

Deinagkistrodon



Scientific Classification

Kingdom:	Anamalia
Phylum:	Cordata
Class:	Reptilia
Order:	Squamata
Suborder:	Serpentes
Family:	viperidae
Genus:	Deinagkistrodon
Subgenus:	D.acutus

Binomial Name

Deinagkistrodon acutus
([Günther](#), 1888)

Synonyms

- *Agkistrodon*
[Palisot de Beauvois](#), 1799
- *Halys* [Fabricius](#), 1803
- *Ancistrodon* [Wagler](#), 1830
- *Deinagkistrodon* [Gloyd](#), 1979^[1]
- *Halys acutus*
[Günther](#), 1888
- *Ancistrodon acutus*
— [Boulenger](#), 1896
- *Agkistrodon acutus*
— [Namiye](#), 1908^[1]
- *Calloselasma acutus*
— [Burger](#), 1971
- *Deinagkistrodon acutus*
— [Gloyd](#), 1979^[2]

Deinagkistrodon is a [monotypic genus](#)^[3] created for the [venomous pit viper species](#), *D. acutus*, which is [endemic](#) to [Southeast Asia](#).^[1] There are no subspecies which are recognized as being valid.^[4]

Description

Deinagkistrodon acutus is light brown or greyish brown [dorsally](#), with a series of dark brown lateral triangles on each side. The two pointed tops of the two opposite triangles meet each other at the mid-line, forming a series of about 20 light brown, squarish blotches on the back. A row of large black spots extends along each side near the belly. The top and upper sides of the head are uniformly black, with a black streak from the eye to the angle of the mouth. *D. acutus* is yellowish ventrally, spotted with dark brown. The young are much lighter than the adults with essentially the same pattern. The head is large, triangular, with an upturned snout. The body is very stout. The tail is short, ending in a compressed, pointed slightly curved cornified scale. The top of the head is covered with nine large shields. The [dorsal scales](#) are strongly and tubercularly keeled. The [subcaudals](#) are mostly in pairs, some of the anterior ones are single. This stout snake, usually between 0.8 and 1.0 metre (2.6 and 3.3 ft) in total length (including tail), reaches a maximum total length of 1.57 metres (5.2 ft) in males and 1.41 metres (4.6 ft) in females.^[5] The largest specimen on record measured approximately 1.549 metres (5.08 ft).^[6]

Common names

Common names for *D. acutus* include sharp-nosed viper, snorkel viper, hundred pacer,^[7] Chinese moccasin,^[8] Chinese copperhead,^[9] five-pacer, hundred-pace snake, long-nosed pit viper, sharp-nosed pit viper,^[10] hundred-pace pit viper.^[11] The snake has been an object of veneration by [indigenous Taiwanese peoples](#).

Geographic range

D. acutus is found in southern China ([Zhejiang](#), [Fujian](#), [Hunan](#), [Hubei](#), [Guangdong](#)), [Taiwan](#), northern [Vietnam](#), and possibly [Laos](#). The [type locality](#) was not included in the original description. It was later given as "Wusueh [Wu-hsueh], [Hupeh](#) Province, China" by Pratt (1892) and Pope (1935). Listed as "Mountains N. of [Kiu Kiang](#)" in the catalogue of the [British Museum of Natural History](#).^[1]

Habitat

The species *D. acutus* inhabits high, forested mountains up to 1,350 metres (4,430 ft), but has also been found in low coastal regions (100 metres (330 ft)). It prefers lower mountain slopes or rocky hills with small valleys.^[5]

Behavior

D. acutus is a [nocturnal](#) species. It is generally discovered by day on rocks or among vegetation along banks of streams, or in firewood near houses, or even in houses.^[5] When encountered it may appear sluggish at first, but it is capable of striking vigorously when threatened.^[6]



Diet

The diet of *D. acutus* consists of small [mammals](#) such as rats and mice, [birds](#), [toads](#), [frogs](#) and lizards. Chinese herpetologist [Er-mi Zhao](#) reported a specimen of a total length of 1.04 metres (3.4 ft) and weighing 600 grams (1.3 lb) having eaten a specimen of *Rattus rattus* of a total length of 51.5 centimetres (20.3 in) and a weight of 530 grams (1.17 lb).^[61]

Reproduction

As one of the few [oviparous](#) pit vipers, *D. acutus* can lay up to 24 eggs, which may be retained during initial incubation, an adaptation that shortens post-deposition incubation time. However, it generally only deposits 11 or 12 eggs from June to August. Egg size is 40-56 x 20–31 mm (about 2 x 1 in). Hatchlings are lighter and more vividly patterned than the adults, but this darkens considerably with age.^{[71][6]}

Venom

Dangerous animals often have exaggerated reputations and the species *D. acutus* is no exception. The popular name "hundred pacer" refers to a local belief that, after being bitten, the victim will only be able to walk 100 steps before dying. In some areas, it has even been called the "fifty pacer." Nevertheless, this species is considered dangerous, and fatalities are not unusual. An [antivenom](#) is produced in [Taiwan](#).^[7]

Brown (1973) mentions a venom yield of up to 214 mg (dried) and [LD₅₀](#) (toxicity) values of 0.04 mg/kg [IV](#), 4.0 mg/kg [IP](#) and 9.2-10.0 mg/kg [SC](#).^[12]

According to the US Armed Forces Pest Management Board, the venom is a potent [hemotoxin](#) that is strongly [hemorrhagic](#). Bite symptoms include severe local pain and bleeding that may begin almost immediately. This is followed by considerable swelling, blistering, necrosis, and ulceration. Systemic symptoms, which often include [heart palpitations](#), may occur suddenly and relatively soon after the bite.^[8] Because of its body size and large hinged fangs which permit effective delivery of large quantities of venom, victims bitten by this snake should be treated accordingly.

