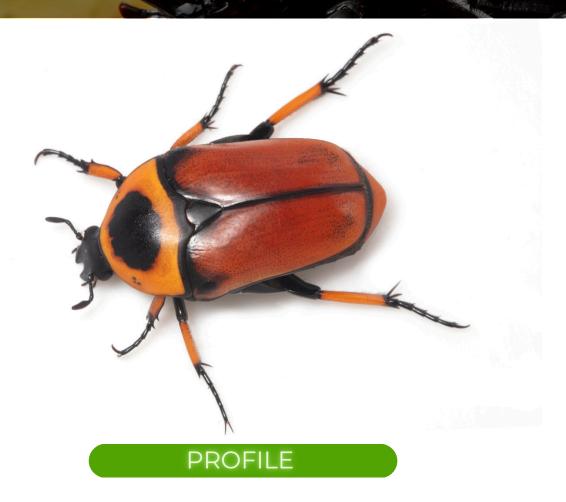


SUNBURST FLOWER BEETLE

Dilochrosis brownii

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Sunburst Flower Beetles belong to the Scarabaeidae family, and the Cetoniinae subfamily which are known as flower beetles or flower chafers. Sunburst Flower Beetles are found in coastal Far North Queensland and are relatively large beetles, adults measuring around 30mm in body length.

As with most flower beetles, Sunburst Flower Beetles are very active diurnal beetles that are strong fliers and will visit flowering and fruiting plants to feed on the sugars. Congregations of them can occur on flowering trees seasonally when they are attracted to the rich food source.

These beetles lay their eggs amongst humus and decomposing timber. The larvae have three stages (instars) and will progressively feed and increase in body size before moulting to the next stage. The third instar larvae grow quite large, reaching over 45mm before pupating. They create a 'cocoon' called a pupal cell by binding the substrate material with a sticky secretion which results in an oval shaped capsule.

Pupation takes place inside the pupal cell and the adult beetle will emerge after a couple of months. This time varies depending on the temperature and conditions the beetle experiences.

FOOD

(Adults) Fruits; soft fruits such as banana and mango are ideal while apple is useful if soft fruits aren't available. Offer small pieces and replace each day to avoid the fruit fermenting. (Larvae) 'Chafer Grub' is a substrate mix of decomposing timber and other organic material including rainforest leaf litter – available from Minibeast Wildlife.

WATER

Water generally does not need to be supplied in free form as it is acquired from food, however care must be taken to ensure enclosure conditions are maintained (see below) to avoid dehydration. A good rule is to mist adult beetles with water every second day, particularly if the enclosure is well ventilated

ENCLOSURE

Plastic tubs make ideal enclosures with dimensions at least 15cm high x 20cm long x 10cm wide. The tub will need a secure lid and some ventilation, however the moisture level and humidity within the enclosure needs to maintained at levels above 70%.

SUBSTRATE

Coco-peat is an ideal substrate for maintaining non-breeding adult beetles, or if breeding is desired, use our 'Chafer Grub' as a substrate. Both are available from Minibeast Wildlife's Bug Shop. The substrate should be kept slightly moist (but not sodden) – there should be no free water pooling below the substrate. The substrate depth should be 5cm for adult beetles, and at least 10cm for larvae. The surface should be scattered with sticks and pieces of wood to allow adult beetles to right themselves if they flip over (this can occur if they fly within the enclosure).

CLEANING AND MAINTENANCE

Remove any uneaten food (fruit for adults) daily to prevent any mould or fungi growth in the enclosure. If mould or fungi does start to grow in the substrate, remove as necessary.

If raising larvae, the substrate should be changed or replenished as the materials (leaf litter/pulpy wood) are consumed. This should be relatively infrequent (every couple of months) if you have low numbers of larvae. You will notice the substrate gradually changing into a rich soil like material with lots of oval-shaped poo. It is best to leave around 25% of the existing substrate when adding new substrate to avoid stressing the larvae.

When the larvae are approaching pupation, it is really important to be extremely careful if digging through the substrate. If a pupal case has been created and is damaged it can result in the death of the beetle. If a pupa is present, it is best not to disturb the substrate until the adult beetle has emerged. This may take 2-3 months depending on the temperature.

TEMPERATURE

The safe temperature range for these beetles is $18-24^{\circ}$ C. They will tolerate both higher and lower temperatures for short periods of time. Higher temperatures will result in much more activity, but also may result in shorter lifespan.

HANDLING

Adult beetles can be handled, but care must be taken to do so gently. Never forcibly pull them off any surface (including your hand), as this may result in damage to the beetle's feet or legs. These beetles will readily fly and are attracted to light, so extreme care must be taken when handling to avoid accidental escape. Never handle beetles in a situation where flight could result in damage (eg near operational ceiling fans) or loss (outside).

Larvae should be disturbed as little as possible; checking on them every few weeks is recommended. If handling, do so on an open palm, and return the larva to the substrate within minutes to avoid stressing it.

COMMON ISSUES

Disruption of pupation due to digging through the substrate is the major issue when raising these beetles from larvae. Avoid unnecessary disturbance of the substrate and take care if doing so for maintenance.



12-18 months total life span, (adult beetle lives for around 3-4 months)



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



60-90%

