

# Spiny leaf insects

## More Details

Stick insects, spiny leaf insects and walking leaves form the order of phasmids (Fig. 1).

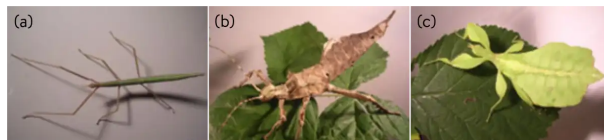


Fig. 1: Depending on their genus and appearance, phasmids are divided into stick insects (a), spiny leaf insects (b) and walking leaf insects (c). There are fluid transitions between the stick insects and spiny leaf insects. They are therefore not clearly separated systematic units.

We often call these insects stick grasshopper, although they are only distantly related to grasshoppers. In total, we know about 3000 different species of phasmids, and new species are discovered regularly. Phasmids can grow very large: one species of stick insects is the largest insect on earth at 32.8 cm long!

Most phasmids are nocturnal. They hide among the leaves of their food plants during the day and come out at night to feed, mate and lay eggs.

## Reproduction & Development

Phasmids can not only reproduce “normally”, but also by parthenogenesis (virgin reproduction). This means that the females also lay unfertilised eggs, from which usually only females hatch. In captivity, there are no males at all in a few species. If the temperature during embryonic development is high enough, males can also develop – but they are incapable of procreation.

Phasmids lay small eggs which, depending on the species, they simply drop, stick to plant parts or lay in the ground with the help of a spike. The development of the eggs takes four to six months.

Phasmids are among the insects with a methamorphosis: The hatched young animals (nymphs) look very similar to the adults and the resemblance increases with each moult. After three to six months and up to six moults, they are fully grown. As soon as the phasmids are sexually mature after the last moult, they mate. The female phasmids live up to one year, males live three to five months.

## The enemy has no chance

Besides their skilful camouflage (mimesis), phasmids have other tricks to escape their enemies: They fall into a state of catalepsy when they feel threatened – they stretch their body completely and the animals no longer show any signs of life. This apparent state of death can last for hours. Many species have the ability to shed extremities at designated breaking points (autotomy). The leg can still move for up to an hour to distract the enemy. It grows back after two or three moults. In adult animals, however, this no longer works and they have to live the rest of their lives with one leg less. Some species secrete strong-smelling or irritating secretions. There are species that spray a foul-smelling liquid up to 30 cm towards attackers. Warning colours are also a common method of sending enemies fleeing.

Almost all winged species chirp (stridulate) as soon as an enemy comes too close.

