

= Unicorn (spider) =

Unicorn (" one horn " , in Latin) is a genus of goblin spiders (family Oonopidae) from South America , containing seven species that occur predominantly in high elevation , semi @-@ desert regions of Bolivia , Chile , and Argentina . Individuals are relatively large for goblin spiders , measuring up to 3 @.@ 0 mm (0 @.@ 12 in) in body length . The genus name refers to a characteristic pointed projection between the eyes and jaws of males . In at least one species , broken @-@ off tips of the male pedipalps have been found within the genitalia of females , postulated as a means of sperm competition . Unicorn possesses several traits that suggest it is a relatively " primitive " member of the Oonopidae , and is classified with other similar , soft @-@ bodied goblin spiders in the subfamily Sulsulinae .

= = Description = =

Species of Unicorn range from 2 @.@ 2 to 3 @.@ 0 mm in body length (from tip of the cephalothorax to end of abdomen , excluding legs) . The cephalothorax , yellow in color , ranges from 1 to 1 @.@ 2 mm long (around 40 ? 49 % of body length depending on species) and often possesses a central grey patch with four lines radiating towards the eyes . The abdomen is white with dark chevron patterns on the dorsal surface , and in some species a pair of dark lines on the underside . The body is covered with a dense covering of long stiff hairs (setae) . The legs are long , slender , and yellow . There are six eyes , roughly equal in size , arranged in roughly triangular groups of three , with two eyes meeting in the middle , forming a wide " H " or bow @-@ tie pattern . Species of Unicorn are considered " soft @-@ bodied " , as the abdomen lacks the hardened plates that occur in many other goblin spiders . The abdomen possesses six spinnerets .

Males and females show some differences in morphology : male jaws (chelicerae) are longer and more slender than those of females ; the male palpal tibiae ? the penultimate segment of the pedipalps ? are enlarged compared to females ; and males alone possess a " clypeal horn " , a forward @-@ pointing projection of the clypeus surrounded by long stiff hairs , from which the genus name Unicorn (" one horn " in Latin) derives .

The copulatory bulb of males (the sperm @-@ transferring organ at the tip of the pedipalps) , terminates in a narrow , curving tip called an embolus , which in Unicorn bears a hook at its base and is accompanied by a similar curved extension called a translucent sclerite .

= = Reproduction = =

Like most spiders , the pedipalps of mature males end in a bulb terminating in a thin , curved projection called an embolus , through which sperm is released during mating . Female *U. catleyi* have been observed with broken @-@ off embolus tips lodged in their genitalia . This has been hypothesized as a type of " sperm @-@ plug " or copulatory plug , where , by breaking off a piece of his anatomy (a process known as genital mutilation or genital breakage) , a male physically precludes other males from successfully mating with the female , one of many types of sperm competition in animals . An alternative to the sperm competition function is that genital mutilation might allow males to more rapidly escape and avoid being cannibalized after mating , although this function is thought to be unlikely in Unicorn since there are no significant size differences between sexes , and cannibalism is more common when females are much larger than males . Sperm plugs of various types , including gelatinous or waxy substances , have been observed in at least 41 spider families , and are generally thought to ensure paternity . *U. catlyei* is one of only few goblin spiders known or suspected to utilize sperm plugs .

= = Habitat = =

Species of Unicorn have mostly been found at elevations between 1 @,@ 000 to 4 @,@ 000 m (3 @,@ 300 to 13 @,@ 100 ft) above sea level , many from semi @-@ desert regions . *U. socos* has

been collected at 360 m (1 @, @ 180 ft) in central Chile . The spiders are hard to detect in the field , and most species have been collected by pitfall trapping . They are uncommon in museum collections , and almost nothing is known about their natural history .

= = Species and distribution = =

The genus Unicorn was established in 1995 by Norman Platnick and Antônio Brescovit , to encompass five newly described species and one species , *U. argentina* , that had previously been described as a species of *Orchestina* . A seventh species was described in 2010 . The type species of Unicorn is *U. catleyi* . Unicorn species occur in central and northern Chile , western Argentina , and Bolivia .

Unicorn argentina (Mello @-@ Leitão , 1940) ? Western Argentina

Unicorn catleyi Platnick & Brescovit , 1995 ? Northern Chile and northwestern Argentina

Unicorn chacabuco Platnick & Brescovit , 1995 ? Chacabuco Province , central Chile

Unicorn huanaco Platnick & Brescovit , 1995 ? La Paz Department , Bolivia

Unicorn sikus González , Corronca & Cava , 2010 ? Salta Province , northwestern Argentina

Unicorn socos Platnick & Brescovit , 1995 ? Limarí Province , central Chile

Unicorn toconao Platnick & Brescovit , 1995 ? Antofagasta Province , northern Chile

= = Classification = =

Unicorn is a member of the family Oonopidae (oonopids , or goblin spiders) , which contains over 1 @, @ 500 species worldwide . Within oonopids , Unicorn is classified in the subfamily Sulsulinae , which contains other soft @-@ bodied genera such as *Xiombarg* and *Dalmasula* . Due to certain features of the eyes and jaws that resemble those found in other families , and which are differently modified in many other oonopids , Platnick and Brescovit suggested Unicorn was among the most primitive or basal members of the Oonopidae , which was corroborated by a 2014 study that examined DNA similarities among the Oonopidae , finding that Unicorn and other sulsulines diverged before almost all other oonopids .