

Biodiversity Record: A swarm of pygmy water boatman, *Micronecta haliploides*

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Subjects: Pygmy water boatman, *Micronecta haliploides* (Insecta: Hemiptera: Nepomorpha: Micronectidae).

Subjects identified by: Leshon Lee.

Location, date and time: Singapore Island, Yishun Street 81; 1 June 2021; around 2000 hrs.

Habitat: Concrete high-rise apartment building in urban residential area.

Observer: Joy Oh Suxian.

Observation: A large number of insects, possibly a few hundred individuals, each the size of a chia seed, was found scattered all over the floor and furniture inside an apartment unit on the 11th floor (Figs. 1, 2), apparently attracted to the lights in the room. Most of the insects were flopping around on the floor, while some individuals were flying up to human knee-level. A few individuals fell into a cup of water, where they were able to swim about (Fig. 3). There were so many insects that they had to be removed with a broom and dustpan.



Fig. 1. Some of the pygmy water boatmen that were collected from the floor. (Screenshot from video by: Joy S. Oh).



Fig. 2. Part of the swarm of pygmy water boatmen on the floor of the apartment. (Screenshot from video by: Joy S. Oh).

Remarks: *Micronecta haliploides* is widely distributed from Indonesia to India (Nieser & Chen, 1999), and is easily identified by the dark punctuates of the hemielytra and its relatively large size (2.4 to 3.6 mm body length) (Fig. 4; Nieser, 2002). Pygmy water boatmen tend to populate stagnant waters or slow-moving streams with aquatic vegetation, sometimes in large numbers, and feed on tiny invertebrates or unicellular algae (Tran et al., 2015). They are also regularly found in light trap catches (Nieser, 2002; Chen et al., 2006), which explains their attraction to the observer's house lights. It is unclear why it swarms in large numbers.

We hypothesise that the water boatmen may have evacuated from their natural habitat due to changes in environmental factors, and while swarming, were attracted to the house lights. Weather reports mentioned that the warm and wet weather would last from April 2021 into the first half of May 2021, before getting drier in the second half of May (Channel News Asia, 2021; Ng, 2021). This suggests that water bodies with *Micronecta haliploides* swarms may be drying up, forcing them to leave for larger water bodies (Velasco & Millan, 1998). More research into the ecology and life history of *Micronecta haliploides* is required to ascertain the reasons for such swarming events.



Fig. 3. Some of the pygmy water boatmen were found swimming in a cup of water. (Screenshot from video by: Joy S. Oh).



Fig. 4. Dorsal (left) and ventral (right) views of one of the *Micronecta haliploides* from the swarm. (Photograph by: Leshon Lee).

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