall enclosure of at least 120 × 60 × 150 cm (length × width × height). The long tail and the fast jumps require space, and height is more important than floor area.

Furnish with many thin branches, bamboo canes and lianas at different angles, dense planting with live plants and a back wall that provides cover. Dense foliage makes the animal feel secure. A moisture-retaining mixture of soil, sand and a layer of leaves suits as substrate. The enclosure must have good ventilation at the top so that still, humid air does not develop. The lid must close tightly, because the animal is very fast.

Keep one animal or a pair in a large enclosure. Remove droppings daily.

TEMPERATURE

The temperature follows the climate in the range. The daytime temperature in the enclosure should be 25-30 °C, and at a basking spot high up on a branch there should be 32-38 °C. At night there should be 22-25 °C, and the temperature must not fall below 20 °C.

Use a heat lamp shielded with a grille so that the animal does not burn itself, and measure the temperature with thermometers at both ends. The animal must always be able to withdraw from the heat into the cool, shaded part. The heat is switched off at night.

Read more: Heat and temperature

HUMIDITY AND WATER

Relative humidity should be 70-90 %, as in a tropical lowland forest. Mist the enclosure thoroughly twice a day so that the leaves and branches are wet. The animal drinks droplets from the plants, and a bowl is not necessary. Let the air dry out a little between mistings, and ensure ventilation so that mould and respiratory problems do not develop.

LIGHTING AND UVB

The species is diurnal and basks at forest edges and in clearings, so it needs strong light and UVB. Use a T5 HO tube of 6 % over the basking spot, corresponding to Ferguson zone 2 with a UV index of 2-3 at the basking spot and lower among the plants. The zone has not been measured for the species, but suits a species that alternates between sun and shade. Check the distance between tube and animal with a UV meter, and replace the tubes according to the manufacturer's instructions.

Switch the light on for 12 hours a day all year round. Live plants also need light, so preferably use a plant lamp in addition.

Read more: Lighting and UVB

FEEDING

Bronchocela cristatella feeds on insects, which it catches in bushes and trees, including ticks. Give varied live feeder insects no larger than the distance between the animal's eyes: small crickets, grasshoppers, cockroaches, flies and larvae, with fruit flies for the young. Fatty insects such as mealworms are given only rarely.

Young animals are fed daily, adults every second or third day. Dust the feeder insects with calcium at most feedings and with a vitamin and mineral supplement once a week, and give the insects nutritious food the day before. The animal reacts to movement, so release the food into the branches or give flying insects.

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

BEHAVIOUR AND HANDLING

The species is shy and easily stressed. Under stress it turns brown, and it may flee into the foliage or jump from the branches. It is unsuitable for handling and is an animal to look at. Work calmly in the enclosure, and give a new animal time and many hiding places among the plants.

Social behaviour in captivity is not documented. Keep only one male in each enclosure; a male with a female can be kept in a large, densely planted enclosure where they can get away from each other.

Breeding

SEXUAL MATURITY AND SEXING

The male has a short nuchal crest of pointed scales, while the female has a weaker crest or none. The sex is easiest to see in adults. Age at sexual maturity is not documented.

MATING

The breeding season and any seasonal changes have not been documented for the species. The climate is humid all year, so a rest period is hardly necessary. Put the female with the male in a large, densely planted enclosure, and watch them, so that the female can get away if the male becomes too rough.

EGG-LAYING AND CLUTCHES

Clutch size is not documented for *B. cristatella*. The figure in the care sheet is borrowed from the closely related *Bronchocela jubata*, which lays two elongated, white eggs of about 4 cm side by side in sandy soil under a thin layer of humus. The number of clutches a year is not documented.

Give the female a laying box or a corner with at least 15 cm of lightly damp soil and sand under a layer of leaves. Without a suitable place the female may retain her eggs, which requires a vet. Give her plenty of food and calcium before and after laying.

INCUBATION

The incubation period has not been documented for the species. The figures in the box are borrowed from *Calotes versicolor*, whose eggs hatch after 47-80 days at 27-31 °C. Dig the eggs up carefully without turning them, and place them in a closed container with slightly damp vermiculite and small ventilation holes. Eggs that collapse or go mouldy are dead and can be removed.

Read more: Incubating eggs

REARING THE YOUNG

Rearing is not documented for the species. Keep the young in a small but tall enclosure with the same layout as the adults': dense plants, thin branches, high humidity, a basking spot and UVB. Feed them daily with fruit flies, small crickets and other small insects dusted with calcium. Keep them sorted by size, and provide many hiding places.

Health and common mistakes

Most problems are caused by mistakes in the setup. Typical problems are:

- Stress and refusal to feed, especially in wild-caught animals. A persistent brown colour is a sign of stress.
- Bone loss (metabolic bone disease) from too little UVB and calcium.
- Dehydration in air that is too dry or too little misting.
- Respiratory infections in still, cold and damp air.
- Parasites in wild-caught animals, which should be quarantined for at least three months.
- Injuries to the snout when the animal jumps into the glass.

A healthy animal has clear eyes, a clear green colour and a plump body. Wash your hands after contact with the animal and enclosure, as reptiles can carry salmonella. See a vet with reptile experience if the animal loses weight, does not eat 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.