

Scorpion Flies

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Scorpion flies are predatory insects. They belong to the insect Order Mecoptera and have two pairs of wings unlike true flies (Order Diptera) which have only a single pair.

The name, scorpion fly, is derived from the shape of the end of the abdomen in the male which is curved and held forward very much like that of a scorpion's sting. They are also sometimes called hanging flies because of their habit of hanging suspended from foliage by the front legs with the other legs positioned ready to catch any prey insect that passes. They are very conspicuous on the trees.

Scorpion flies feed on a wide of other insects such as flies, moths, caterpillars and beetle larvae as well as spiders. They are also known to feed on nectar. In some species only the male captures the prey. In these species the females are presented with the prey insect by the male during a complex mating ritual.

The most commonly found scorpion flies are *Harpobittacus* spp. They are often found hanging by their front legs on leaves and stems waiting to capture any other insects that may pass by.



Description

Adult scorpion flies are medium to large insects, with long legs and a long slender body. They are very delicate looking. They resemble crane flies and are often mistaken for them because of their long thin legs. However scorpion flies have two pairs of wings whereas crane flies, which are true flies, have only one pair. Another feature of scorpion flies is the elongated head with its long, narrow beak and biting and

chewing mouthparts. All four wings are similar in size and shape. *Harpobittacus* spp. are brown/black in colour and approximately 35mm in length. Adult males have genital structures at the tip of the abdomen that resemble the sting of a scorpion but are actually harmless. Larvae are caterpillar like.

Life History

The eggs, which have a tough shell that resists desiccation, are dropped directly onto the ground by the female. They vary in shape depending on the species, those of *Harpobittacus* spp. being cube shaped.

Larvae live in loose soil or debris. Some species are predatory, others feed on dead animal or plant material. There are four larval stages, the fourth stage being an inactive hibernating stage. When fully grown, each larva pupates in an individually constructed cell in the soil.

The adults of some scorpion fly species have a rather unusual mating behaviour that involves the male presenting the female with a prey insect as part of the ritual. This

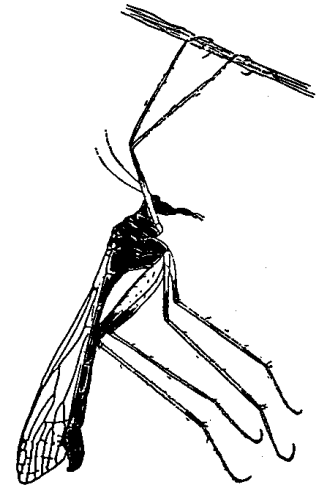
behaviour is thought to have evolved to distract the female, as with many insects the male is eaten after mating.
Adults may be found from spring, through summer to autumn but are more common in spring.

Natural Enemies

Scorpion flies are often caught in spider's webs and also occasionally fall prey to other insects such as large asilid flies and assassin bugs.

Importance

Scorpion flies are very beneficial insects. At times they are sufficiently abundant to have a significant effect on pest insects.



Summary

When to look: Look in spring, summer and autumn - adults more abundant in spring.

Where to look: Look on foliage and on nearby tall grasses.

What to look for: Look for large, slender, delicate, brown/black insects hanging from foliage by the forelegs.

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