

MANTOPHASMATODEA

This is the newest order of insects, having been re-discovered and described in 2001. The first genus was described for fossil specimens, but then workers discovered several modern day specimens. Actually, specimens had been collected quite awhile back (over 100 years ago), but these were usually mistaken as immature mantids. Modern day expeditions to southern Africa have turned up quite a few more specimens including a number of species.

The order name reflects the supposed relatedness with the orders Mantodea and Phasmatodea. One common name often used is gladiator, referring to their predatory habits. Another common name is heelwalkers, which refers to the fact that they tend to keep the last tarsal segment and the enlarged pad (arolium) off the substrate, so it looks like they are walking on their heels.

Your text book is already out of date. According to your text, there is a single family, Mantophasmatidae, and three genera: *Raptophasma* (fossil species), *Mantophasma* (2 species), and *Praedatophasma* (one species), and there are at least 3 more new species that have been discovered in South Africa. But if you go to the website listed in your text book, it says that there are now 13 described species in 10 genera, and they are arranged in 3 families.

They are fairly small, 2-3 cm. in length. Both sexes are wingless. They have chewing mouthparts (head is hypognathous). Antennae are long and filiform, longer than in the Phasmatodea, and the apex is slightly bent. They have fairly large eyes. Tarsi are 5-segmented. They resemble preying mantids, but the front legs are not raptorial (although the front legs are somewhat enlarged). The hind legs are not saltatorial. Males are usually much smaller than the females.

They are predatory, feeding on other small insects. Although the front legs are not distinctly raptorial as in the Mantodea, they still catch their prey with the front legs. Most South African species are nocturnal, while some of the Namibian species are diurnal. Both males and females communicate by drumming with their abdomens; they do not have auditory organs, so the communication is probably vibrational. Adults are short-lived, living for only a few weeks.

There is still some discussion whether this will remain a valid order or not.