



## ***Lethocerus patruelis* (Stål, 1855) in Italy: a recent introduction or a natural westward spread? (Hemiptera: Heteroptera: Nepomorpha: Belostomatidae)**

FABIO CIANFERONI<sup>1</sup> & GIANLUCA NARDI<sup>2</sup>

<sup>1</sup>*Museo di Storia Naturale dell'Università degli Studi di Firenze, Sezione di Zoologia "La Specola", Via Romana 17, I-50125 Florence, Italy. E-mail: fabio.cianferoni@unifi.it*

<sup>2</sup>*MiPAAF, Corpo Forestale dello Stato, Centro Nazionale per lo Studio e la Conservazione della Biodiversità Forestale "Bosco Fontana" di Verona, Strada Mantova 29, I-46045 Marmirolo (Mantua), Italy*

### **Abstract**

The paper provides new records and a critical review of the previous citations of *Lethocerus patruelis* (Stål, 1855) from Italy. The status of the species in Italy, and whether its presence can be related to a recent introduction or to a natural westward spread, is discussed, but further observations are needed to assess its effective status in the country.

The dates of description for this species and of *L. niloticus* (Stål, 1855) are corrected, since they have up to the present time been incorrectly stated as 1854.

**Key words:** Heteroptera, Nepomorpha, Belostomatidae, *Lethocerus patruelis*, Italy, distribution, alien

### **Introduction**

*Lethocerus patruelis* (Stål, 1855) is a large aquatic bug (Fig. 1) belonging to the family Belostomatidae that has been only recently recorded from Italy (Bacchi & Rizzotti Vlach 2005).

Its chorotype is Indo-Mediterranean, with exclusion of North Africa and the W-Mediterranean (cf. Vigna Taglianti *et al.* 1999). It is the only species of this family living in Europe, where it is recorded from the Balkans (Albania, Bulgaria, Croatia, Greece, Macedonia, Montenegro, Romania, Serbia, Turkey), Hungary (doubtful) (Polhemus 1995; Protić 1998; Perez Goodwyn 2006; Fent *et al.* 2011) and Italy (Bacchi & Rizzotti Vlach 2005).

Most of the Italian literature records of this species are scattered and taxonomically confused, so the aim of this paper is to provide new records and a critical review of the previous ones. Italian records of the species are available from different sources (journals, proceedings, posters, popular naturalistic papers, websites) and the bug is sometimes misidentified with other species, in particular *Lethocerus niloticus* (Stål, 1855) = *L. cordofanus* Mayr, 1853, and *L. indicus* (Lepeletier & Serville, 1825).

### **Material and methods**

In this paper, all the available data are critically revised and listed together with new records. For each record, the following information, when available, is provided: region, province, commune, locality, biotope, metres a.s.l., date, collector or observer, number of specimen/s (ex), sex (♀/♂), additional information on the finding, collection, possible published data source (bibliographic reference or website, in parenthesis); the symbol "(!)" refers to a new record. Unpublished works according to ICZN (2012) are also listed in the references, but their effective status is reported in square brackets. Localities are listed in alphabetical order. The examined material was identified according to Perez Goodwyn (2006).