

## The genus *Tuponia* Reuter, 1875 in Belgium (Hemiptera: Miridae)

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### Abstract

Until present, only *Tuponia* (*Chlorotuponia*) *hippohaes* (Fieber, 1861) had been reported in Belgium. Here, *Tuponia* (*Chlorotuponia*) *brevirostris* Reuter, 1883 and *Tuponia* (*Tuponia*) *mixticolor* (A. Costa, 1862) are added to the Belgian fauna. All records are listed and characteristics to separate all three species are illustrated.

**Keywords:** Heteroptera, *Tuponia* (*Chlorotuponia*) *brevirostris*, *Tuponia* (*Chlorotuponia*) *hippohaes*, *Tuponia* (*Tuponia*) *mixticolor*

### Samenvatting

Tot nu toe werd alleen *Tuponia* (*Chlorotuponia*) *hippohaes* (Fieber, 1861) in België waargenomen. Hier worden *Tuponia* (*Chlorotuponia*) *brevirostris* Reuter, 1883 en *Tuponia* (*Tuponia*) *mixticolor* (A. Costa, 1862) toegevoegd aan de Belgische fauna. Alle waarnemingen worden opgelijst en kenmerken om de drie soorten te herkennen worden geïllustreerd.

### Résumé

Jusqu'à présent, *Tuponia* (*Chlorotuponia*) *hippohaes* (Fieber, 1861) était la seule espèce connue de Belgique. Ici, *Tuponia* (*Chlorotuponia*) *brevirostris* Reuter, 1883 et *Tuponia* (*Tuponia*) *mixticolor* (A. Costa, 1862) sont ajoutées à la faune belge. Toutes les observations sont listées et les caractéristiques des trois espèces sont illustrées.

### Introduction

Miridae are the largest family of Heteroptera in Belgium. In the distribution atlas of Belgium, already 231 species were mentioned, but another 88 species might be expected, which have been observed in neighbouring areas such as the Netherlands, the German federal states Nordrhein-Westfalen and Rheinland-Pfaltz, Northern France and the Grand Duchy of Luxembourg (AUKEMA *et al.*, 2014). Here, two of those expected species are added to the Belgian fauna: *Tuponia* (*Chlorotuponia*) *brevirostris* Reuter, 1883 and *Tuponia* (*Tuponia*) *mixticolor* (A. Costa, 1862).

### Material and methods

Bugs were sampled by sweeping the vegetation. Miridae were identified using WAGNER & WEBER (1964) in combination with WACHMANN *et al.* (2004, 2012). The collected specimens of *Tuponia* (Reuter, 1875) were deposited to the entomological collection of the Royal Belgian Institute of Natural Sciences (RBINS, I.G.: 33.649).



Fig. 1. Habitus of *Tuponia (Chlorotuponia) hippophaes* (Fieber, 1861) (photograph by Koen Lock).



Fig. 2. Ventral view of the head of *Tuponia (Chlorotuponia) hippophaes* (Fieber, 1861) (photograph by Koen Lock).



Fig. 3. Ventral view of the head of *Tuponia (Chlorotuponia) brevirostris* Reuter, 1883 (photograph by Koen Lock).



Fig. 4. Habitus of *Tuponia (Tuponia) mixticolor* (A. Costa, 1862) (photograph by Koen Lock).

## Results

### *Tuponia (Chlorotuponia) hippophaes* (Fieber, 1861)

This bug is green, just like the other species of the subgenus *Chlorotuponia* (Fig. 1). The species differs from *T. brevirostris* by its long rostrum, which reaches at least the median coxae (Fig. 2).

MATERIAL EXAMINED. Oostende, Fort Napoleon, UTM: 31UDS9576, several hundreds of animals were observed on 1.VIII.2017; De Panne, Westhoek, UTM: 31UDS6960, several hundreds of animals were observed on 12.IX.2017; Gentbrugge, Arbedpark, UTM: 31UES5255, only a few dozen of animals were observed on 12.X.2017, since only a couple of *Tamarix* spp. plants were present.

DATA FROM LITERATURE. De Panne, Westhoek, UTM: 31UDS6960, about 1000 animals were found on 24.VIII.2003 and 20 females on 25.IX.2003 (BAUGNÉE & CHÉROT, 2004); Tournai, Carrière de l'Orient, UTM: 31UES2905, more than hundred adults and larvae were found on 15.VIII.2004 (BAUGNÉE, 2004).

### *Tuponia (Chlorotuponia) brevirostris* Reuter, 1883 (new to Belgium)

Just like *T. hippophaes*, this species is green, however, the rostrum hardly surpasses the first coxae (Fig. 3).

MATERIAL EXAMINED. Bredene, UTM: 31UDS97B, 22.X.2007, two specimens collected by Bruers J.M. and wrongly identified as *T. hippophaes* by Viskens G.M.; Oostende, Fort Napoleon, UTM: 31UDS9576, much less common than *T. hippophaes* at this location: only about a dozen were observed on 1.VIII.2017; De Panne, Westhoek, UTM: 31UDS6960, much less common than *T. hippophaes* at this location: only a few dozen were observed on 12.IX.2017.

### ***Tuponia (Tuponia) mixticolor* (A. Costa, 1862) (new to Belgium)**

Unlike the subgenus *Chlorotuponia*, this species is not monochromatic green, but the hemelytra are whitish with a longitudinal red-brown band on clavus and corium and a transversal red-brown band apically in the corium (Fig. 4).

MATERIAL EXAMINED. Oostende, Fort Napoleon, UTM: 31UDS9576, much less common than *T. hippophaes* at this location: only a few dozen were observed on 1.VIII.2017.

### **Discussion**

All species of the genus *Tuponia* Reuter, 1875 live on Tamarisk (*Tamarix* spp., Tamaricaceae). Numerous cultivars and hybrids of the genus *Tamarix* are cultured in parks and gardens, some of which escaped to the wild and are now naturalised. Both *Tuponia (Chlorotuponia) brevirostris* Reuter, 1883 and *Tuponia (Tuponia) mixticolor* (A. Costa, 1862) were already observed in the German federal state Rheinland-Pfalz bordering Belgium and could therefore be expected to occur in Belgium (WACHMANN *et al.*, 2012). In the Netherlands and the Grand Duchy of Luxembourg, no species of the genus *Tuponia* have been observed yet, but as Tamarisk is also used there as an ornamental plant, a dedicated inventory will probably indicate that at least *T. hippophaes* also lives in these countries.

### **References**

- AUKEMA B., CHÉROT F., VISKENS G. & BRUERS J., 2014. - Verspreidingsatlas van de Belgische Miridae (Insecta: Heteroptera). *Fauna van België*, 2014: 1–311.
- BAUGNÉE J.-Y., 2004. - Hétéroptères nouveaux ou intéressants pour la faune belge (Hemiptera Heteroptera). *Bulletin S.R.B.E./K.B.V.E.*, 140: 201–122.
- BAUGNÉE J.-Y. & CHÉROT F., 2004. - L'hétéroptère Miridae *Tuponia hippophaes* (Fieber, 1861) nouveau pour la faune de Belgique: une espèce en expansion ? *Bulletin S.R.B.E./K.B.V.E.*, 140: 27–30.
- WACHMANN E., MELBER A. & DECKERT J., 2004. - Wanzen 2. *Die Tierwelt Deutschlands*, 75: 1–288.
- WACHMANN E., MELBER A. & DECKERT J., 2012. - Wanzen 5. *Die Tierwelt Deutschlands*, 82: 1–256.
- WAGNER E. & WEBER H.H., 1964. - Hétéroptères Miridae. *Faune de France*, 67: 1–589.