





GOLIATH STICK INSECT

Invertebrate keeping guideline

GOLIATH STICK INSECT Eurycnema goliath



Goliath Stick Insects are one of Australia's largest and most spectacular phasmids. The heavy-bodied females grow to a length of 200mm, and have well developed wings which they extend rapidly to startle and deter predators.

They have a very interesting reproductive cycle, beginning with the eggs being tossed individually by females from the trees down to the forest floor. A single female may lay over 1000 eggs in a lifetime. The eggs look very much like plant seeds and are often collected by ants and stored below ground in their nests which protects the eggs from predators.

After hatching, the baby stick insects (nymphs) must make their way to the surface and into a tree. The nymphs are brown and twig-like at this stage, and use their appearance to blend into the small growth at the tips of branches.

Once in a tree they begin to feed on leaves and grow by shedding their outer skeleton (exoskeleton). This process is called ecdysis or moulting. To moult successfully the insect needs to hang uninterrupted beneath a leaf or branch. This can take 10mins to half an hour. Both sexes change from grey/brown to bright green on reaching maturity. Mature males have fully developed wings with very slender lightweight bodies, and are capable of flying short distances. Females are much larger and are not capable of flight.

An amazing fact about many phasmids is that they are parthenogenetic. This means that females don't need to be mated to reproduce. So if you only have a single female, she can still produce young - replicas of herself.

FOOD

Various species of Eucalyptus (gum), Acacia (wattle), Cadagi and Guava. Ensure fresh, healthy leaves are always available to your insect. Don't let the leaves dry out before you change them. The leaves can be put into a jar of water to keep them fresh for as long as possible. Make sure the jar has a lid or covering with holes in it to stop the young stick insects from falling in and drowning. Offering two or three species of food plant when you first get your stick insects is a good way finding one that they like. Food plant should be changed over at least once a week.

WATER

Mist-spray the leaves around your insect once a day – it will drink the droplets.

ENCLOSURE

The enclosure needs to be large enough to allow your stick insect to shed its exoskeleton properly. An enclosure at least 50cm H x 30cm W x 30cm D is recommended. Several individuals can be housed together as long as each insect has sufficient space to hang and feed without disturbing others. An enclosure should be higher than it is wide, as stick insects like to climb upwards. Place the enclosure in a spot where it gets a bit of daylight each day, but be careful it doesn't overheat in direct sunlight. Make sure there is plenty of ventilation in your enclosure.

COMMON ISSUES

Sometimes stick insects will not shed their exoskeleton properly. This may be because there isn't enough room in the enclosure for them to do so, or that their environment is too dry and their new exoskeleton hardens before they can free themselves from the old one. They can also lose limbs through the moulting process if they aren't hanging correctly whilst moulting. They can regrow lost limbs at their next moult, but need at least two moults to regrow a limb to a usable size.

CLEANING AND MAINTENANCE

Remove frass (poo) and fallen leaf material from the bottom of the enclosure once a week. This can be done when the food plant is changed over. If you have adult females in the enclosure, collect any eggs present on the enclosure floor.

HANDLING

They should be picked up gently, by coaxing them onto your hand. They always prefer to climb up, so use this to your advantage when picking them up and putting them back onto the leaves. They do have small hooks on their feet that they use to hang on with – these may tickle your hand a little.

TEMPERATURE

This species will do best at $22 - 26^{\circ}$ C, but will tolerate $18 - 20^{\circ}$ C and have a slower growth rate.

SUBSTRATE

Not required, but it can help with clean up to put some paper down on the bottom of the enclosure to catch the frass (poo) and leaf material that falls to the ground.



12-16 months life span



These animals are captive bred, and should not be released into the wild



50-60%