

Common names: mantids, praying mantids, mantis

Simple diagnosis. Mantodea have a mobile head, with very large eyes, three ocelli, usually an elongate pronotum, elongate forecoxae and forefemora with spines. They usually have five-segmented tarsi and multisegmented cerci. Their wings have extensive venation and are held flat over the body when at rest. The forewings are leathery and the hindwings possess a well-developed anal region.

Technical diagnosis. Mantids are known for their distinctive "prayer-like" stance, and some species are either leaf-, flower- or stick-mimics. They have an elongate body with leathery forewings, with extensive venation, hindwings broader than the forewings, wings held flat over the body when at rest, which can be sometimes reduced or absent. The head is subtriangular and mobile, the eyes are prominent, three ocelli are present, and the antennae are multisegmented. The prothorax is usually elongate. The forelegs of mantids are modified for catching prey and have elongate coxae and femora, the remaining two pairs of legs are not modified, and have short coxae. The tarsi are almost always 5-segmented. Multi-segmented cerci are present. Immature stages are similar to adults, and can possess wing buds.

What can they be confused with? Mantodea can be confused with Phasmatodea (= stick insects), as they both have an elongate body, mandibulate (= biting and chewing) mouthparts, multisegmented antennae, leathery forewings and 5-segmented tarsi. However, stick insects can be differentiated in that the forelegs are never raptorial, the coxae are short, the pronotum is short and the mesothorax are usually elongate, the eyes are small and the cerci are unsegmented.



Mantodea also can be similar to some representatives of the order Neuroptera (family Mantispidae) with raptorial forelegs, they both also have subtriangular head, swollen eyes, non-modified mandibulate (= biting and chewing) mouthparts, multi-segmented antennae, elongate pronotum and five-segmented tarsi. However, the latter can be recognised by the forewings always being membranous, fore- and hindwings subequal in size and shape, and held tent-like over the body when at rest, and ocelli and cerci absent.

Biology. Mantids are most diverse in the topics. They are solitary and usually can be found on vegetation, from grasses to tree canopies. They are predators and regularly feed on insects, and sometimes feed on small vertebrates.

Diversity in Papua New Guinea. Mantids are found primarily in the tropical regions of the world, with a total of 1800 species. The New Guinea fauna is well-known and described (Miller 2007)



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Key references for Papua New Guinea.

There are no reviews in English.