

## Pearly-banded bees *Nomia incerta* nesting in flower pots at Pasir Ris

**Subjects:** Pearly-banded bee, *Nomia (Hoplonomia) incerta* (Insecta: Hymenoptera: Halictidae).

**Subjects identified by:** Zestin W. W. Soh.

**Location, date and time:** Singapore Island. Pasir Ris Park, Kitchen Garden; 9 July 2016; 1030 hrs

**Habitat:** Plant pots in garden next to secondary forest and mangrove.

**Observers:** Contributor, with Chui Shao Xiong & John X. Q. Lee.

**Observation:** Six female *Nomia incerta* were seen entering their nests made in the soil within separate flower pots. One of the nests is shown on Figs. 1, 2 and 3.

**Remarks:** *Nomia incerta* is a ground-nesting bee with a wide distribution across Asia (Ascher & Pickering, 2016). While the species has previously been observed nectaring at flowers in various semi-urban and forested parks across Singapore (Soh & Ngiam, 2013), this is the country's first published record of its nesting behavior. Descriptions of the nests of *Nomia incerta* (formerly called *Nomia punctata*) in Japan have been published by Masuda (1943) and Okumura (1966).

The present observation are of six females returning to their nests, each made within separate flowerpots containing soil (Figs. 1&2). The pots, owned by the gardeners who manage the Kitchen Garden, were placed under the shade of a pong pong (*Cerbera* sp.) tree (Fig. 4). Diameter and depth of the pots were around 18 cm and 13 cm respectively.

No bees were found nesting in the ground of the surrounding area, suggesting that the species may prefer to nest in the loose soil in the flowerpots. This observation of an artificial nesting site (flowerpot) used by the bees may potentially guide future management of the species for both conservation and crop pollination (Cane, 1997). This record is also noteworthy as currently very little is known of the nesting behavior of ground-nesting bees in Singapore (J. S. Ascher, personal communication on 3 August 2016).

Like other ground-nesting bees, *Nomia incerta* is a docile and unaggressive species that is safe around people. The bees are also likely to be providing a pollination service to the fruiting crops in the Kitchen Garden. The nests should, therefore, not be purposefully disturbed or removed.

### References:

- Ascher, J. S. & J. Pickering, 2016. *Discover Life Bee Species Guide and World Checklist (Hymenoptera: Apoidea: Anthophila)*. [http://www.discoverlife.org/mp/20q?guide=Apoidea\\_species](http://www.discoverlife.org/mp/20q?guide=Apoidea_species) (Accessed on 2 August 2016).
- Cane, J. H., 1997. Ground-nesting bees: the neglected pollinator resource for agriculture. *Acta Horticulture*. 437: 309–324.
- Masuda, H., 1943. Biological notes on *Nomia punctata* Westwood (Hymenoptera, Halictidae). *Mushi*. 15: 16–28.
- Okumura, T., 1966. Studies on the biology of *Nomia punctata* Westwood (Hymenoptera: Apoidea). *Life Study*. 10: 17–22 (in Japanese).
- Soh, Z. W. W. & R. W. J. Ngiam, 2013. Flower-visiting bees and wasps in Singapore Parks (Insecta: Hymenoptera). *Nature in Singapore*. 6: 153-172.

Contributor: Zestin W. W. Soh

Contact address: [zestin.soh@outlook.com](mailto:zestin.soh@outlook.com)

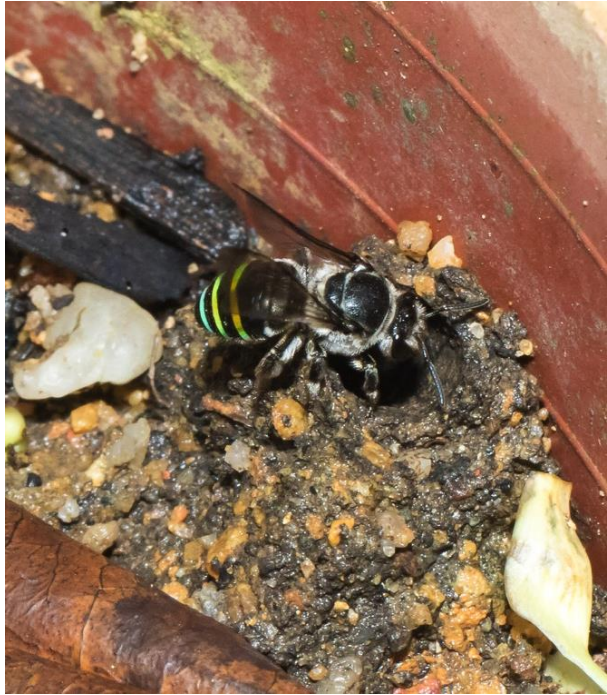


Fig. 1. Female bee at entrance of nest.



Fig. 2. Female bee entering nest.



Fig. 3. Entrance of nest within flower pot.  
(indicated by arrow)

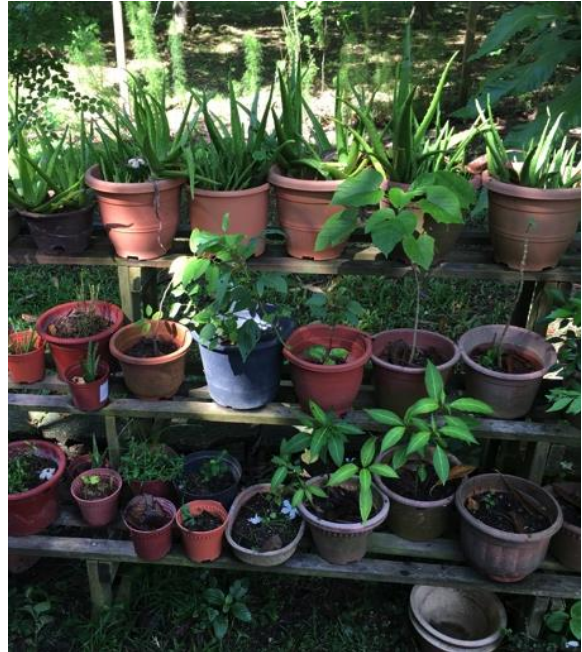


Fig. 4. Microhabitat of the flower pots in the  
Kitchen Garden at Pasir Ris Park.

Photographs by Zestin W. W. Soh