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Singapore: native land of *Bucinozomus hortuspalmarum* Armas & Rehfeldt, 2015 (Schizomida: Hubbardiidae)

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Abstract: The rare short-tailed whipscopion *Bucinozomus hortuspalmarum* Armas & Rehfeldt, 2015, described on the basis of two male specimens collected in a greenhouse in Frankfurt am Main, Germany, is recorded from the Bukit Timah Nature Reserve, Singapore, southeastern Asia. This new record is based on the photographs of two adult specimens (female and male) observed on 2015 in that locality.
Key words: Schizomida, Hubbardiinae, Singapore, Bukit Timah Nature Reserve.

Singapur: patria de *Bucinozomus hortuspalmarum* Armas & Rehfeldt, 2015 (Schizomida: Hubbardiidae)
Resumen: Se reporta la presencia del raro esquizómido *Bucinozomus hortuspalmarum* Armas & Rehfeldt, 2015, en la Reserva Natural Bukit Timah, Singapur, sudeste de Asia. Este registro se realiza a partir de las fotografías tomadas en 2015 a dos especímenes adultos de esta especie, la cual se describió sobre la base de dos machos recolectados en un invernadero de Frankfurt del Main, Alemania.
Palabras clave: Schizomida, Hubbardiinae, Singapur, Reserva Natural Bukit Timah.

The weird schizomid *Bucinozomus hortuspalmarum* Armas & Rehfeldt, 2015 was described on basis to two male specimens collected on February 2012 and March 2013, respectively, in a greenhouse at Frankfurt am Main, Germany. Unfortunately, at that time was not possible to determine its real homeland, although was suggested that southeastern Asia might be the area in which it naturally exists (Armas & Rehfeldt, 2015: 60).

Almost simultaneously with the description of this interesting species, Bay (2015) published on-line the photos of an unidentified short-tailed whipscorpion, which were taken by him in the Bukit Timah Nature Reserve, Singapore (Fig. 1). Nevertheless, the specimens were not collected (N. Bay, pers. com.).

There are not doubts that the Singaporean specimens recorded by Bay (2015) belong to *Bucinozomus hortuspalmarum*. On basis to this new information, we are here recording this taxon, for the first time, as a native member of the Singaporean fauna.

The small island of Singapore (685 Km^2) is located at the end of the Malay peninsula (Fig. 2). It is almost plain (highest altitude is 176 m a.s.l.) and originally was covered with tropical rain forest. Annual mean temperature and precipitations are 27.2 °C and 2 400 mm, respectively (Wikipedia, 2022).

The Bukit Timah Nature Reserve (Fig. 2; 01°21'N, 103°46'E, at the end of Hindhede Drive, Singapore) has 1.64 square kilometre (400 acre) and is located on the slopes of Bukit Timah Hill (163.63 m a.s.l.), and parts of the surrounding area. It contains one of the largest patches of primary rainforest in Singapore (Wikipedia, 2022).

A remarkable character of the female of *B. hortuspalmarum* is its very long flagellum, which is 0.60 times as long as the carapace (Fig. 1 B). On the other hand, it is apparently composed by four flagellomeres.

On the other hand, according with J. C. Cokendolpher, J. C. Reddell and D. W. Sissom (pers. com., April 22, 2022), an adult female examined by them and collected 8 km from Kota, Tingii-Air Terjun, Pantai Forest Reserve, Johore [Malaysia, Malay Peninsula], Malaya, 20 October, 1980 (D.H. & A.C. Kistner), ex nest T-1029 of Termitinae sp., #4324 (deposited at the American Museum of Natural History), matches with the original description of *B. hortuspalmarum* (this locality is approximately 15 km north of Bukit Timah Nature Reserve). Spermathecae of this specimen are described by Cokendolpher *et al*. (pers. com., data as above) as follows: "With two pairs of large oval lobes connected at base by narrow stalks (Fig. 3A)", whereas the flagellum is described by them as having four flagellomeres (Fig. 3 B-C).

We are very indebted to Nick Bay for permitting the utilization of the photographs of *B. hortuspalmarum* taken by him in Singapore. Also, our sincere gratitude to James C. Cokendolpher (Museum of Texas Tech University), James R. Reddell (Texas Memorial Museum, University of Texas at Austin) and W. David Sissom (West Texas A & M University), for providing data on specimen from Malaysia and also authorizing their publication, including the figures.

Bibliography

ARMAS, L. F. DE & S. REHFELDT 2015. *Stenochrus portoricensis*, *Zomus bagnallii* and a new genus of schizomids (Schizomida: Hubbardiidae) from a greenhouse in Frankfurt am Main, Germany. *Arachnologischen Mitteilungen*, **49**: 55-61.

BAY, N. 2015. https://c1.staticflickr.com/9/8629/16004937068_bcb1496626_b.jpg

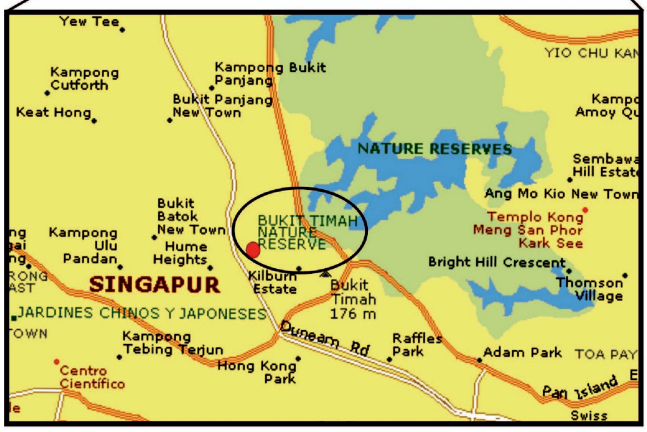
WIKIPEDIA 2022. Bukit Timah Nature Reserve. https://en.wikipedia.org/wiki/Bukit_Timah_Nature_Reserve. Accesed on March 14, 2022.





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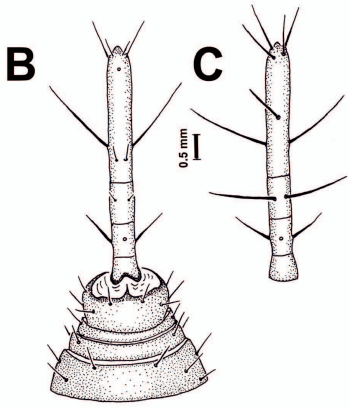


Fig. 1. Dorsal habitus of alive specimens of *Bucinozomus hortuspalmarum* in their natural habitat in Bukit Timah Nature Reserve, Singapore. **A**, male; **B**, female. Photographs by Nick Bay. **Fig. 2.** Geographical distribution of *Bucinozomus hortuspalmarum* in Singapore. **Fig. 3.** *Bucinozomus hortuspalmarum*. Female from Johore, Malaysia. **A**, spermathecae. **B-C**, flagellum: **B**, dorsal aspect, including last abdominal segments; **C**, ventral aspect. Drawings by Cokendolpher, Reddell and Sissom (pers. com.)