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A new junior synonym for the jumping spider *Epeus flavobilineatus* (Araneae: Salticidae: Plexippina)

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Summary. *Evenus tener* Simon 1877 is recognized as a junior synonym of *Epeus flavobilineatus* (Doleschall 1859), which thereby serves as type species for the genus *Epeus* Peckham & Peckham 1886.

In a recent publication (Hill 2025) I wrote that the jumping spider *Evenus tener* Simon 1877 was a *nomen dubium*, based on the fact that the female type specimen was lost, and Simon's brief description would not support identification of this spider to species. However, this designation would leave the genus *Epeus* Peckham & Peckham 1886 without a type species. Here, instead, I recognize *Evenus tener* as a junior synonym of *Epeus flavobilineatus*, thus identifying the latter as the type species for the Peckhams' *Epeus*:

***Epeus* Peckham & Peckham 1886**
type species: *Evenus tener* Simon 1877

***Epeus flavobilineatus* (Doleschall 1859)** ♀
Salticus flavobilineatus Doleschall 1859 ♀
Evenus tener Simon 1877 ♀, **new synonym**
Epeus tener Peckham & Peckham 1886 ♀, type species for genus *Epeus*
Viciria flavo-bilineata Thorell 1892 ♀
Epeus flavobilineatus Prószyński 1984a ♀
Epeus tener Prószyński 1984b ♂ only
Epeus tener Żabka 1985 ♂ only
Epeus tener Peng 2020 ♂ only
Epeus flavobilineatus Hill 2025 ♂♀
Epeus tener Hill 2025 ♀

The rationale for this synonymy is as follows:

1. Although Simon's (1877) decription of a female *Evenus tener* was brief, it was not incompatible with Doleschall's previous (1859, also brief) description of a female *Salticus flavobilineatus*. For example, Doleschall described a specimen *with two longitudinal lemon-yellow stripes on the back* of the opisthosoma. Simon referred to the presence of *two fine yellow lateral lines on the abdomen* (English translations by Hill 2025). In both specimens, legs I-IV were of similar length, in this order: 3. 1. (4. 2.). We do not know if either specimen was mature or not.

2. Prószyński (1984a, 1984b) was apparently the first to look closely at descriptions of both species, and he noted that *E. flavobilineatus is closely related to E. tener (= Viciria tenera)*. His separation of the two species at that time, based on a series of males and females collected in Java, was only *provisional*.

3. Although previously there have been no publications based on anything other than isolated specimens supposed to represent either of these species, I have reviewed most of the many records of *Epeus* posted in *iNaturalist*, and have

produced a distribution map for *E. flavobilineatus* (Figure 1), based *only* on records backed by identifiable photographs of adult males. Since adult male *E. flavobilineatus* have distinctive field marks (Figure 2), they are relatively easy to identify. Several things stand out here. First, on *iNaturalist* there are almost no spiders identified as *E. tener*, but a large number identified as *E. flavobilineatus*. This may be the result of the association of *E. tener* with the male of other species, beginning with Simon's (1903) synonymy of the male *Viciria cristata* Thorell 1887 from northern Myanmar with his female *tener* from the Philippines. As noted in Figure 1, I could find no records of a male *E. flavobilineatus* north of Penang in the Malay Peninsula, but this species is very frequently encountered in both Java and the Philippines, and has a wide range of distribution in Sunda. There are many photographic records of this species from Singapore.

4. Other problems related to subsequent attempts to associate specimens collected outside of this range of distribution (Figure 1) with *E. tener* are discussed in detail in Hill (2025). In *iNaturalist*, many *Epeus* are misidentified, at least on a preliminary basis (prior to confirmation). For example, many if not most identified as *E. flavobilineatus* in southern India are actually *E. alboguttatus* (Thorell 1887), a distinctively different species that should now be very easy to identify.

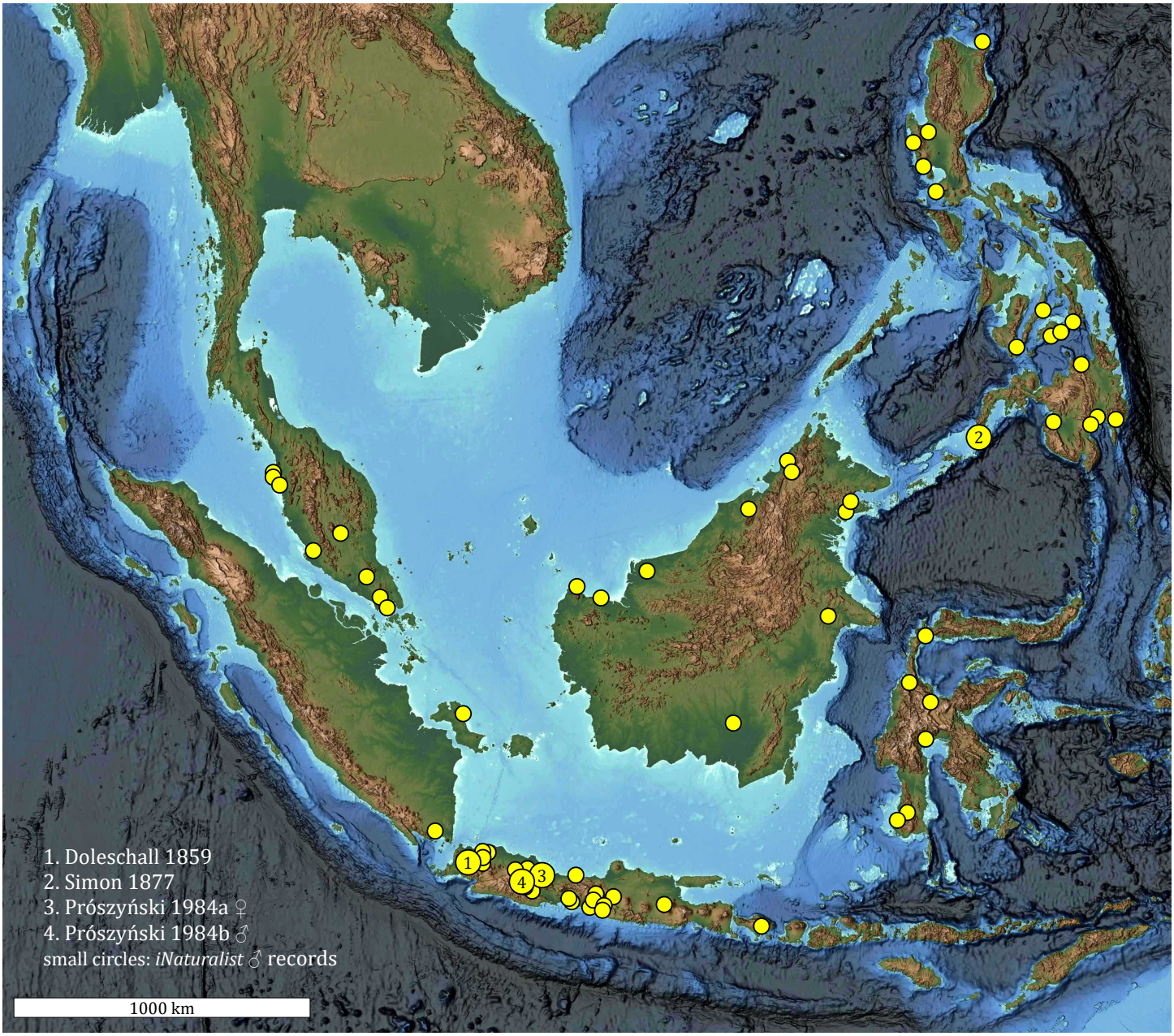

Figure 1. Distribution of *Epeus flavobilineatus* in the tropics of Southeast Asia, based on photographs of males posted in *iNaturalist*. Most have been found in Sunda, south of Penang and extending southeast to Java and Bali, just west of the Wallace Line. However there are many records of this species from Sulawesi, and from the Philippines. Localities associated with important publications are numbered, (2) in the Philippines, and (1, 3-4) in West Java.

Figure 2 (continued on next page). Posted records of adult ♂ *Epeus flavobilineatus* from *iNaturalist*. In each case, the respective *iNaturalist* observation number (iNat. obs.) and the Creative Commons deed associated with the use of each photo is given. All photos have been cropped and/or otherwise modified for this presentation. **1-2,** iNat. obs. 265931239, Singapore, © franegan, CC BY-NC 4.0. **3,** iNat. obs. 4770938, Singapore, © budak, CC BY-NC 4.0. **4,** iNat. obs. 242467027, Singapore, © Melvyn Yeo, CC BY-NC 4.0. **5,** iNat. obs. 197790943, Singapore, © SunGW, CC BY-NC 4.0. **6,** iNat. obs.145652393, Gingoog, Misamis Oriental, Philippines, © Melbert James Baul, CC BY-NC 4.0.

Figure 2 (continued from previous page, continued on next page). Posted records of adult ♂ *Epeus flavobilineatus* from *iNaturalist*. **7-8,** iNat. obs. 62476193, Jakarta, Java, Indonesia, © Wildan R. Ardani, CC BY 4.0. **9-10,** iNat. Obs. 68104358, Dramaga, West Java, © Wildan R. Ardani, CC BY 4.0. **11,** iNat. obs. 71224543, Jakarta, Java, © Wildan R. Ardani, CC BY 4.0. **12,** iNat. obs. 262120085, Kota Kinbalu, Sabah, Malaysia, © emanon, CC BY-NC 4.0.

Figure 2 (continued from previous page). Posted records of adult ♂ *Epeus flavobilineatus* from *iNaturalist*. **13-15,** iNat. obs. 62474361, Singapore, © Soh Kam Yung, CC BY-NC 4.0. **16-17,** iNat. obs. 212171175, Gunung Mulu National Park, Sarawak, © DolceAmore, CC BY-NC 4.0. **18-19,** iNat. obs. 180986574, Gunung Ledang, Malaysian Peninsula, © aidil_hiroki, CC BY-NC 4.0.

It should be noted once more that the identity of *Viciria cristata* Thorell 1887 (from northern Myanmar), assumed to represent the ♂ of *V. tener* by Simon (1903), has not been resolved. See Hill (2025) for a detailed discussion of this subject, to include English translations of related papers.

Acknowledgements

I thank all of the photographers and naturalists who have posted their discoveries on iNaturalist, and have made these available to a wider audience through their permission. Creative Commons deeds that apply to the photographs shown here are CC BY 4.0, and CC BY-NC 4.0.

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