

A pair of Peruvian fern insects, with the smaller male here being bright red.  
 Photograph © Drägüs.

# Sticks on FIRE

Not all stick insects are muted shades of green or brown, but bright colours signal danger, as shown by the case of the Peruvian fern insect. Ed Baker explains more.

The Peruvian fern insect (*Oreophoetes peruana*) is a rare example of a truly colourful stick insect. The males are a bright red with black patches, while the slightly larger females, averaging about 8cm (just over 3in) long, have red, yellow or orange stripes and knees contrasting boldly with their black body. This species is found in the humid tropical forests of Peru and Ecuador, and thrives under similar vivarium conditions.

Like most phasmids that have evolved to lose their usual camouflage, this species is more than capable of defending itself. Special glands on the thorax are capable of producing a milky fluid containing quinoline that can cause irritation to the eyes or sensitive skin. These stick insects therefore need to be handled very carefully, especially if you have any cuts on your hands. It is also important to wash your hands immediately after touching them, as a precaution.

There are two recognised subspecies, known as *O. p. peruana* and *O. p. nigripes*, but only the nominate race is in culture. Any stick insects offered for sale as *O. p. nigripes* are actually likely to be a separate species, known as *O. topoense*, which was misidentified for a time as being *O. p. nigripes*.

## Food plants

As its name suggests, this species feeds exclusively on ferns. Many species of fern will be eaten, but it is important to have access to a supply throughout the year. During the summer months, bracken is a suitable for these stick insects, but in the winter, you are more likely to have to rely on ferns growing in your garden or in your home. Standing the cut fronds in a narrow-necked jar of water and packing or covering the top with tinfoil will mean that this greenery has to be replaced less frequently though, and there will be no risk of the stick insects drowning.

As with all herbivorous insects, care should be taken to ensure that the food plants are free from any traces of

insecticide. Remember that many garden centre plants are treated with systemic insecticides, and they may need to be kept for at least six months (and possibly even longer) in order to ensure that they are safe as food sources for these stick insects.

## Culturing

This species requires warm conditions, with a temperature of around 24°C (75°F), and humid surroundings. Humidity may be maintained by providing limited ventilation, using a 3cm (1.25in) layer of moist vermiculite as a substrate, and regular spraying. To prevent moulting problems, the vivarium should be a minimum of 30cm (12in) in height, so the insects can hang off the food plants or the roof of the enclosure easily.

The Peruvian fern insect has a relatively short lifecycle, with eggs generally hatching in 10-12 weeks and nymphs maturing after around six months. The adults may then live for a similar interval.

## Similar species

This species is closely-related to other American species in the tribe Diapheromerini, including the common American walking stick (*Diapheromera femorata*) and the Costa Rican species known simply as *Alienobrota brocki* which has been popular in culture.

The closely related and newly-described *Oreophoetes topoense* is also available. Females in this case are similar in appearance to *O. peruana* but can be distinguished because the body of the males is glossy black in colour. ■

A female Peruvian fern insect.

“ The Peruvian fern insect has a relatively short lifecycle, with eggs generally hatching in 10-12 weeks ”