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Giant Centipedes (Order Scolopendromorpha)

Fast and Many Legged Hunters

Centipedes are elongated, segmented arthropod invertebrates that can vary considerably in size, color, and appearance depending on species. There are roughly 8,000 centipede species known and described, from tropical and sub-tropical regions to temperate areas throughout most of worldwide. All centipedes, however, have a modified pair of claw or pincer like appendages beneath their rounded heads called forcipules, a long pair of antennae, typically one pair of legs per segment (anywhere from 30 to over 300), and telson like rear appendages. Several different orders and families of centipedes are known, but the order Scolopendromorpha are the most commonly kept due to their large size and colorations. Most of the Scolopendromorph centipedes display brighter aposematic coloration of brown, reddish brown, blackish, to olive brown body segments and brightly colored red, yellow, orange, or whitish heads, antennae, and limbs. Unlike millipedes, which they may be confused with, centipedes are fast moving, aggressive predators of many invertebrates and even other small animals, using their speed, venom, and forcipules to capture and overpower prey, including even small vertebrates.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum: Arthropoda

Subphylum: Myriapoda

Class: Chilopoda

Order: Scolopendromorpha

Family: Scolopendridae

**Taxonomy subject to change and revision.*

Lifespan and Longevity

Lifespan may vary depending on the size and species of centipede, but larger centipedes found in the pet trade may live up to 5 to 10 years under the correct conditions.

Origin/History

Scolopendra Linnaeus, 1758.

As with other pet invertebrates, Scolopendra (and related genera) became popular in the pet trade sometime during the mid-20th century during the 1980's and 1990's as a result of increased international trade and expanded care and husbandry available. Their large sizes, colors, predatory nature, and unique appearances and relatively low space requirements were the reasons which made them popular. There is, however, little other specific information or history to suggest that they were kept as pets prior to the establishment of the modern day exotic pet industry.

Distribution and Habitat

The Scolopendra genus of large centipedes is a broadly distributed genus over much of the tropical to sub-tropical regions of the world, although it is uncertain which areas, and to the extent of which, these centipedes are native or were introduced by human means. Species of these centipedes can occur over a broad area of Australia, New Guinea, much of Indo-Malaya, or southern to southeastern Asia, much of Central and South America, and the Caribbean. More specifically, they can occur in Mexico, Aruba, Colombia, Venezuela, Trinidad, the U.S. and British Virgin Islands, Haiti, the Dominican Republic, Puerto Rico, a few tropical to subtropical United States, and Honduras in the New World, and southern China, Indonesia, India, Java, Thailand, Myanmar, Vietnam, Bali, Borneo, and the Philippines in the Old World. Within this very wide geographic range, these centipedes may occur within the tropical to sub-tropical rainforests, woodlots, and tropical to sub-tropical dry forests, where they may be found amongst moist, humid forest floor leaf litter, rocks, logs, and other debris.

Commonly Kept Species

Four genera are generally most widely or commonly available in the pet trade: *Alipes*, *Ethmostigmus*, *Rhysida*, and *Scolopendra*. Also *Cormocephalus* as well, although there are many species in this genus and identification can oftentimes be difficult. Most of the species listed below will be in *Scolopendra* sp. Not many species guides or listings of commonly kept giant centipede species are out there, other than a few forum posts, and this care guide will attempt to bridge this gap while providing additional information about the species available.

Different genera and/or species may be available in different countries or areas of the world due to importation and/or possession restrictions and regulations. Some species may be yet to be officially identified or described, and thus go by "market name".



Giant Vietnamese Centipede (Scolopendra dehaani): Southern to Southeastern Asia; India, Japan, Andaman and Nicobar Islands. Dark reddish, reddish-brown, brown, to olive-brown body segments, with yellow to orange legs. Deeper orange or red antennae and abdominal segments. One of the less expensive and readily available species, but not a good choice for the beginner.



Arizona or Sonoran Giant Desert Centipede (*Scolopendra heros*): Northern Mexico, through the Southwestern and South-Central United States. Body segments range from brown or dark yellowish-brown, red or orange, to black, dark brown, or olive brown, with lighter colored yellow or orange legs. Head and antennae a brighter red or orange color. Also known as the Texas Black-Tailed, Texas Red-Headed, or Giant Red-Headed Centipede. One of the more venomous species on the list.



Common Desert or Banded Desert Centipede (*Scolopendra polymorpha*): Ranges from Western North America and the Hawaiian Islands. Coloration can be highly variable, hence its scientific name “polymorpha” meaning many forms. Also known as the Tiger Centipede due to each of the body segments having one lateral stripe. Generally has a darker brown, red, or orange colored head and lighter brown, tan, or orange body segments with lighter yellow legs. Some populations can be light blue in color with indigo stripes, or turquoise legs. A good choice for a first or beginning pet centipede.



Haitian Giant Centipede (*Scolopendra alternans*): Junior Synonym with *S. longipes*. Also known as the Florida Keys or Caribbean Giant Centipede. Puerto Rico, Cuba, Guadeloupe, Martinique, Venezuela the Bahamas, Hispaniola, the Antilles, the British Virgin Islands, and Florida. Coloration can be variable, ranging from brownish, reddish, to yellow or orangish. Body segments less contrasting or paler relative to the legs and antennae. Head a deeper orange or red.



Giant Florida Blue Centipede (*Scolopendra viridis*): Florida and Southeastern United States, also in Mexico, Central America, and Southwestern United States. A relatively shorter lived species, living on average for only about 1.5 to 2 years. Center of body segments a dark blue, grayish-blue or violet blue, with lateral or outer margins of segments a contrasting orange or reddish color. Legs are usually a paler orange or yellow color, and abdominal segments a deeper orange or red.



African Giant Centipede (*Ethmostigmus trigonopodus*): Also known as the Tanzanian Blue Ring Centipede or Blue-Legged Centipede. A larger growing species, with two valid subspecies; *E. trigonopodus pygomasoides* and *E. trigonopodus trigonopodus*. Body segments can vary in color from deep purplish or indigo, to dark brown, olive-brown, or dark reddish. Legs and antennae are distinctly a darker blue to sometimes purplish, hence the name. Legs can also be yellow to orange in *E. trigonopodus trigonopodus*.



Peruvian Giant Yellow-Legged Centipede (*Scolopendra gigantea*): Naturally occurs in northern South America, U.S. Virgin Islands, Hispaniola (both Haiti and the Dominican Republic), Mexico, Puerto Rico and Honduras are assumed to be accidental introductions. Body segments vary in color from dark brown or reddish-brown, dark orangish, to olive-brown with lighter yellow, red, or orange legs with distinct darker banding. One of the largest centipede species in the world. Also known as the Amazonian Giant Centipede.



Vietnamese Centipede (Scolopendra subspinipes): Tropical and subtropical Asia from Russia to the islands of Malaysia and Indonesia, Australia, South and Central America, the Caribbean islands, and possibly parts of the southern United States. Also known as the Jungle Centipede, Hawaain Centipede, Pacific Giant Centipede, and Orange-Legged Centipede.



Tanzanian Blue Ringleg Centipede (Scolopendra morsitans): Also known as the Red-Headed Centipede. Not to be confused with other species with similar-sounding names. Cosmopolitan; Found Worldwide except not well documented in Europe.



Megarian or Mediterranean Banded Centipede (Scolopendra cingulata): southern Europe, including Portugal and around the Mediterranean Sea, in such countries as Spain, France, Italy, Albania, Croatia, and Greece, around the Black Sea in South Romania, Bulgaria, Ukraine, as well as parts of North Africa.



Chinese Red-Headed Centipede (Scolopendra mutilans): China and East-Central Asia.



Flag or Feather-Tail Centipedes (*Allipes* spp.): Madagascar, Eastern Africa. Seven (7) species noted for their long, elongated laterally flattened feather like abdominal hind segments.



Malaysian Jewel and Philippine Mint-Legged Centipede (*Scolopendra paradoxa*) and (*Scolopendra* spp.): Beautiful, but not great beginner species. Fast moving and fragile species. Asia and the Philippines.



Peruvian Giant "White-Legged" Centipede (*Scolopendra* sp.)



***Scolopendra spinosissima* (No Common Name).** Philippines.



Westwood Green Centipede (*Cormocephalus westwoodi*). Eastern Australia.

There are probably other *Scolopendra* species also available as well. Most centipedes are not the best invertebrates for beginning or new invertebrate keepers in general. However, the **best** "beginner's species" can include the following:

- Ethmostigmus trigonopodus
- Any of the Rhysida or Alipes species
- S. cingulata, S. multidentis, S. mutilans, S. Polymorpha, S. Morsitans, and S. Alternans (although some of these may have slightly more potent venom than those other species).

Some species of centipedes beginners should certainly **avoid** include the following:

- Most of the Asian species except S. mutilans and S. multidentis, for their often potent venom.
- The South-American giants (S. galapagoensis, S. sp “White legs”, S. sp “Robusta”, S. sp “Viridicornis”), for their price and sometimes large sizes.
- Some of the more sensitive or fragile species such as S. paradoxa and S. sp “Malaysian Jewel”.

Experience Level Required

Novice/Beginner to Advanced (depending on species).

Size

Centipedes can vary greatly in size from less than 1 inch to 12 to 16 inches or more in the larger, more commonly kept Scolopendromorphs.

Housing and Enclosure

Enclosure System: Primarily Terrestrial to Semi-Fossorial. Provide a sturdy and secure escape proof yet adequately ventilated enclosure, such as a 5 to 20 gallon terrarium for most commonly kept species. There are many substrates that can be used to house centipedes including orchard bark, potting soil, sphagnum moss, vermiculite, or any combination thereof for tropical to desert species of centipedes. Furnishings can be provided, but ensure any live plants chosen are non-toxic to centipedes and are sturdy and firmly planted. Provide at least 2 to 3 inches of substrate that can retain humidity moderately well, and ample hides such as cork bark hides, slabs, or other log/rock hides. A feeding dish, shallow water dish, and hiding spaces should also be created or provided as well.

Temperature, Lighting, and Humidity

Temperature and humidity requirements for centipedes can vary depending upon the species and where they originate. Most tropical species of centipedes, however, can be maintained at or around room temperature of 75 to 85 degrees F, seldom to exceed 90 degrees F and humidity levels of at, or around 75 to 85%. Maintaining adequate humidity and moisture is a major husbandry consideration in keeping centipedes, as most lack the waxy cuticles that other insects and arachnids possess, and are more prone to desiccation when temperatures become too high or humidity too low. Some desert species requiring higher levels of heating can be provided a low wattage under tank heating element (UTH), radiant or ceramic heat emitter, or incandescent bulb as well. Centipedes are primarily nocturnal to crepuscular, and do not require any additional UVA/UVB lighting or heating. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one’s needs, as well as those of one’s animals can be given as well.

Feeding, Diet, and Nutrition

Insectivorous to Carnivorous; Most species of centipedes are carnivorous, and will feed on a variety of insects and other invertebrates, and even small vertebrates they can catch and overpower. As a captive diet, most feeder insects of appropriate size can be provided including crickets, mealworms, waxworms, roaches, superworms, and fruit flies. They will also eat small, frozen thawed rodents or feeder lizards of appropriate size as well, but give these sparingly. Additional calcium and other vitamin/nutritional elements are typically not required with maintaining centipedes, but can help with exoskeleton growth and development. More specific dietary and supplementary product suggestions and recommendations that can best suit one’s

needs, as well as those of one's animals can be given as well.

Handling

Centipedes as an order and group can be fast moving and aggressive invertebrates, and thus handling is not recommended. Some species are capable of delivering a painful and unpleasant bite/sting and several species are medically significant in terms of their venom. The appropriate tools applied in a gentle manner such as tongs, tweezers, and trap boxes can be used to move centipedes for any necessary reason.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

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