

SOME NOTES ON *GASTROPHOLIS PRASINA*

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Little was known about these lizards until one was brought in on 13 XII 85. Unable to identify it we wrote to Dr. E.N. Arnold of the British Museum with a brief description. Dr. Arnold suggested that it may be an example of *Gastropholis prasina* and he sent us a photograph of a sub-adult one taken in the Jalori Forest some weeks before. This we considered a reasonable confirmation. Our single specimen remained the only one for five years. During this time it laid a clutch of five infertile eggs. Regrettably it died within five days of our having a second specimen, a male, brought in. Since that time a number of specimens have been brought to us.

It appears that our first specimen was the first ever collected in Kenya and only the fourth one ever collected over the last 90 years. (Dr. E.N. Arnold).

SUPERFICIAL DESCRIPTION:

These are medium sized lizards. The normal adult size appears to be about 350 mm. long. Much of this is tail. They are a brilliant green dorsally fading to a more yellowish green ventrally in the body. There are fine black spots dorso-laterally along the tail. The femoral portions of the rear limbs are grey. The inside of the mouth and the tongue are a bright orange. These lizards are irascible and difficult to handle, proving resistant to accurate measurement when alive. Recently we had a female die so we were able to provide the following measurements and scale counts.

Length Total:	326 mm	This means that the tail is two and a half times the body length.
Nose to vent:	94 mm	
Vent to tail end:	232 mm	
Mid-body dorsal scales:	(tranverse)	29
Mid-body ventral scales:	(tranverse)	15
Caudal Scales:	(longitudinal)	142
Ventral scales: Gular fold to vent:		38
Femoral pores	Left:	13
	Right:	14

Gular fold. This is a fold ventrally on the neck which in this specimen consisted of 12 transverse enlarged scales, the largest in the centre and decreasing in size to each side. When the head is lifted a line bare of scales across the neck is exposed.

Dorsal scales are imbricate on the rear margins but appear not to be so. Ventral scales are oblong in unstaggered rows resembling schoolbook illustrations of the Roman military *testudo*.

There appears to be no sexual dimorphism apart from that the tail root of males appears to be slightly larger than that of females. Examination of a series could well provide other differences. At present all our other specimens are alive so close scrutiny is difficult.

These lizards are slender and bear a superficial resemblance to *Varanus niloticus* (Quoting Karl Schmidt. *The Herpetology of the Belgian Congo*).

OBSERVATIONS IN CAPTIVITY

Disposition

These are active, fierce little lizards and will not hesitate to attack anything they deem to be attackable. One determinedly attacked a ruler I put into a cage to measure it. A gecko, *Hemidactylus* Sp. was put in a vivarium with one of these lizards and was chased around until it dropped its tail. The green lizard promptly ate the wriggling discarded tail. A bite can draw blood from a human hand. Observation shows that these lizards are probably quite intelligent and can learn about feeding routines and watch carefully what is happening on the other side of the glass and will give any addition to the contents of the vivarium a thorough inspection. Males put together will behave aggressively towards each other and this usually results in a truncated tail in one or both.

Breeding in captivity

“A pair collected from the same hole in a tree were accidentally disturbed when the door was opened for feeding. I saw a movement, two lizards dropping from the higher branches of the vivarium furnishings. When I checked, the female was climbing back with difficulty because the male was on her back and the twigs on the cage furnishings were thin. The male had a grip with his mouth on the female’s neck and his partly truncated but regrowing tail was twined around her. She came to rest on a thin twig with her neck and forelimbs over it and her body hanging to one side with only the toes of the upper hind foot holding on to the twig. The male suddenly shifted, his head going down to her groin and his vent opposite hers, his tail curling up and past her temporal region so he was encircling her pelvis. I could not see if copulation was actually taking place, nor could I see whether he was licking her vent but his head appeared to be doing so. After one minute his rear end dropped away while he held her with his mouth across the pelvis. She hauled herself up and he released her” – (S.R. Ashe).

FIELD OBSERVATIONS

Below are extracts from an account of observations sponsored by Bio-Ken, made by Peter Mashauri between 28 VII 96 and 11 VIII 96. & 12 VIII 96.

General observations

“28 VII 96, 7 am. I watched a hole about seven meters up a *Combretum scharmantii* tree, (Swahili & Giriya name, Mugurure, Sanyo name Mugulule) I knew these lizards lived here but saw none until about 7.30 am when one came out of its hole. The holes are usually small and narrow, but only about half an inch of its head appeared. It saw me at once and went in again. I went elsewhere where it could not see me and it came out again. I saw it eat some insects around the hole but the distance was too great to see what the insects were. I noted that these lizards are so shy that they would stay in their hole a whole day if they could see that they were being watched. I did discover that they only leave their home in sunny weather, and then from about 7.30 to 11 am returning to



Fig 1. *Gastropholis prasina*. Line drawing by Lorna Depew

their hole about 1 pm, where they stay until about 3 pm when they go hunting until around 6 pm, when they go back to their hole for the night. They do not emerge if there are heavy clouds or rain.

Two further inhabited holes were discovered where there were more than one lizard living in each. These are in *Dailium orientale* trees, (Mpepita in Swahili, Mutsungwi in Giriama and in the Sanya language, Shoshole). One was four metres up and the other is six. These are not far from the main road and the lizards appear to be watching people passing between 100 and 300 metres distant, in one case five individuals.

Two nests which were under observation were seen to be taken over by Forest Cobras, *Naja melanoleuca*. Whether the previous occupants had been eaten by the cobra is not known but it may well be a new record of these snakes living five or seven metres up trees.”

Mating

“Realising that there was much that I was missing because of the distance, I was lent a pair of binoculars and observed these lizards in the field from 12 VIII 96 to 20 VIII 96. The result was as below:

On the morning of 20 VIII 96 at 11 am, I saw a male come out of a hole and climb round the hole several times with his head in it and the female just looking out. I watched until 4 pm when the female came out. The male at once got onto her back and got a grip on her neck with his mouth. She slowly moved away from the hole and then the male bit the back of the female. They stayed like this for five minutes or so, then the male squeezed his tail under the female’s and the female responded by lifting her tail and copulation started. They remained like this for about 20 minutes while I kept watching through binoculars. Then she showed signs of wanting to go by moving and lifting her head up and down. The male let her go and the female returned to the hole in the tree. The male watched her and

then went in himself. I watched for five minutes and saw one head looking out of the hole. The time was 4.30 pm. I kept watching and at 5 pm the head vanished into the hole and did not come out again until I left at dark." – (Peter D. Mashauri).

INCUBATION AND YOUNG

Two specimens brought from the same location were placed in the same cage. They had not been seen to mate but may well have done so unobserved. On 20 IX 94 the female produced five eggs that were scattered in the cage, all but two were badly damaged. The undamaged ones were placed in a makeshift incubator in our laboratory. Incubation was at normal seasonal ambient temperatures, namely 26 to 29 degrees C with high humidity. On the morning of 24 XII 94 the two sound eggs were found to have hatched. The young lizards were found to be very active and their basic measurements were as follows:

Nose to tail: 115 mm. Nose to Vent: 78 mm. Tail 78 mm. I can only assume that the disparity between the body and tail ratios between the adults and the young is the proportionally larger heads of the neonates. The colour of the newly hatched specimens is the same as that of the adults except that the black spots along the tail are less visible in the newly hatched ones.

Unfortunately the eggs were not measured on being laid but they seemed to increase in size during incubation. After hatching they were 16 mms long and shaped like a bird's egg with one end tending to be more acute than the other. Clutches of eggs vary from 5 to 7 in number.

DIET

This is not precisely known in the wild though they were observed eating ants. In captivity they ate a wide variety of insects like cockroaches, grasshoppers, crickets termites, flying ants and beetles, both adult and larval. Their food of choice seems to wasp grubs. When food is scarce we feed out captive ones on eggs, boiled, raw or scrambled.

CONCLUSION

In the past there has been some discussion as to whether these lizards are arboreal or terrestrial. Our study has confirmed that they definitely are an arboreal form. They can infrequently be seen on the ground but always are moving from one tree or patch of forest to another (per. com. Mashauri). The tail is partly prehensile and the lizard can sometimes be seen depending solely by it. Although before these lizards were discovered in the Kenya Coastal Forest only three specimens were ever collected, they are perhaps more common than believed because their habitat is in and only just below the forest canopy.

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