Predation of a whip scorpion by a Pantropical Huntsman Spider

The Sparassid genus *Heteropoda* Latreille, 1804 is a highly speciose group of large, nocturnal and cursorial huntsman spiders, currently comprising of 189 recognized species (World Spider Catalog 2023), most of which are non-web building ambush predators specialized in incapacitating their prey through envenomation (Turner 2010; Zhang et al. 2015).

They are exclusively distributed throughout tropical Asia as well as Australia with the exception of the cosmopolitan/cosmotropical *H. venatoria* (Linnaeus 1767) (Edwards 1979; Sethi & Tikader 1988) which is known to feed on a wide range of invertebrates ranging from cockroaches to other arthropods as well as scorpions and even smaller vertebrates including frogs,

An adult *Heteropoda venatoria* feeding on a whip scorpion. © Aditya Karmakar.

The same adult Whip scorpion that was dropped by the spider after consuming the body fluids from its cephalothorax region. © Aditya Karmakar.
tadpoles, lizards (particularly geckos) and occasionally bats (Bhattacharyya 1941; Shukla & Lele 2008; Quah et al. 2022).

Moreover, apart from their large body size, these arachnids can surprisingly fit into small crevices due to their flattened body structure, enabling them to adapt frequently in and around human habitations, houses, barns, sheds, under boards on the ground and in other sheltered areas (Edwards 1979). Herein, we report an observation of predation by a Pantropical Huntsman Spider *Heteropoda venatoria* on a whip scorpion from Tripura, northeastern India.

On 11 September 2019 in Udaipur, Chanban, Tripura (23.5366 N, 91.4854 E), at around 2000 h, we sighted a Huntsman Spider *Heteropoda venatoria*, measuring approximately 11 cm in length including leg span, having no emboli on pedipalps, indicating the specimen to be a female which was identified using Mondal et al. (2020) clinging to a tin wall as it was feeding on a partially moving whip scorpion (*Labochirus* sp.) (approx. 5 cm in length).

Upon closer observation, we found that the spider was sucking the body fluids from the cephalothorax region of its prey, leaving behind the opisthosoma (abdominal portion which contains strong acetic acid glands) and eventually dropped it about 10 minutes later.

The fact that these hunstman spiders feed on other arachnids in particular does not stand out or sound peculiar compared to its ability to take down larger vertebrate prey. But novel observations like these help us to understand the dietary ecology of the species, since very limited natural history records are available for the members of the genus *Heteropoda* (Zhang et al. 2015).

References


**Acknowledgements**

We are thankful to Dr. Ayan Mondal and Dr. Jayaditya Purkayastha for providing valuable comments on our manuscript.

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*Zoo’s Print* Vol. 38 | No. 9 28