

NOTA / NOTE

First record of *Zelus renardii* Kolenati, 1856 in Portugal
(Heteroptera: Reduviidae: Harpactorinae).Torsten van der Heyden¹ & José Manuel Grosso-Silva²¹ Immenweide 83, D-22523 Hamburg (GERMANY). e-mail: tmvdh@web.de² Museu de História Natural e da Ciência da Universidade do Porto (MHNC-UP) / PRISC, Praça Gomes Teixeira, 4099-002 Porto, Portugal. e-mail: jmgrossosilva@mhnc.up.pt

Abstract: The first record of the Nearctic species *Zelus renardii* Kolenati, 1856 (Heteroptera: Reduviidae: Harpactorinae) from Portugal is reported. The European distribution of the species is summarized.

Key words: Hemiptera, Heteroptera, Reduviidae, *Zelus renardii*, Portugal, Europe, Mediterranean Region, distribution, first record.

Resumen: Primera cita de *Zelus renardii* Kolenati, 1856 en Portugal (Heteroptera: Reduviidae: Harpactorinae). Se presenta la primera cita de la especie neártica *Zelus renardii* Kolenati, 1856 (Heteroptera: Reduviidae: Harpactorinae) de Portugal. Se resume la distribución europea de la especie.

Palabras clave: Hemiptera, Heteroptera, Reduviidae, *Zelus renardii*, Portugal, Europa, Región Mediterránea, distribución, primera cita.

Recibido: 17 de septiembre de 2020

Publicado on-line: 3 de octubre de 2020

Aceptado: 1 de octubre de 2020

Zelus renardii Kolenati, 1856 (Heteroptera: Reduviidae: Harpactorinae) is the only species belonging to the New World genus *Zelus* Fabricius, 1803 that has been introduced to Europe. So far, the species has been reported from the following European countries: Albania, France, Greece, Italy, Spain and Turkey (Davranoglou, 2011; Petrakis & Moulet, 2011; Baena & Torres, 2012; Vivas, 2012; Dioli, 2013; van der Heyden, 2015, 2017; Çerçi & Koçak, 2016; Zhang *et al.*, 2016; Simov *et al.*, 2017; Pinzari *et al.*, 2018; Rodríguez Lozano *et al.*, 2018; Garrouste, 2019; Goula *et al.*, 2019; Pérez-Gómez *et al.*, 2020). The known distribution of *Z. renardii* in Europe is principally limited to the Mediterranean Region.

On 15.09.2020, Nelson Conceição photographed a specimen of *Z. renardii* (Fig. 1) at Lota Beach near Altura (personal communication). The site is located in the district of Faro (Algarve) at the Atlantic coast, very close to the Portuguese border with Spain. Several photos of the specimen were uploaded to the online database iNaturalist (Conceição, 2020). So far, this is the westernmost record of the species in Europe (Garrouste, 2019; Pérez-Gómez *et al.*, 2020).

As *Z. renardii* has not been reported from Portugal in scientific publications yet, the record reported in this note is the first one for this country.

Acknowledgements

We would like to thank Nelson Conceição (Tavira, Portugal) for allowing us to use his photo of *Z. renardii* to illustrate this paper and for additional information about his finding.

References

- Baena, M. & Torres, J.L. 2012. Nuevos datos sobre heterópteros exóticos en España y Francia: *Tempyra biguttula* Stål, 1874, *Belonochilus numenius* (Say, 1832) y *Zelus renardii* (Kolenati, 1856) (Heteroptera: Rhyparochromidae, Orsillidae, Reduviidae). *Boletín de la Asociación española de Entomología*, **36**(3-4): 351-360.
- Çerçi, B. & Koçak, Ö. 2016. Contribution to the knowledge of Heteroptera (Hemiptera) fauna of Turkey. *Journal of Insect Biodiversity*, **4**(15): 1-18.
- Conceição, N. 2020. Leafhopper Assassin Bug (*Zelus renardii*). [Accessed: 16.09.2020]. Available from: <https://www.inaturalist.org/observations/59691584>.
- Davranoglou, L.R. 2011. *Zelus renardii* (Kolenati, 1856), a New World reduviid discovered in Europe (Hemiptera: Reduviidae: Harpactorinae). *Entomologist's Monthly Magazine*, **147**(1766-1768): 157-162.
- Dioli, P. 2013. *Zelus renardii* (Kolenati, 1856) (Insecta Heteroptera Reduviidae). *Quaderno di Studi e Notizie di Storia Naturale della Romagna*, **38**(133): 232-233.
- Garrouste, R. 2019. *Zelus renardii* (Kolenati, 1856): une Réduve nouvelle pour la France (Hemiptera, Reduviidae, Harpactorinae). *Bulletin de la Société entomologique de France*, **124**(3): 335-336.
- Goula, M., Lizana, F. & Miralles-Núñez, A. 2019. New records of the Nearctic leafhopper assassin bug, *Zelus renardii* Kolenati, 1857 in the Iberian Peninsula (Hemiptera: Heteroptera: Reduviidae). *Butlletí de la Institució Catalana d'Història Natural*, **83**: 219-222.
- Pérez-Gómez, Á., Sánchez, Í. & Baena, M. 2020. Nuevos registros de hemípteros (Insecta: Hemiptera) alóctonos en Andalucía (sur de España). *Revista de la Sociedad Gaditana de Historia Natural*, **14**: 9-19.
- Petrakis, P.V. & Moulet, P. 2011. First record of the Nearctic *Zelus renardii* (Heteroptera, Reduviidae, Harpactorinae) in Europe. *Entomologica Hellenica*, **20**: 75-81.
- Pinzari, M., Cianferoni, F., Martellos, S. & Dioli, P. 2018. *Zelus renardii* (Kolenati, 1856), a newly established alien species in Italy (Hemiptera: Reduviidae, Harpactorinae). *Fragmenta entomologica*, **50**(1): 31-35.
- Rodríguez Lozano, B., Baena Ruiz, M. & Gómez de Dios, M.Á. 2018. The invasive species *Zelus renardii* (Kolenati, 1857) (Hemiptera, Reduviidae) in Spain and comments about its global expansion. *Transactions of the American Entomological Society*, **144**: 551-558.
- Simov, N., Gradinarov, D. & Davranoglou, L.-R. 2017. Three new assassin bug records (Hemiptera: Heteroptera: Reduviidae) for the Balkan Peninsula. *Ecologica Montenegrina*, **13**: 25-29.
- van der Heyden, T. 2015. Ein aktueller Nachweis von *Zelus renardii* (Kolenati, 1856) auf Kreta/Griechenland (Hemiptera: Heteroptera: Reduviidae: Harpactorinae). *BV news Publicaciones Científicas*, **4**(52): 55-59.
- van der Heyden, T. 2017. First records of *Zelus renardii* (Kolenati, 1856) (Hemiptera: Heteroptera: Reduviidae: Harpactorinae) for Albania. *Archivos Entomológicos*, **18**: 49-50.
- Vivas, L. 2012. Primera cita en España de la especie *Zelus renardii* (Kolenati, 1857) (Heteroptera: Reduviidae) que representa la segunda cita en Europa. *BV news Publicaciones Científicas*, **1**(6): 34-40.

Zhang, G., Hart, E.R. & Weirauch, C. 2016. A taxonomic monograph of the assassin bug genus *Zelus* Fabricius (Hemiptera: Reduviidae): 71 species based on 10,000 specimens. *Biodiversity Data Journal*, 4: e8150. doi: [10.3897/BDJ.4.e8150](https://doi.org/10.3897/BDJ.4.e8150).



Fig. 1. - Specimen of *Zelus renardii* Kolenati, 1856, Lota Beach, Faro (Algarve), Portugal. (Photo: Nelson Conceição).