





# PEPPERMINT STICK INSECT

Megacrania batesii

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Peppermint Stick Insects are unique amongst Australian phasmids for several reasons. Their name comes from their ability to squirt a milky-white chemical in self defence which smells very much like peppermint. In the wild, they feed exclusively on plants in the Pandanaceae family, predominantly Screw Pine, *Pandanus tectorius*, and are limited to only a few areas despite the plant being relatively widespread. They are found only in north Queensland around Cape Tribulation, Innisfail and the Mission Beach area.

Like most other phasmids, their reproductive cycle involves the eggs being dropped individually by females from the plant down to the forest floor – many end up lodging in the base of the Screw Pine stalks which is a very safe place for them. The eggs are woody in appearance and look very much like plant seeds. They vary in colour from yellowish brown through to dark chocolate brown, and have a distinctive point-like cap on one end.

After hatching, the baby insects (nymphs) must make their way up the Pandanus plant and align themselves flat against the leaves, a position which they will spend most of their lives in. They begin to feed within 24 hours and leave distinctive chew marks in the leaves. The nymphs 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. They moult many times until they mature; their final moult revealing their wings.

An amazing fact about many phasmids (including Peppermint Stick Insects) 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**

Fresh healthy leaf 'straps' of Pandanus or related species – ensure fresh leaves are always available for 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 or eggs from falling in. Peppermint Stick Insects will feed upon a variety of Pandanaceae species in captivity, including *Pandanus*, *Benstonea* and *Freycinetia spp.*. The 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 should be higher than it is wide, as stick insects like to climb upwards. An enclosure 60cm x 30cm x 30cm is a good size, and will allow reasonable sized Pandanus leaves to be placed within it. 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 completely regrow a limb.

#### **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

These insects cannot bite but will often squirt their peppermint scented defence spray when handled. Handle with caution, hold well away from your face, and wash your hands afterwards. This chemical can cause extreme discomfort if it makes contact with the eyes. 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.

# TEMPERATUR<u>E</u>

This species will do best at 24 – 28° C, but will tolerate 20 - 22° 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.



Around 1 year life span



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



60-80%