

Short communication

NEW FAUNAL DATA ON TRUE BUGS (HETEROPTERA) IN SERBIA

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In the last decade, numerous records of new true bug species in Serbia were published. Some of them were invasive alien species from other continents (Protić, 2009; Protić & Živić, 2012; Šeat, 2015; Protić & Šeat, 2016), but some were Mediterranean species, well known from surrounding countries (Protić, 2010, 2011; Jerinić-Prodanović & Protić, 2011). Even though Serbia is a landlocked country, its climate and vegetation in some parts are sub-Mediterranean and can provide a suitable environment for certain Mediterranean true bugs. Additionally, it is known that many Mediterranean species have shifted their ranges northwards in the last decades and Rabitsch (2008) stated that habitat and climate change, as well as the interactions of these two, are the main reasons for areal expansion. On their way to 'mediterraneanizing' central Europe, species of southern Balkan Peninsula first have to pass through Serbia. Recently, new true bugs were recorded in our country and species are listed with notes on records, as follows.

Anisops sardeus Herrich-Schäffer, 1849

Serbia: Lake Ludaš: Hajdukovo, 46°06'23"N 19°50'06"E, 93 m a.s.l, 21.08.2014, 2 ♀♀, leg. and det. Jelena Šeat (Fig. 1A, Fig. 2).

Notes: Ludaš is a shallow Pannonian lake surrounded by a wide reed bed, and the whole area is recognizable by its saline steppe and marshy features. It is known that this aquatic true bug tolerates salty waters very well (Brooks, 1951), and it has often been found nearby or in saline lakes in Hungary (Soós *et al.*, 2010; Boda *et al.*, 2012; Petri *et al.*, 2012). The specimens of *A. sardeus* from Lake Ludaš were attracted by a light trap that was installed 200 m away from the waterbody. The locality where the species was recorded in Serbia is c. 10 km away from Lake Madarász, the nearest published record from Hungary (Petri *et al.*, 2012).

Distribution of *A. sardeus* in the region: the species has already been recorded in all neighboring countries, except Macedonia (Josifov, 1986; Protić, 1998; Soós *et al.*, 2010; Berchi 2011, 2013; Kment & Beran, 2011; Boda *et al.*, 2012; Petri *et al.*, 2012; Csbai *et al.*, 2015; Gligorović *et al.*, 2016; Stoianova & Simov, 2016) (Fig. 4).

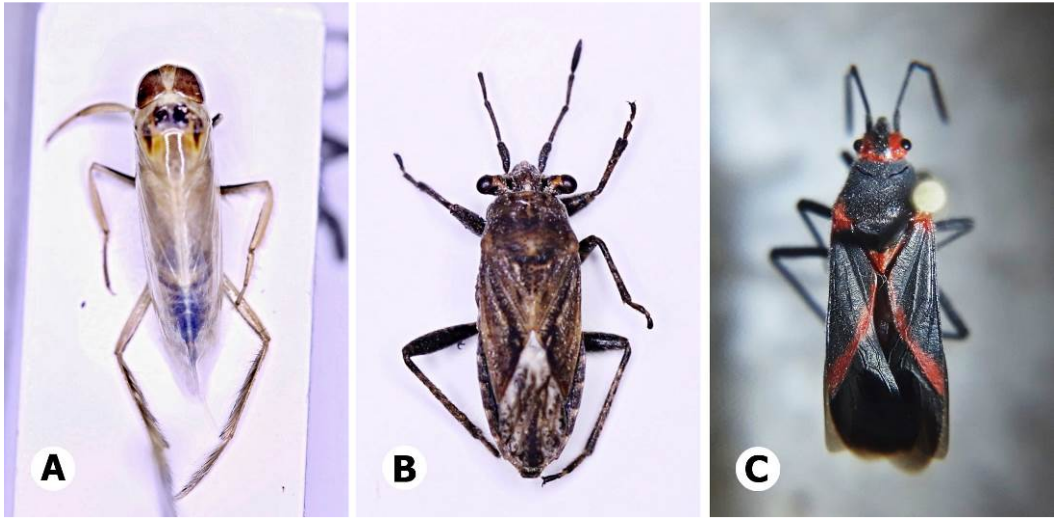


Figure 1. New true bug species in Serbian fauna: A) *Anisops sardeus*, B) *Henestaris laticeps*, C) *Caenocoris nerii*.

Henestaris laticeps (Curtis, 1836)

Serbia: Rujen (or Rujan) Mountain: Buštranje, 42°19'06"N 21°46'17"E, 635 m a.s.l., 14.09.2018, 1 ♀, leg. and det. Bojana Nadaždin (Fig. 1B, Fig. 2).

Notes: The locality where the *H. laticeps* specimen was recorded has Mediterranean steppe-like vegetation on rocky ground with occasional bushes (Fig. 3). The true bug was collected by sweep-netting of vegetation.

Distribution of *H. laticeps* in the region: The species has already been recorded in most of the Balkan countries (Josifov, 1986; Protić, 2001) (Fig. 4).

Caenocoris nerii (Germar, 1847)

Serbia: Belgrade: Vrčin, 44°40'36.74"N 20°36'25.70"E, 160 m a.s.l., 07.11.2018, 1 ♀, leg. and det. Mihailo Vujić (Fig. 1C, Fig. 2).

Notes: It is known that the main host plant of the species is the Mediterranean *Nerium oleander* L., which is widely used as an ornamental shrub. However, due to the harsh winters in Serbia, oleanders are mostly planted in pots and overwinter indoors. The *C. nerii* specimen was collected on an ornamental *Chrysanthemum* L. plant in a private garden of a suburban settlement, Vrčin. There are numerous potted oleanders in the same garden and throughout the neighborhood, but no other specimen of *C. nerii* was found after checking nearby shrubs. In addition, the first half of November 2018 was extremely warm in Serbia, with average temperatures around 20°C, and in the Belgrade surroundings two more Mediterranean species were recorded, the hoverfly *Eristalinus taeniops* (Wiedemann, 1818) (recorded by the second author of this manuscript) and the moth *Daphnis nerii* (Linnaeus, 1758), whose caterpillar also feeds on oleander (Hric, pers. comm). These newcomers possibly migrated northwards, driven by the unusually warm autumn weather.

Distribution of *C. nerii* in the region: The species has been recorded only in Greece, Albania and Bulgaria (Josifov, 1986, 1999; Simov, 2011) (Fig. 4).

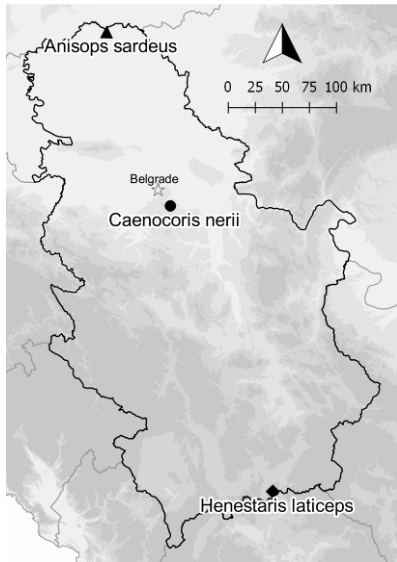


Figure 2. Locations where the new species were recorded.



Figure 3. Habitat of *Henestaris laticeps* in southern Serbia.

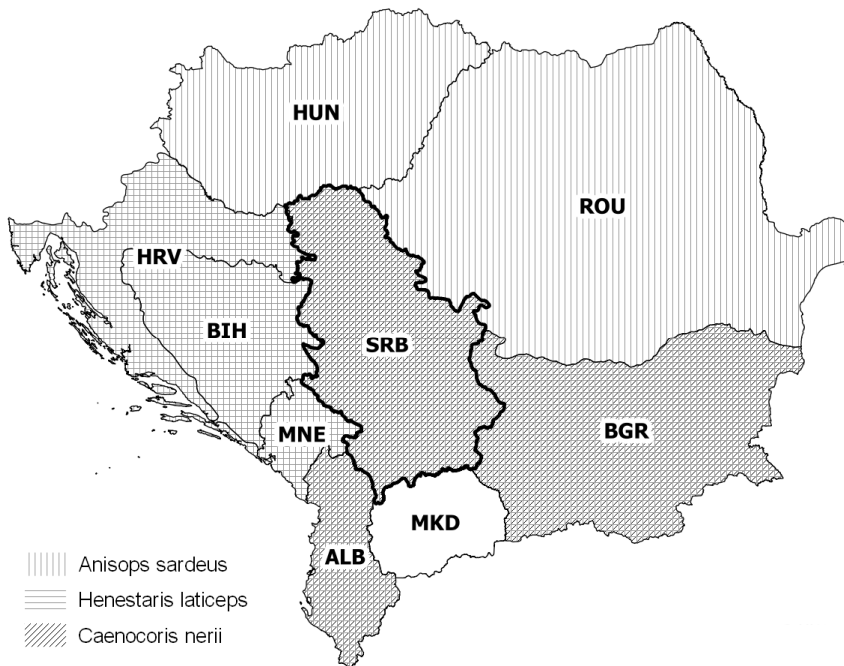


Figure 4. Distribution of the new species in neighboring countries

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References: Berchi, M.G. (2011). *North-Western Journal of Zoology*, 7(2), 339-341; Berchi, M.G. (2013). *Zootaxa*, 3682(1), 121-132; Boda, P., Várбірó, G. & Deák Cs. (2012). *Acta biologica Debrecina. Supplementum oecologica hungarica*, 28, 17-32; Brooks, G.T. (1951). *The University of Kansas Science Bulletin*, 34(1), 301-519; Csabai, Z., Boda, P., Boda, R., Bódis, E., Danyik, T., Deák, Cs., Farkas, A., Kálmán, Z., Lókkös, A., Málnás, K., Mauchart, P. & Móra, A. (2015). *Acta biologica Debrecina. Supplementum oecologica hungarica*, 33, 9-70; Gligorović, B., Savić, A., Protić, Lj. & Pešić, V. (2016). *Oceanological and Hydrobiological Studies*, 45(4), 554-563; Jerinić-Prodanović, D. & Protić, Lj. (2011). *Acta entomologica serbica*, 16(1/2), 143-146; Josifov, M. (1986). *Faunistische Abhandlungen Staatliches Museum für Tierkunde in Dresden*, 14 (6), 61-93; Josifov, M. (1999). *Historia naturalis bulgarica*, 10, 35-66; Kment, P. & Beran, L. (2011). *Natura Croatica*, 20(1), 159-178; Petri, A., Nagy-László, Zs. & P. Holló, I. (2012). *Acta biologica Debrecina. Supplementum oecologica hungarica*, 28, 167-171; Protić, Lj. (1998). *Catalogue of the Heteroptera fauna of Yugoslav countries*. Part one, Spec. Iss., 38, 18; Protić, Lj. (2001). *Catalogue of the Heteroptera fauna of Yugoslav countries*. Part two, Spec. Iss., 39, 41; Protić, Lj. (2009). *Acta entomologica serbica*, 14(2), 237-239; Protić, Lj. (2010). *Zaštita prirode* 61(1), 93-104; Protić, Lj. (2011). *Bulletin of the Natural History Museum*, 4, 119-125; Protić, Lj. & Šeat, J. (2016). *Acta entomologica serbica*, 21, 13-19; Protić, Lj. & Živić, N. (2012). *Acta entomologica serbica*, 17(1/2), 23-28; Rabitsch, W. (2008). *Advances in Heteroptera research*, 309-326; Simov, N. (2011). *Heteropterus Revista de Entomología*, 11(2), 351-358; Soós, N., Petri, A., Nagy-László, Zs. & Csabai, Z. (2010). *Folia Entomologica Hungarica*, 71, 15-18; Stoianova, N. & Simov, D. (2016). *Acta zoologica bulgarica*, 68(4), 497-502; Šeat, J. (2015). *Acta entomologica serbica*, 20, 167-171.

НОВИ ФАУНИСТИЧКИ ПОДАЦИ О СТЕНИЦАМА (НЕТЕРОПТЕРА) У СРБИЈИ

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Извод

Последњих десетак година забележен је велики број нових врста у фауни стеница Србије. Највећи број новопридошлица су алохтоне инвазивне врсте, али и медитеранске врсте пореклом из приморских делова Балканског полуострва. Нове врсте стеница у националној фауни су такође врсте топлијих крајева, већ бележене у региону: *Anisops sardeus* Herrich-Schäffer, 1849, *Henestaris laticeps* (Curtis, 1836) и *Caenocoris nerii* (Germar, 1847).

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