



## UPDATED DISTRIBUTION FOR PANAMA OF *Thasopsis formidabilis* (Distant, 1893)

(HEMIPTERA: COREIDAE: COREINAE)

## DISTRIBUCIÓN ACTUALIZADA PARA PANAMÁ DE *Thasopsis formidabilis* (Distant, 1893)

(HEMIPTERA: COREIDAE: COREINAE)

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### INFORMACIÓN SOBRE EL ARTÍCULO

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**Contribución de los autores:** Los autores de este trabajo declaran haber participado en la realización de este proyecto de investigación en todas sus etapas, trabajo de campo, la identificación, así como la discusión y el análisis de datos.

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**ABSTRACT.** The subfamily Coreinae (Hemiptera: Coreidae) includes species of large stink bugs that, in addition to causing discomfort to people by releasing irritating substances to the skin and eyes, can be pests of ornamental plants and agricultural crops. Recently, in areas close to plantain crops in Finca 65 – Changuinola, Bocas del Toro (9°25'50" N 82°31'01" W, 11 m asl), a black and orange bug was found, so the objective was to identify the species. Specialized literature was reviewed, and a specialist was consulted to confirm the identification. The results reflected that the insect in question corresponds to *Thasopsis formidabilis* (Distant, 1893) (Hemiptera: Coreidae: Coreinae), a species reported for the province of Chiriquí and other countries like Costa Rica and Honduras, so this finding expands the known distribution. of the species for Panama, specifically in the western region of the country.

**KEYWORDS:** Bocas del Toro, bugs, identification, pest, plantain.

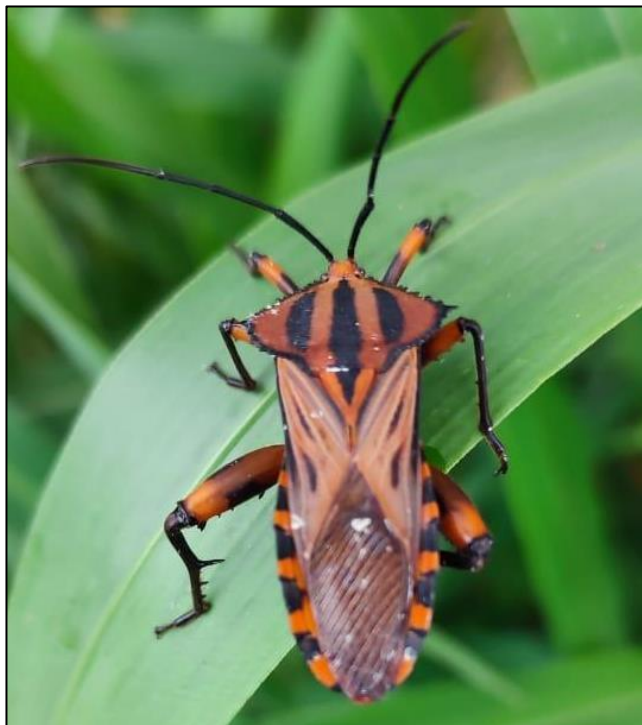
**RESUMEN.** La subfamilia Coreinae (Hemiptera: Coreidae), incluye especies de chinches apuestosos de gran tamaño que, además de causar molestias a las personas por la liberación de sustancias irritantes para la piel y los ojos, pueden ser plagas de plantas ornamentales y cultivos agrícolas. Recientemente en áreas próximas a cultivos de plátano en Finca 65 – Changuinola, Bocas del Toro (9°25'50" N 82°31'01" O, 11 msnm), se encontró un chinche de coloración negro con naranja, por lo que el objetivo fue identificar la especie. Se revisó literatura especializada y se hizo consulta a un especialista para confirmar la identificación. Los resultados reflejaron que el insecto en cuestión corresponde a *Thasopsis formidabilis* (Distant, 1893) (Hemiptera: Coreidae: Coreinae), especie reportada para la provincia de Chiriquí y otros países como Costa Rica y Honduras, por lo que este hallazgo amplía la distribución conocida de la especie para Panamá, específicamente en la región occidental del país.

**PALABRAS CLAVE:** Bocas del Toro, chinches, identificación, plaga, plátano.



The Coreinae subfamily (Hemiptera: Coreidae) contains species of large stink bugs, which have been previously reported in Panama and other countries as pests of ornamental species and agricultural crops, like *Leptoglossus zonatus* (Dallas, 1952) and *Leptoglossus concolor* (Walker, 1871) in citrus fruits (Rodríguez et al., 2011), *Sphictyrtus intermedius* Stål, 1859 in dragon fruit and cotton (Alarcón & Cazorla, 2022), *Pachylis nervosus* Dallas, 1852 and *Pachylis pharaonis* (Herbst, 1784) in legume trees (Collantes & Santos-Murgas, 2023), *Spartocera fusca* in Solanaceae and other crops (Linares & Orozco, 2017), to mention some.

Bocas del Toro is one of the main plantain producing areas in Panama. In march 7, 2023, a black and orange big stink bug was found near to plantain crops in Finca 69 – Changuinola (9°25'50" N 82°31'01" W, 11 m asl), (Figure 1). A study about arthropods related to these crops was developed (Collantes et al., 2023), but there were no Coreidae specimens found during that research. The aim of this work was to identify the said stink bug species.



**Figure 1.** Stink bug found near plantain crops in Bocas del Toro.

The specimen's habitus was compared with specialized literature (Linares, 2016; STRI, 2024), including the original species description by Distant (1893) (Figure 2) and the reports of the said insect were checked.



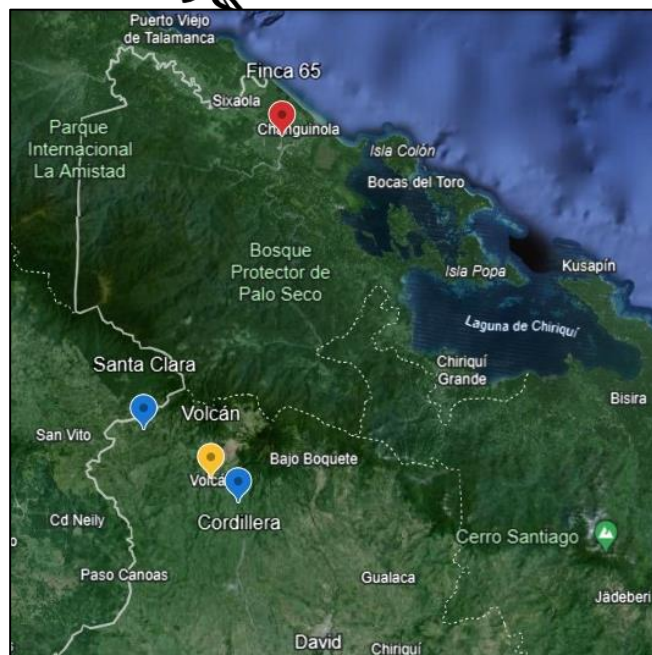
**Figure 2.** Habitus of *Tharsopsis (Bardistus) formidabilis*, according to the original description of Distant (1893).

According to the results, the specimen found in Bocas del Toro corresponds to *Tharsopsis (Bardistus) formidabilis* (Distant, 1893) (Hemiptera: Coreidae: Coreinae). The morphological characters observed were similar to the original description by Distant (1893) (from a female collected by George C. Champion in Volcán – Chiriquí, Panama); like a length near to 3 cm, the brownish-ochraceous color, the spots and crenulated margin of the pronotum, to mention some.

After checking the works of Distant (1893), Linares & Orozco (2017) and STRI (2024), the known distribution of the species was from the Chiriqui province and other central american countries like Costa Rica and Honduras; so, this finding expands the known distribution. of *T. formidabilis* for Panama, specifically in the western region (Figure 3).

It is important to mention that Distant (1893) indicated the altitudinal distribution of the species between 2500 and 4000 feet (762 – 1219 m asl) (according to Champion's notes). However, Finca 65 in Bocas del Toro is at 11 m asl and some of the locations from Honduras reported by Linares & Orozco (2017), are near the sea level and above 1400 m asl; so, *T. formidabilis* could have a broader altitudinal range, between 0 and more than 1400 m asl.

This kind of studies are necessary to be continued, because with an updated data about the distribution of stink bugs and other potential pests, the possibility to establish proper integrated pest management (IPM) alternatives could be easier, especially in strategic crops like plantain.



**Figure 3.** Known distribution for Panama of *T. formidabilis*, according to Distant (1893) (yellow), STRI (2024) (blue) and the new record (red).

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#### Conflict of interests

We declare that there is no conflict of interests in this information.