# Hemachatus haemachatus



#### Scientific Classification

Kingdom:	Anamalia
Phylum:	Cordata
Class:	Reptilia
Order:	Squamata
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Suborder:	Serpentes
Suborder: Family:	Serpentes Viperidae
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Family:	Viperidae

#### **Binomial Name**

#### Hemachatus haemachatus

(Bonnaterre, 1790)

#### Synonyms

- Coluber haemachates Bonnaterre, 1790
- Vipera haemachates - Latreille, 1802
- Sepedon haemachates - Merrem, 1820
- Naja haemachates
  <u>Schlegel</u>, 1837
- Aspidelaps haemachates
  <u>Jan</u>, 1863
- Sepedon hæmachates - <u>Boulenger</u>, 1896
- Hemachatus haemachatus
   <u>Stejneger</u>, 1936<sup>[1][2]</sup>

The **rinkhals** (*Hemachatus haemachatus*), also called the **ringhals** or **ring-necked spitting cobra**, is a <u>species</u> of <u>venomous elapid</u> found in parts of southern Africa. It is not a true <u>cobra</u> in that it does not belong to the <u>genus/Naja</u>, but instead belongs to the <u>monotypic genus</u> *Hemachatus*. While rinkhals bear a great resemblance to true cobras they also possess some remarkable differences from these, resulting in their placement outside the genus *Naja*.<sup>[3]</sup>

# Description

Coloration varies throughout its distribution area, but a characteristic of the species is the belly is dark with one or two light-coloured crossbands on the throat. Their average length is 90–110 cm.<sup>[3]</sup> Some individuals may have a mostly black body, while others are striped. Rinkhals scales are distinct from those of true cobras in that they are ridged and keel-like.

### **Scale Pattern**

#### Scalation:[4]

- dorsal scales are keeled
- 17–19 rows of dorsal scales at midbody
- 116–150 <u>ventral scales</u>
- anal plate is entire
- 30–47 <u>subcaudal scales</u>, paired
  - 7 upper labial scales
- upper labials 3 and 4 entering the eye
- 1 pre<u>ocular</u> (rarely up to 3)
- 3 postoculars
- 8–9 lower labials

### Distribution

A South African rinkhals with hood spread

This species is found in the Southern Cape province of <u>South</u> <u>Africa</u>, northeast through the Free State, <u>Lesotho</u>, <u>Transkei</u>, <u>Kwazulu Natal</u>, South Africa, Western <u>Swaziland</u>, <u>Mpumalanga</u> and parts of <u>Gauteng</u>, South Africa. Recent evidence that it is found in Johannesburg proper. An isolated population is centered on Inyanga on the <u>Zimbabwe</u>-Mozambigue border.<sup>[3]</sup>

# Behaviour and diet

The rinkhals has a varied diet. Its main prey is <u>toads</u>,<sup>[4]</sup> but it also eats small <u>mammals</u>, <u>amphibians</u>, and other <u>reptiles</u>.<sup>[6]</sup>

Rinkhals are unique amongst African cobras in being <u>ovoviviparous</u>.<sup>[3]</sup> They give birth to 20–35 live young, but as many as 65 young have been recorded.<sup>[4]</sup>

# Venom

The <u>venom</u> of the rinkhals is <u>neurotoxic</u> and partially <u>cytotoxic</u>, and is less <u>viscous</u> than that of other African <u>elapids</u>.<sup>[3]</sup> When confronting a human, it generally aims its venom at the face. If the venom enters the eyes, it causes great pain.<sup>[6]</sup>

A <u>polyvalent antivenom</u> is currently being developed by the <u>Universidad de Costa Rica</u>'s <u>Instituto</u> <u>Clodomiro Picado</u><sup>[7]</sup>

### Symptoms of a bite



Detail of head

Local symptoms of swelling and bruising is reported in about 25% (a quarter) of cases.<sup>[3]</sup> General symptoms of drowsiness, <u>nausea</u>, vomiting, violent abdominal pain, cramps and <u>vertigo</u> often occur, as does a mild <u>pyrexial</u> reaction.<sup>[3][6]</sup>

# **Defensive behaviour**

If distressed, the rinkhals spreads its hood, showing its distinctive, striped neck. It is a spitting snake, and can spray its venom up to 2.5 m. Its spitting mechanism is primitive and it has to rear up and fling its body forward to spray its venom. It is also known to fake death by rolling onto its back with its mouth agape.<sup>[citation needed]</sup>

# Habitat

The rinkhals generally prefers <u>grassland</u> habitats because it allows them to blend in with the surroundings. Rinkhals also may live in <u>swamps</u> around <u>southern Africa</u>.<sup>[6]</sup>