

- Biology of Insect-Induced Galls*. Oxford University Press, New York/Oxford : 196-207.
- SKUHRAVÁ M. & SKUHRAVÝ V., 1994. - European gall midges (Diptera: Cecidomyiidae). In : PRICE P.W., MATTSON W.J. & BARANCHIKOV Y.N. (eds.) - *The ecology and evolution of gall-forming insects*. U.S. Department of Agriculture, St. Paul, USA. NC-14 : 93-95.
- TSCHARNTKE T., 1987. - Growth regulation of *Phragmites australis* by the gallmidge *Giraudiella inclusa*. In : LABEYERIE V., FABRES G. & LACHAISE D. (eds.) - *Insects – Plants*. Proceedings of the 6th International Symposium on insect - plant relationships, (Pau 1986). Dr. W. Junk Publishers, Den Haag : 201-205.
- TSCHARNTKE T., 1989. - Attack by a stem-boring moth increases susceptibility of *Phragmites australis* to gall-making by a midge : mechanisms and effects on midge population dynamics. *Oikos*, 55 : 93-100.
- TSCHARNTKE T., 1999. - Insects on common reed (*Phragmites australis*) : community structure and the impact of herbivory on shoot growth. *Aquatic Botany*, 64 : 399-410.

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***Trichoniscoides sarsi* (PATIENCE, 1908) : a new species for the fauna of Belgium (Isopoda Trichoniscidae)**

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Abstract

Trichoniscoides sarsi was observed for the first time in Belgium on the 16th of April 2000. The species was found in loose clay on the side of a ditch in the creek area of Assenede. A second observation was made on the 20th of July 2000 in Nieuwpoort, where the animal was found under a drifted woodblock in the supralittoral of the river Ijzer in the nature reserve 'De Ijzermonding'. In the present paper the species is briefly described and some notes on the distribution and the habitat are given. With this species the number of terrestrial isopods in Belgium has risen to 33.

Keywords : *Trichoniscoides sarsi*, Isopoda, Belgium.

Samenvatting

Trichoniscoides sarsi werd voor het eerst waargenomen in België op 16 april 2000. De soort werd aangetroffen in de rulle klei van een grachtkant in het Asseneedse krekengebied. Een tweede waarneming werd verricht op 20 juli 2000 in Nieuwpoort waar de soort werd aangetroffen onder aangespoeld hout in het vloedmerk van de Ijzer in het natuureservaat 'De Ijzermonding'. In deze bijdrage wordt de soort kort beschreven en de verspreiding en het habitat worden besproken. Met deze soort stijgt het aantal soorten landpissebedden in België tot 33.

Résumé

Trichoniscoides sarsi est rapporté pour la première fois de Belgique le 16 avril 2000. L'espèce a été trouvée dans l'argile meuble à côté d'un ruisseau dans la région des criques d'Assenede. Une seconde observation a eu lieu le 20 juillet 2000 à Nieuwpoort où l'espèce a été trouvée sous une pièce de bois, échouée sur la zone supralittorale de l'Ijzer, dans la réserve naturelle 'De Ijzermonding'. Une brève description et quelques notes sur la distribution et l'habitat sont données. Avec cette espèce, le nombre d'isopodes terrestres pour la Belgique s'élève à 33.

Introduction

During an excursion on the 16th of April 2000 *Trichoniscoides sarsi* was recorded for the first time in Belgium. The species was found in the creek area of Assenede where several animals were found in the loose clay along the border of a ditch (Fig. 1). A second observation was made on the 20th of July 2000 in Nieuwpoort where the animal was found under a drifted woodblock in the supralittoral of the river Ijzer in the nature reserve 'De Ijzermonding' (Fig. 1).

TAVERNIER & WOUTERS (1989) reported 30 species in their checklist of the terrestrial isopods in Belgium. Since then, *Hyloniscus riparius* (KOCH, 1838) and *Miktoniscus patiencei* (VANDEL, 1946) have been added to the fauna of

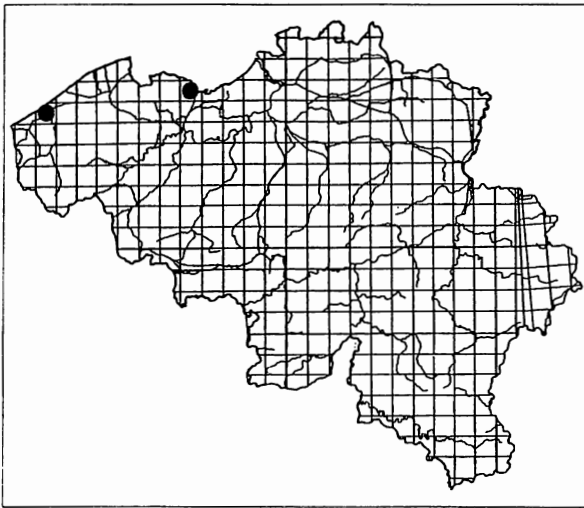


Fig. 1. Distribution of *Trichoniscoides sarsi* (PATIENCE, 1908) in Belgium.

Belgium (LOCK & VANACKER, 1999; LOCK & DURWAELE, 2000). With the discovery of *T. sarsi*, the number of terrestrial isopods of Belgium has risen to 33.

Description

Trichoniscoides sarsi belongs to the family of the Trichoniscidae. It is a small species of up to 4 mm which closely resembles the other species of the genus. The white body is often veined with pink or orange on the pleon and either side of the mid line and the eyes consist of one red ocellus. However, all colour is lost in ethanol. Females cannot be distinguished from *T. helveticus* and *T. saeroeensis*. The merus of the male seventh pereopod has a sternal face with a prominent short recurved spine. The male first pleopod (Fig. 2A) has a broadly triangular exopod with a roundly angled posterior margin and a straight inner margin. Distally it has two long bristle-ended processes of which the outer is twice the length of the inner. The endopod has two articles: the first narrowly triangular and the second styliform tapering to a densely bristled point and joined to the first at a short distance from the tip. The male second pleopod exopod is subquadrate with a single short distal bristled process and the endopod is robust styliform with a heavily chitinised tip with a complex twist and a recurved simple hook.

Distribution, habitat and co-occurring species

The worldwide distribution of *T. sarsi* is res-

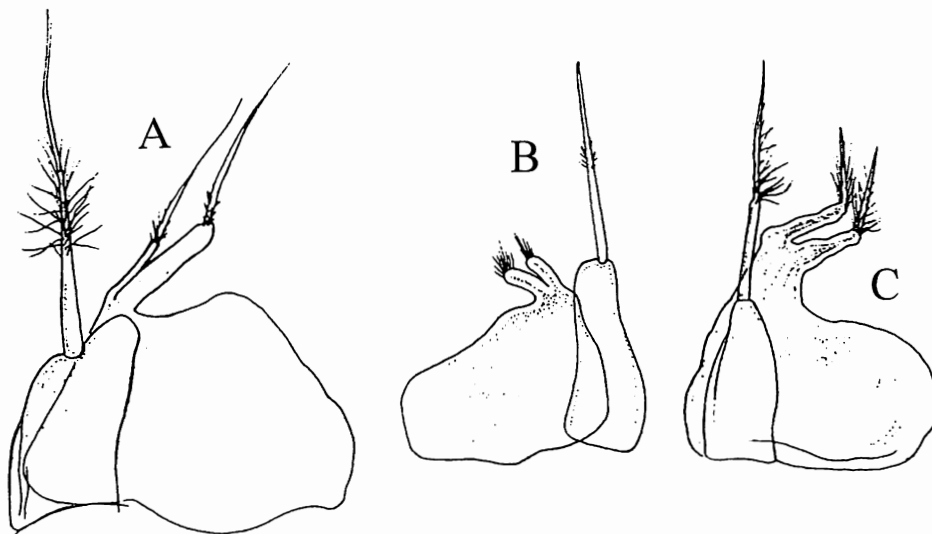


Fig. 2. First pleopod of the male, A : *Trichoniscoides sarsi*, B : *T. saeroeensis*, C : *T. helveticus* (after BERG & WIJNHOFEN, 1997).

stricted to the coastlines of Northwestern Europe (VANDEL, 1962; OLIVER & MEECHAN, 1993). It is soil dwelling species which is often found under deeply embedded stones. Humid, loose clay soils along ditches seem to have the preference.

Co-occurring species in Assenede were *Porcellio scaber* (LATREILLE, 1802), *Trichoniscus pusillus* (BRANDT, 1833), *Philoscia muscorum* (SCOPOLI, 1763) and *Armadillidium vulgare* (LATREILLE, 1802). In Nieuwpoort, *T. sarsi* was accompanied by the same species and in addition, *Miktoniscus patiencei* (VANDEL, 1946) was present. All these species, with the exception of *M. patiencei* which is an intertidal species, are very common in Belgium and they do not have any specific requirements concerning their habitat.

Discussion

As already indicated by LOCK & DURWAEEL (2000), *T. sarsi* was expected to be found in Belgium. In 1993 *T. sarsi* was reported for the first time from the Netherlands and since then the species was frequently found in marine clay (BERG, 1996; BERG, 1997). In the Netherlands, this small, soil-inhabiting species had been overlooked in the past and also in Belgium this species is probably not rare in marine clay. Also the closely related species *T. saeroeensis* (LOHMANN, 1923) might be found in Belgium in the future because it has recently been found in numerous locations along the British coast and the

species is also known from Denmark and France (HARDING & SUTTON, 1985).

References

- BERG M.P., 1996. - Preliminary atlas of the terrestrial Isopoda of the Netherlands. - Report D967007, Free University, Amsterdam.
- BERG M.P., 1997. - Naamlijst van de Nederlandse landpissebedden (Crustacea : Isopoda : Oniscidea). *Nederlandse Faunistische Mededelingen* 7 : 31-34.
- BERG M.P. & WINHOVEN H., 1997. - *Landpissebedden*. Wetenschappelijke Mededeling KNNV 221, Utrecht.
- HARDING P.T. & SUTTON S.L., 1985. - *Woodlice in Britain and Ireland : Distribution land habitat*. Institute of Terrestrial Ecology, Huntingdon.
- LOCK K. & DURWAEEL L., 2000. - *Miktoniscus patiencei* (VANDEL, 1946) : reported for the first time in Belgium (Isopoda Trichoniscidae). *Bull. Annl. Soc. r. belge Ent.* 136 : 21-23.
- LOCK K. & VANACKER S., 1999. - Isopods of the gravelbanks of the Meuse (Isopoda). *Bull. Annl. Soc. r. belge Ent.* 135 : 193-196.
- OLIVER P.G. & MEECHAN C.J., 1993. - *Woodlice*. Synopses of the British Fauna (New Series) 49. Field Studies Council, Shrewsbury.
- TAVERNIER J.M. & WOUTERS K., 1989. - *Check-list of the terrestrial Isopoda (Crustacea) of Belgium*. In : WOUTERS K. & L. BAERT (Ed.), *Verhandelingen van het symposium "Invertebraten van België"*, KBIN, Brussel, 169-172.
- VANDEL, A., 1962. - *Isopodes terrestres (Deuxième partie)*. Faune de France 66. Lechevalier, Paris.