

## Biodiversity Record: The porcelain crabs, *Petrolisthes haswelli* and *Petrolisthes pubescens* in Singapore

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**Subject:** *Petrolisthes haswelli* (Crustacea: Decapoda: Anomura: Porcellanidae).

**Subject identified by:** Oh Rui Quan and Clinton Duffy.

**Location, date and time:** Singapore Strait, Sentosa, Tanjong Rimau; 31 January 2026; around 1630 hrs.

**Habitat:** Marine. Reef flat with coral rubble at low tide.

**Observers:** Oh Rui Quan and Wong Shun Kai Joshua.

**Observations:** One individual (Figs. 1 & 2) of approximately 1 cm carapace width, was observed under coral rubble during low tide.



Fig. 1. Dorsal-frontal view of *Petrolisthes haswelli*. Fig. 2. Dorsal view of the same crab. (Photographs by: Wong Shun Kai Joshua).

**Subjects:** *Petrolisthes pubescens* (Crustacea: Decapoda: Anomura: Porcellanidae).

**Subjects identified by:** Oh Rui Quan & Samuel Nhoung.

**Locations, dates and times:** Singapore Strait at three locations —

- 1) Cyrene Reef; 1 February 2026; around 1800 hrs.
- 2) Sentosa, Tanjong Rimau; 31 January 2026; around 1800 hrs.
- 3) East Coast Park, Area B; 9 October 2025; around 1830 hrs.

**Habitats:** Marine. Reef flat with coral rubble at low tide (locations 1 & 2). Seashore with coral rubble at low tide (location 3).

**Observers:** Oh Rui Quan and Wong Shun Kai Joshua.

**Observations:** An ovigerous female was observed at eastern Cyrene Reef (Fig. 5). At least four examples were seen at Tanjong Rimau (Figs. 3 & 4). One individual was found at East Coast Park (Fig. 6). All individuals were around 1 cm in carapace width.



Fig. 3. Dorsal-frontal view of one of the *Petrolisthes pubescens* at Tanjong Rimau. Fig. 4. Rear dorsal view of the same crab (in Fig. 3). Fig. 5. Close-up view of right cheliped carpus of the female *Petrolisthes pubescens* from Cyrene Reef showing double-tipped distal spines. Fig. 6. Frontal view of *Petrolisthes pubescens* at East Coast Park. (Photographs by: Joshua Wong Shun Kai Joshua (Figs. 3–5) and Oh Rui Quan (Fig. 6).

**Remarks:** Johnson (1970) recorded the following species of *Petrolisthes* in Singapore—*Petrolisthes* cf. *militaris*, *Petrolisthes lamarckii*, *Petrolisthes hastatus*, *Petrolisthes kranjiensis*, and *Petrolisthes teres*. Although *Petrolisthes boscii* was hypothesised to be in Singapore, it does not seem to have been recorded. The two species featured here do not morphologically match any of the aforementioned species. They have been identified as *Petrolisthes haswelli* and *Petrolisthes pubescens*. Both are believed to be new records for Singapore.

*Petrolisthes haswelli* is identified with the combination of the following characters: chela strongly granulated, anterior margin of chelipedal carpus armed with 4 or 5 unequal teeth, distal end of the posterior margin of the chelipedal carpus with 3 spines, absence of fringe of long hairs arising from the ventral portion of the outer face of the chelipedal palm, and absence of a row of spots on the dorso-extensor margin of the palm (see Miers, 1884; Johnson, 1970; Osawa, 2007; Fang et al., 2023). The species has been recorded from tropical Australia, the Moluccas (Haig, 1979), and various localities in China (Fang et al., 2023). Although this species is herein treated as a new record for Singapore, there is a picture of a reddish example labelled as '*Petrolisthes* cf. *haswelli*' in the general account of porcellanids of Singapore by Wang & Ng (2011), which does not appear to be conspecific with the individual featured here.

*Petrolisthes pubescens* is identified with the combination of the following characters: surface of carapace sparsely or thickly covered with simple setae, all segments of the chelipeds covered with pappose setae, ambulatory legs scattered with simple and plumose setae, presence of large teeth on the anterior region of the chelipedal carpus, some individuals with double-tipped distal spine (see Fig. 5) (see Kropp, 1986). The species is known from the Indian Ocean and western Pacific as far east as the Marquesas Islands (Kropp, 1986).

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