Atheris squamigera



Scientific Classification

Kingdom: Anamalia
Phylum: Cordata
Class: Reptilia
Order: Squamata
Suborder: Serpentes
Family: viperidae
Genus: Atheris

Subgenus: A. squamigera

Binomial Name

Atheris squamigera

(Hallowell, 1856)

Synonyms

- Echis squamigera Hallowell, 1856
- T [oxicoa]. squamigera
 Cope, 1860
- Atheris squamatus Cope, 1862
- Toxicoa squamataCope, 1862
- Echis squamataCope, 1862
- Poecilostolus Burtonii Günther, 1863
- Atheris burtonii
 Günther, 1863
- A[theris]. squamigera
 W. Peters, 1864
- Atheris Lucani Rochebrune, 1885
- Atheris subocularis
 Fischer, 1888
- Atheris squamiger
 Boulenger, 1896
- Atheris squamigera
 Bogert, 1940
- Atheris squamigera squamigera
 Laurent, 1956
- Atheris squamigera robusta Laurent, 1956
- Atheris squamiger squamiger
 Klemmer, 1963
- Atheris squamiger
 Hughes & Barry, 1969
- Atheris squamiger robustus
 Golay et al. 1993

Atheris squamigera (common names: green bush viper, [213] variable bush viper, [415] leaf viper, [5] and others) is a venomous viper species endemic to west and central Africa. No subspecies are currently recognized. [6]

Description

A. squamigera grows to an average total length (body + tail) of 46 to 60 cm (about 18 to 24 inches), with a maximum total length that sometimes exceeds 78 cm (about 31 inches). Females are usually larger than males. [2]

The head is broad and flat, distinct from the neck. The mouth has a very large gape. The head is thickly covered with keeled, imbricate scales. The <u>rostral scale</u> is not visible from above. A very small scale just above the rostral is flanked by very large scales on either side. The nostrils are lateral. The eye and the <u>nasal</u> are separated by 2 scales. Across the top of the head, there are 7 to 9 <u>interorbital scales</u>. There are 10 to 18 <u>circumorbital scales</u>. There are 2 (rarely 1 or more than 2) rows of scales that separate the eyes from the <u>labials</u>. There are 9 to 12 <u>supralabials</u> and 9 to 12 <u>sublabials</u>. Of the latter, the anterior 2 or 3 touch the chin shields, of which there is only one small pair. The <u>gular scales</u> are keeled. [2]

Midbody there are 15 to 23 rows of <u>dorsal scales</u>, 11 to 17 posteriorly. There are 152 to 175 <u>ventral scales</u> and 45 to 67 undivided <u>subcaudals</u>. It is possible that there is a variation in morphometric characters related to habitat: $^{[2]}$

| | Southern forests | Northern grasslands |
|---------------------------|------------------|------------------------|
| Midbody dorsal scale rows | 17 | 21 |
| Ventral scales | 171 | 168 |
| <u>Subcaudal scales</u> | 52 | 58 |

The coloration is the same in some populations, but variable in others. The dorsal color varies from sage green or light green to green, dark green, bluish, olive or dark olive brown. Rare specimens may be found that are yellow, reddish or slate gray. The scales have light-colored keels and sometimes yellow tips that form a series of 30 or more light crossbands or chevrons. On the tail, there are 10 to 19 chevrons: not always clearly defined, but usually present. The ventral edge of the dorsum has light spots in pairs. An interstitial black color is visible only when the skin is stretched. The belly is yellow or dull to pale olive; it may be uniform in color, or heavily mottled with blackish spots. The throat is sometimes yellow. The tail has a conspicuous ivory white tip, 7 to 12 mm long, extending back over 10 subcaudals. [2]

Neonates have a dark, olive coloration with wavy bars, paler olive or yellowish olive with fine dark olive margins, bars at 5 mm (0.20 in) intervals, and a belly that is paler greenish olive. The adult color pattern develops within 3 to 4 months. $^{[2]}$

Common names

Common names for *A. squamigera* include green bush viper, ^{[2][3]} variable bush viper, ^{[4][5]} leaf viper, common bush viper, ^[5] bush viper, ^[7] and tree viper. ^[8]

Geographic range

A. squamigera is found in <u>West</u> and <u>central Africa</u>: <u>Ivory Coast</u> and <u>Ghana</u>, eastward through southern <u>Nigeria</u> to <u>Cameroon</u>, southern <u>Central African Republic</u>, <u>Gabon</u>, <u>Congo</u>, <u>DR Congo</u>, northern <u>Angola</u>, <u>Uganda</u>, <u>Tanzania</u>(Rumanika Game Reserve), western <u>Kenya</u> and <u>Bioko Island</u>.

The type locality is given as "Near the river Gaboon, Guinea" [Gabon].[1]

Habitat

A. squamigera inhabits mostly rainforest, preferring relatively low and thick flowering bushes. [3]

Breeding in captivity

A. squamigera requires a very high level of humidity to breed. In one case, males and females were kept separate from January to the end of November. Two females became gravid (with one observed mating). Each produced eight young: a smaller percentage were yellow (possible recessive gene), most being green. In each brood, there was also one nonviable green specimen. Some of the neonates fed readily on <u>frogs</u>, while the others had to be force-fed pinkie mice. All fed independently after a few months. [2]

Venom

Bites from *A. squamigera* have resulted in at least one report of severe hematological complications as well as two deaths. Although no specific antivenom is made for the genus *Atheris*, antivenom for the genus *Echis* has been shown to be partially effective in neutralizing *Atheris* venom. [10]

Taxonomy

A number of subspecies of A. squamigera may be encountered in literature. These include: [1][2][3]

- A. s. squamigera (<u>Hallowell</u>, 1856), found in <u>Ghana</u> to <u>Cameroon</u>, <u>DR Congo</u>, <u>Uganda</u>, western Kenya and Angola.
- A. s. robusta <u>Laurent</u>, 1956, from the <u>Ituri Forest</u> in <u>Province Orientale</u> (<u>DR Congo</u>). ^[2] It is sometimes described as growing larger, having a lower subcaudal count and only a single row of scales between the eye and the upper labials. ^[3]
- A. s. anisolepis Mocquard, 1887, (see A. anisolepis).

Furthermore, specimens from Dimonika and Menengue in <u>Congo</u> are sometimes treated as a separate species: *A. laeviceps*. It has been distinguished as having a group of small scales on top of the head, a row of scales that separates the suboculars and the upper labials, as well as a yellow coloration. [3]

