

(*Paguma larvata*). We heard and saw this animal climbing about in the canopy of the *Ilex* tree. It ate 10 - 20 fruits, dropping several on the ground, which we saw were like the previous fruits seen underneath the tree. What surprises us is that it removed the fruit skin and ate the fruit tissue inside, leaving fruit skins and pyrenes to fall to the ground. This indicates that civets are smart frugivores. In Hong Kong, masked palm civets are considered important dispersers of large seeded plants (Goodyer, 1992), and from our observations it would appear that they may also help to disperse *I. chapaensis*.

## Bibliography

Goodyer, N. J. (1992). Notes on the Land Mammals of Hong Kong. *Memoirs of the Hong Kong Natural History Society* 19: 71-78.

# Gemmae of the moss *Octoblepharum albidum* taken as food by spider mites

by Zhang L.<sup>1,2</sup>, Paul P.H. But,<sup>2</sup> and Ma P.<sup>2</sup>  
<sup>1</sup>South China Institute of Botany, The Chinese Academy of Sciences, Guangzhou 510650 and <sup>2</sup>Department of Biology, The Chinese University of Hong Kong, Shatin, NT, Hong Kong.

It is widely known that some bryophytes, mainly their gametophytes and capsules, are eaten by mammals, birds, and insects (Longton, 1990; Slack, 1988). No reports that we have found so far indicate that the gemmae of bryophytes are taken as food by invertebrates. We here report such an example from Hong Kong.

During a field survey at Kadoorie Farm & Botanic Garden on October 31, 2002, we collected some fresh material of *Octoblepharum albidum* on tree trunks at Orchid Heaven at 400 m altitude. The sample was kept in a petri dish (with cover) in our laboratory in room temperature. Abundant gemmae were found on the sample. The mature gemmae are commonly borne singly along the upper 1/3–1/2 leaf margins. They are fusiform, 110–220 (250) µm long, and consist of 4–8 cells. One (occasionally two), hyaline hair-like projection is frequently developed at the distal ends of the gemmae. Several weeks later (November 28, 2002), the sample was observed again. It was surprising to find that almost all gemmae were lost leaving only the basal cells of the gemmae. At the same time, several spider mites (*Tetranychus* sp.?) were found actively crawling on the moss and eating the remaining gemmae. The mite body is dark red to black in color, 1-1.5 mm in length, with eight red legs covered by sparse spines.

It is easy to find insects and other invertebrates dwelling on bryophytes, especially in streamside habitats. But this is the first time bryophyte gemmae have been documented as food for invertebrates in Hong Kong. (For figures see *Porcupine!* Website)

## Acknowledgements

Sincere thanks were extended to Kadoorie Farm & Botanic Garden for allowing us to do the field survey, Dr Roger Kendrick for suggesting the insect belongs to a kind of mite, and Dr Richard T. Corlett for correcting the text.

## Bibliography

Longton, R.E. (1990). The role of bryophytes and lichens in terrestrial ecosystems. In: Bates, J.W. and Farmer, A.M. (eds.), *Bryophytes and lichens in a changing environment*, Clarendon Press: Oxford, pp.32-76.

Slack, N. G. (1988). The ecological importance of lichens and bryophytes. In: Nash, T.H. and Wirth, V. (eds.) *Lichens, bryophytes and air pollution*, J. Cramer: Berlin. Stuttgart, pp. 23-53.



*This column aims to introduce interesting species of Hong Kong flora and fauna that might be encountered during fieldwork. Distinctive physical characteristics and some interesting ecological facts are included for each example. If you wish to contribute to this column, or have any comments or suggestions, please contact either*

*Jacqueline Weir (jesweir@hkusua.hku.hk) or  
Sukh Mantel (skmantel@hkusua.hku.hk)*

## '*Perisesarma bidens*' by David Poon

*Perisesarma bidens* (Grapsidae: Sesarminae) is one of the commonest mangrove crabs in Hong Kong. You can easily distinguish it from other crabs by its orange chelae and the greenish/olive green carapace. Also, as the name implies, this species has two "teeth" (hence *bi-dens*) on the lateral sides of the carapace.

As dominant mangrove fauna, *P. bidens* are highly adapted for their semi-terrestrial lifestyle. They possess a gill chamber and a modified breathing mechanism typical in many sesarminae crabs [for further details, see Warner's (1977) classic work]. They are burrowers but appear to have a strong preference for natural refuges such as rock crevices, under boulders and between interstices of mangrove root buttresses. They can also be found in high intertidal grass patches and near freshwater

sources, indicating their tolerance to salinity changes and desiccation stress. Observations have shown that they are also good climbers as they move up and cling on mangrove stems tightly during high tides, possibly as a means to avoid prolonged immersion as well as predation from aquatic predators. Spotting of *P. bidens* on open sand-/mudflats (that are immediately next to the mangroves) is extremely unusual. They seem to have a strong association with mangroves and their activity is, therefore, mostly restricted within the mangrove stand. Field observations suggest that they are aggressive and agonistic encounters are rather common. When kept in captivity, they tend to cannibalize.

*Perisesarma bidens* are swift and alert, and therefore difficult to catch. They can retreat very quickly into narrow refuges and also give a painful bite! As in many other sesarminae crabs, *P. bidens* play a key role in the mangrove food web as leaf litter processors. Interestingly, they also spend most of their time cropping on surface sediments, a behaviour that has been recognized, yet generally ignored by crab ecologists. The reason(s) for crabs feeding on such an apparently nutritionally inferior food item could be simple or complex, which is a good lesson to me that there is still much to be learnt about mangrove crabs' feeding ecology.

### Bibliography

Warner, G.F. (1977). *The Biology of Crabs*. Van Nostrand, New York. 202 pp.



Fig. 1. *Perisesarma bidens*

### 'Hong Kong Newt (*Paramesotriton hongkongensis*)' by Dr Leung Sze Lun, Alan

Of the 23 species of amphibians in Hong Kong, there is only a single species of salamander, also known as "tailed amphibians", naturally occurring in Hong Kong and this is the Hong Kong newt, *Paramesotriton hongkongensis*. The species is endemic to Guangdong, including Hong Kong, and protected by law under the Wild Animals Protection Ordinance Cp. 170 Schedule 2. The adult length, from snout to the end of the tail, is about 11 to 14 cm, with four legs similar in size. The body colour ranges from light brown to dark

brown with some patches of orange markings scattered on the ventral side of the body. The patterns of the patches are unique for each individual, just like the fingerprints of humans. The tadpoles have some finger-like gills around their necks which are usually absent in frog and toad tadpoles, and the gills disappear after metamorphosis to adult.

The Hong Kong newts undergo seasonal breeding migrations. Each year after the end of the wet season around October, the newts move into the stream pools. After breeding, they will eventually leave the pools around December, but the information on where they go is still poor. From a Hong Kong newt migration study I carried out during 1996 to 1997 "The seasonal migration and diet of Hong Kong Newts, *Paramesotriton hongkongensis* in KFBG and Tai Tam", it was found that at the beginning of the breeding season, the newt population in pools was male-biased. Towards the end of the breeding season, the newt population tended to become female-biased. The males that breed quicker than others may have an advantage since their offspring can hatch earlier. As cannibalism is common in this species, being "bigger" can reduce the risk of being eaten.



Fig. 2. 'Hong Kong Newt' *Paramesotriton hongkongensis*

## MISCELLANY

### CITES in Santiago

by Yvonne Sadovy

The recent CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) meeting, held in Chile, Santiago, ended on some high notes in mid-November after two exhausting weeks of debate, politics and a lot of sitting around. This was the 12<sup>th</sup> Conference of the Parties (CoP): the term Parties refers to the countries that are