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The South American Giant Centipede *Scolopendra gigantea* Linnaeus (Arthropoda: Myriapoda: Chilopoda: Scolopendridae) is the largest species of centipede in the world (Shelley and Kiser 2000). It is found in northern Colombia, northern Venezuela, Aruba, Curaçao, Margarita Island and Trinidad (Shelley and Kiser 2000). In Trinidad, based on specimens in the University of the West Indies Zoology Museum and on personal experience, the giant centipede is mainly found in the north-west of the mainland and on the small islands off the north-west coast.

On 12 April, 2011, I observed the feeding behaviour of a captive centipede. It had been collected the previous day from leaf litter in the tropical dry forest on Chacachare Island, Trinidad during filming of a documentary by WAG TV for the Discovery Channel. It was identified using the diagnostic features shown in Shelley and Kiser's 2000 paper.

The centipede was placed in a glass tank 90 cm long by 30 cm wide by 30 cm high with a substrate of soil from the forest where it was collected. Large items such as leaves and twigs were removed to allow unimpeded observation.

Ten captive-bred Six-spot cockroaches, *Eublaberis distanti* (Kirby), were placed into the middle of the tank at 1505 h. The centipede was making laps around the perimeter of the tank moving its antennae up and down, but it did not seem to respond to the visual stimulus of the cockroaches. However, as soon as one of its antennae touched a cockroach, it went on the attack. The centipede ran over the top of a cockroach and pushed it to the edge of the tank. It then grasped this first cockroach using legs 8-16 (numbered from the anterior end) and held the cockroach so that its ventral side was exposed. The centipede then proceeded to inject venom by biting the cockroach several times using its toxicognaths. Elzinga (1996) reported a similar method of grasping in an account of a *Scolopendra viridis* Say centipede feeding on American cockroaches *Periplaneta americana* (Linnaeus).

Whilst the centipede was injecting venom into the first cockroach, a second cockroach crawled over the hind legs of the centipede. This caused the centipede to attempt to grab the second cockroach using legs 20-21. The centipede did not manage to get a firm grasp so it released the first cockroach and turned around quickly to grab the second cockroach using legs 2-9. The centipede held the second cockroach from above and started to inject venom by biting repeatedly into the neck of the

cockroach. After five minutes the centipede had bitten off the head of the second cockroach and then spent the next 45 minutes eating most of the cockroach apart from the legs, wings and head-shield.

While the centipede was dealing with the second cockroach, the first cockroach had remained on its back with its antennae twitching, but otherwise not moving. Studies on scolopendrid venom have shown that it has a very fast acting paralytic effect on insects (Rates *et al.* 2007).

Whilst the centipede had been catching, killing and eating the second cockroach, it had no physical contact with the first cockroach. However, at 1615 h, as soon as the centipede had finished eating the second cockroach, it turned back instantly to where it had left the first cockroach and grasped it again and started to feed (Fig. 1). Thirty-five minutes later it had finished eating most of the first cockroach and then proceeded to clean itself.

Although there was a gap of 50 minutes between leaving the first cockroach after immobilising it and then finding it again, the centipede showed no hesitation in doing so. The speed with which the centipede relocated the first cockroach suggests that it remembered its location as opposed to just randomly coming across it. This combined with the fact that the centipede dealt with two prey items in quick succession and manipulated them in different ways and using a different combination of legs, suggests that scolopendrids have more complicated feeding behaviour than may at first be apparent.



Fig. 1. Centipede feeding on first cockroach.

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