

# Dictyoptera (Cockroaches and Mantids)



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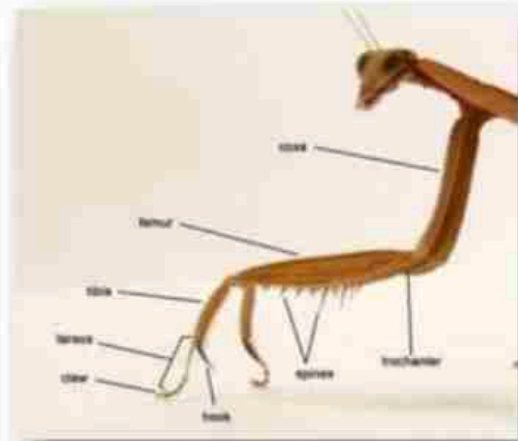
## General Characters

- 🦋 Body : Medium to large sized insects
- 🦋 Head : Usually hypognathous
- 🦋 Antennae : Filiform or setaceous
- 🦋 Mouth Parts: Chewing type

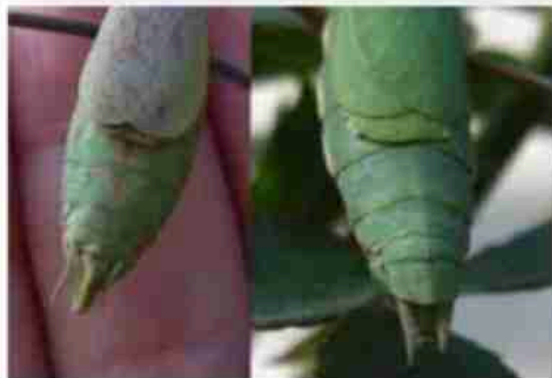
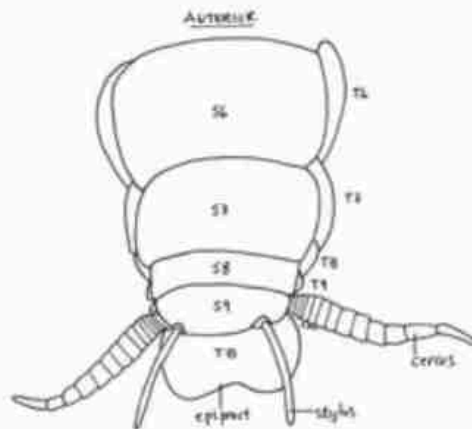
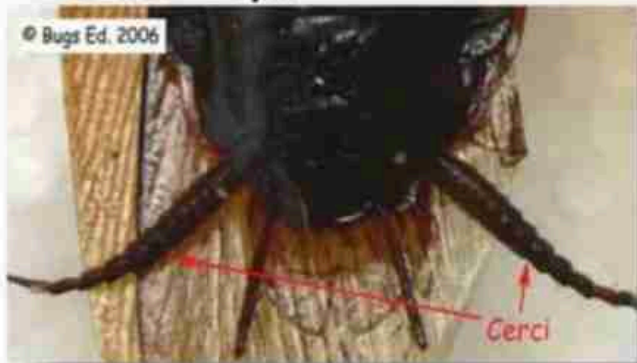


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- Thorax : Prothorax usually larger than meso and metathorax
- Wings : Forewing leathery – tegmina ; hindwings – membranous and folded, fanlike
- Legs : Forelegs are Raptorial in Mantids and Cursorial in Blattidae



- Male genitalia is asymmetrical.
- On 9<sup>th</sup> segment pair of styli.
- Cerci many segmented.
- Cerci > Styli



# SUB-ORDERS

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graph TD; A[SUB-ORDERS] --> B[BLATTARIA]; A --> C[MANTODEA];
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## BLATTARIA

- Polyphagidae
- Blaberidae
- Blattidae
- Epilampridae

## MANTODEA

- Amorphoscelidae
- Eremiaphilidae
- Hymenopodidae
- Mantidae
- Empusidae

## BLATTARIA

- Head is not mobile in all directions.
- Pronotum is shield like and covers the head.
- Body is flattened and dark coloured .
- Antennae long and setaceous.
- Legs are cursorial type.
- Ootheca is chitinous.
- They are omnivorous.
- Common family : Blattidae :  
eg. American cockroach

## MANTODEA

- Head is mobile in all directions.
- Pronotum is elongated and do not cover the head.
- Body is elongated sometimes cylindrical.
- Antennae long, setaceous and may be filiform in some species.
- Legs are raptorial type.
- Ootheca is not chitinous.
- They are carnivorous.
- Common family : Mantidae :  
eg. Preying mantids

## Blattaria

Number of Species	4,000
Common names	Roaches, cockroaches
Typical habitats	- damp, warm dark areas - tropical forests
Distinguishing characteristics	-No ovipositor -No saltatorial hind legs
Other features	-ootheca used in oviposition



## Family : Blattidae

- Antennae long and setaceous
- Forewings prominently tegmina
- Legs similar to one another
- Tarsi 5-segmented
- Ovipositor reduced and concealed under the 7<sup>th</sup> abdominal sternum
- A pair of many segmented cerci.
- They are mainly household pests.

ex. American cockroach, *Periplaneta americana*

German cockroach, *Blatella germanica*

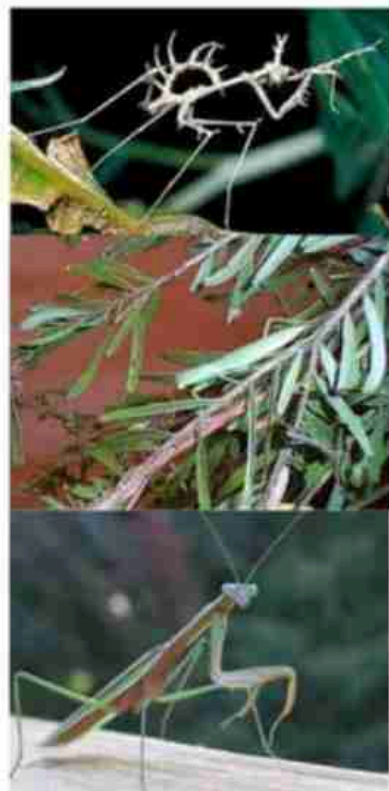


Fig :- Ootheca of Cockroach



## Mantodea

Number of Species	2.300
Common names	Mantids
Typical habitats	- arboreal
Distinguishing characteristics	-Predatory adaptations
Other features	-ootheca used in oviposition



## Family : Mantidae

- Usually large insects having elongated and cylindrical body.
  - Forelegs modified as raptorial with spines on inner-ventral side of fore-femurs.
  - Antennae comparatively shorter and filiform.
  - Pronotum is elongated and do not cover the head.
  - Nymphs are cannibalistic.
  - Mimic leaves and flowers.
  - Predators on crop pests.
- ex. Praying mantis, *Mantis religiosa*.

Fig :- Ootheca of Praying Mantis

