

## Biodiversity Record: *Carebara diversa* ants attacking an Oriental whip snake

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**Subjects:** Ant, *Carebara diversa* (Insecta: Hymenoptera: Formicidae: Myrmicinae);  
Oriental Whip Snake, *Ahaetulla prasina* (Reptilia: Squamata: Colubridae).

**Subjects identified by:** Foo Maosheng.

**Location, date and time:** Sentosa Island, Serapong Trail; 28 April 2021; around 2000 hrs.

**Habitat:** Abandoned military fort in old secondary forest.

**Observer:** Foo Maosheng.

**Observation:** On a shrub some 110 cm off the ground, an Oriental whip snake of about 1 m total length (initially mistaken for a green vine) was observed covered in hundreds of *Carebara diversa* ants (Figs. 1–3), with soldiers as large as 13 mm. At first, the snake was assumed to be dead as there were no signs of movement. The ants on the snake appeared to be constantly biting and stinging weak points of the snake's body, especially the soft integuments between the scales. A few minutes later, the snake started to move slightly but it appeared to be very weak. The observer left the scene shortly after, and it is not known if the snake eventually succumbed to the ants' attack.



Fig 1. Side view of the head of the Oriental whip snake covered with biting and stinging *Carebara diversa* ants of different castes and sizes. (Photograph by: Foo Maosheng)

**Remarks:** *Carebara diversa* is known to be a common predator of other insects and various invertebrates. When these ants go about foraging, they exhibit group-hunting behaviour (Moffett, 1987; Moffett, 1988 as *Pheidologeton diversus*). These ants, especially soldiers and major workers, have strong mandibles which can deliver painful bites and are capable of cutting into flesh and tissue (Cornaby 1974; Fonseca et al. 2015). The smaller worker ants are capable of stinging their victims with venom (Lepage & Darlington, 1984).



Fig 2. Ventral view of the ant-covered snake with its head slowly moving to a vertical position. Fig 3. Sections of the snake's body swarming with *Carebara diversa* ants. (Photographs by: Foo Maosheng)

The featured observation seems unusual in that the victim is a large snake. Although it is not known if the snake eventually died, it seemed that the reptile was overpowered by the swarm. The soldier and major workers had attacked it by biting, the smaller workers by stinging. While the bites are expected to be extremely painful, the stings by the numerous workers are likely to have injected a significant amount of possibly paralytic venom into the snake. It is also unusual for a large snake to have allowed itself to be covered with ants. Even if it had accidentally blundered onto an ant trail or nest, it should be able to move away rapidly to avoid getting swarmed. Thus, it is believed that the reptile's health was severely compromised, and it was too weak to escape from the ants. It is also not known if the ants had attacked the snake in self-defence, or with the intention of consuming it as food.

**Literature cited:**

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