

Hammerhead flatworm *Bipalium cf. vagum* in Singapore

Subjects: *Bipalium cf. vagum* (Platyhelminthes: Rhabditophora: Bipaliidae).

Subjects identified by: Kelvin K. P. Lim.

Location, date and time: Singapore Island, Venus Loop and Pasir Ris Park; 1 October 2010 and 31 December 2013; night.

Habitat: Edge of secondary forest and parkland beside mangrove vegetation.

Observer: Heng Pei Yan.

Observations: Two examples are herein featured.

1) Along Venus Loop at the eastern border of the Central Catchment Nature Reserve, one example of about 5 cm total length was found on a leaf about 1 m off the ground at the edge of secondary forest, on 1 October 2010 at 2153 hrs (Fig. 1).

2) At Pasir Ris Park, one example of about 4 cm total length was observed on the trunk of a tree about 2 m off the ground at the mangrove boardwalk by the edge of a small patch of mangrove vegetation, on 31 December 2013 at 2327 hrs (Fig. 2).



Fig. 1. *Bipalium cf. vagum* at Venus Loop, on 1 October 2010. Photograph by Heng Pei Yan

Remarks: The identification of the featured examples is tentative. They bear a strong resemblance to *Bipalium vagum*, a species described from Bermuda, and recently discovered and regarded as an invasive species in the southern United States. Similar looking animals are known from Taiwan. This species is known to be a predator of terrestrial snails (Ducey et al., 2007).

Terrestrial flatworms are usually found in damp wooded places. Based on our personal observations, terrestrial flatworms with this colour pattern do not seem to be one of the forms known in Singapore (see de Beauchamp, 1933; Yeo, 2011). This taxon appears to be recorded there for the first time. If these examples are indeed *Bipalium vagum*, the local population is likely to be derived from individuals that were introduced possibly with imported ornamental plants.

References:

De Beauchamp, P., 1933. Planaires terrestres du Raffles Museum. *Bulletin of the Raffles Museum, Singapore*. 8: 109-120.

Ducey, P. K., M. McCormick & E. Davidson, 2007. Natural history observations on *Bipalium* cf. *vagum* Jones and Sterrer (Platyhelminthes: Tricladida), a terrestrial broadhead planarian new to North America. *Southeastern Naturalist*. 6 (3): 449-460.

Yeo, R. K. H., 2011. Terrestrial flatworms. In: Ng, P. K. L., R. T. Corlett & H. T. W. Tan (eds.). *Singapore Biodiversity. An Encyclopedia of the Natural Environment and Sustainable Development*. Editions Didier Millet and the Raffles Museum of Biodiversity Research, Singapore. p. 480.



Fig. 2. Example from Pasir Ris Park, on the night of 31 December 2013. Photograph by Heng Pei Yan

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