

## Highlights of hidden insect worlds



The film documents at high magnification the behaviour of various small insects and thus provides a fascinating insight into a hidden world, barely visible to the human eye.

Under the heading 'from monsters to divas' the film first shows, how hoverfly and lacewing larvae turn into beautiful ladies after a ferocious and greedy aphid-devouring childhood. Another example is presented by the antlion *Myrmeleon formicarius* that catches prey - mainly ants - in sand funnels and then changes, when fully grown, into a dragonfly-like winged insect. Subsequent sequences show how the gladiator or heel-walker *Mantophasma zephyrum*, endemic in South Africa and Namibia, catches prey with amazing skill. This kind of behaviour is then compared with that of a young praying mantid.

Especially impressive are the strategies evolved by parasitic wasps (parasitoids). The film shows, how aphelinid and aphidiid wasps attack their aphid hosts and how the hyperparasitoid *Alloxysta vicrix* has to calm down aphids in order to climb onto their back to deposit an egg into a parasitic larvae living inside the aphid. The tiny egg-parasitic wasp *Trichogramma brassicae* recognises the odour of mated *Pieris brassicae* females and then climbs upon them to be carried to the site where they deposit their eggs. Amazing host feeding strategies are used by the ectoparasitic wasp *Lariophagus distinguendus* that constructs feeding tubes in order to remove haemolymph from otherwise inaccessible larvae of the granary weevil *Sitophilus granarius*, living deep inside wheat grains.

The caterpillars of the moths *Plutella xylostella* and *Lyonetia clerkella* deserve to be described ingenious architects when observed how they start and finish their pupation cocoons with miraculous precision.

The hole in hazelnuts is well known but little is known about its creator. The film shows how the hazelnut weevil *Curculio nucum* deposits an egg into a young nut and how hatched progeny develops inside the nut until the massive, fully grown larva has to squeeze its way out of the nut by biting an exit hole through the hard shell. The film closes with an amusing story about the behaviour of two brothers of a parasitic wasp (*Nasonia virtipennis*) that compete for the favour of a sister. Finally the loser becomes the winner.