

***Orthotylus (Melanotrichus) rubidus* (Puton, 1874) new to Belgium (Hemiptera: Miridae)**

Koen LOCK

Merelstraat 27, B-9000 Gent (e-mail: Koen_Lock@hotmail.com)

Abstract

On 12.IX.2017, *Orthotylus (Melanotrichus) rubidus* (Puton, 1874) was observed for the first time in Belgium. The species was very abundant on *Salicornia* sp. in and around the nature reserve 'Baai van Heist' in Knokke-Heist.

Keywords: Baai van Heist, Heteroptera, *Orthotylus (Melanotrichus) rubidus*

Samenvatting

Op 12.IX.2017 werd *Orthotylus (Melanotrichus) rubidus* (Puton, 1874) voor het eerst in België waargenomen. De soort was zeer algemeen op *Salicornia* sp. in en rond het natuurreservaat 'Baai van Heist' in Knokke-Heist.

Résumé

Le 12.IX.2017, *Orthotylus (Melanotrichus) rubidus* (Puton, 1874) a été observé pour la première fois en Belgique. L'espèce était très abondante sur *Salicornia* sp. dans et autour de la réserve naturelle 'Baai van Heist' à Knokke-Heist.

Introduction

Miridae, also called capsid bugs or plant bugs, are the largest family of Heteroptera in Belgium. The recently published distribution atlas for Belgium, where already 231 species were mentioned for the country, seems to indicate that this family is well investigated in Belgium (AUKEMA *et al.*, 2014). However, at least another 88 species might be expected based on their occurrence in neighbouring areas such as the Netherlands, the German federal states Nordrhein-Westfalen and Rheinland-Pfalz, Northern France and the Grand Duchy of Luxembourg (AUKEMA *et al.*, 2014). Here, *Orthotylus (Melanotrichus) rubidus* (Puton, 1874) is added to the Belgian fauna.

Material and methods

Bugs were sampled by sweeping the vegetation and later were identified using WAGNER & WEBER (1964) in combination with WACHMANN *et al.* (2004). Several specimens of *Orthotylus (Melanotrichus) rubidus* (Puton, 1874) were deposited to the entomological collection of the Royal Belgian Institute of Natural Sciences (RBINS, I.G.: 33.649).

Results

On 12.IX.2017, *Orthotylus (Melanotrichus) rubidus* (Puton, 1874) was found in great numbers on *Salicornia* sp. (Amaranthaceae) in and around the nature reserve 'Baai van Heist' in Knokke-Heist (Province of West Flanders, UTM: 31UES1688). The reserve has been recognised since 2000 and consists of 50 hectares of beach, dunes and mud flats. It is property of the Flemish government and managed by the Agency for Nature and Forests.



Fig. 1. *Orthotylus (Melanotrichus) rubidus* (Puton, 1874) on *Salicornia* sp. (photograph by Koen Lock).



Fig. 2. Right paramere of *Orthotylus (Melanotrichus) rubidus* (Puton, 1874) (photograph by Koen Lock).



Fig. 3. Left paramere of *Orthotylus (Melanotrichus) rubidus* (Puton, 1874) (photograph by Koen Lock).

Orthotylus rubidus is a small (2.7-3.5mm) reddish bug covered by black erect hairs (Fig. 1). The males can also be recognised based on the shape of the parameres (Figs 2-3). It was found on the parts of the plants that emerged above the water surface, which are often submerged during spring tide. The greenish *Orthotylus (Melanotrichus) moncreaffi* (Douglas & Scott, 1874), which was previously only observed in the Zwin nature reserve (AUKEMA *et al.*, 2014), was also found in the reserve 'Baai van Heist', however, it occurred on slightly higher grounds and not only on *Salicornia* sp., but also on sea purslane (*Atriplex portulacoides* L. (Amaranthaceae)).

Discussion

Orthotylus rubidus was expected in Belgium, because it was already found in the Netherlands, where it occurs around the Wadden Sea and in the Rhine-Meuse-Scheldt Delta region (AUKEMA & HERMES, 2014), and also in northern France (EHANNO, 1987). The species overwinters in the egg stage, has two generations per year and adults can be found from May till September.

Acknowledgements

I would like to thank Ward Vercruyse, Wouter Van Gompel and Wouter Van Landuyt from the Research Institute Nature and Forest for letting me tag along in the nature reserve 'Baai van Heist' in Knokke.

References

- AUKEMA B. & HERMES D.J., 2014. - Verspreidingsatlas Nederlandse wantsen (Hemiptera: Heteroptera). Deel III: Cimicomorpha II (Miridae). EIS Kenniscentrum Insecten en andere ongewervelden, Leiden.
- AUKEMA B., CHÉROT F., VISKENS G. & BRUERS J., 2014. - Verspreidingsatlas van de Belgische Miridae (Insecta: Heteroptera). *Fauna van België*, 2014: 1-311.

- EHANNO B., 1987. - Les hétéroptères mirides de France. Tome II-B. Inventaire biogéographique et atlas. *Inventaire de Faune et de Flore*, 42: 649–1075.
- WACHMANN E., MELBER A. & DECKERT J., 2004. - Wanzen 2. *Die Tierwelt Deutschlands*, 75: 1–288.
- WAGNER E. & WEBER H.H., 1964. - Hétéroptères Miridae. *Fauna de France*, 67: 1–589.