

## An update on the verified reports of imported spiders (Araneae) from Belgium

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### Summary

The article at hand builds on VAN KEER (2007) and adds the new reports of imported spiders for Belgium. Striking is the number of reports of *Latrodectus mactans* (Fabricius, 1775), which has increased considerably since the previous article. Another notable fact is that the mediterranean spider *Holocnemus pluchei* (Scopoli, 1763) has been imported already several times into Belgium via the United States of America!

### Samenvatting

Voorliggend artikel bouwt verder op VAN KEER (2007) en voegt de nieuwe meldingen toe van ingevoerde spinnen in België. Opvallend is het aantal meldingen van *Latrodectus mactans* (Fabricius, 1775), dat aanzienlijk is gestegen sinds het vorige artikel. Een andere vermeldenswaardige vaststelling is dat de mediterrane spin, *Holocnemus pluchei* (Scopoli, 1763), nu al herhaaldelijk in België werd ingevoerd via de Verenigde Staten van Amerika!

### Résumé

L'article ci-dessous part de VAN KEER (2007) et ajoute les nouvelles mentions d'araignées importées en Belgique. Le nombre de mentions de *Latrodectus mactans* (Fabricius, 1775) a augmenté de manière frappante dès l'article précédent. Un autre fait assez digne de mention est que *Holocnemus pluchei* (Scopoli, 1763), araignée méditerranéenne, à été importée en Belgique déjà à plusieurs occasions via les Etats Unis!

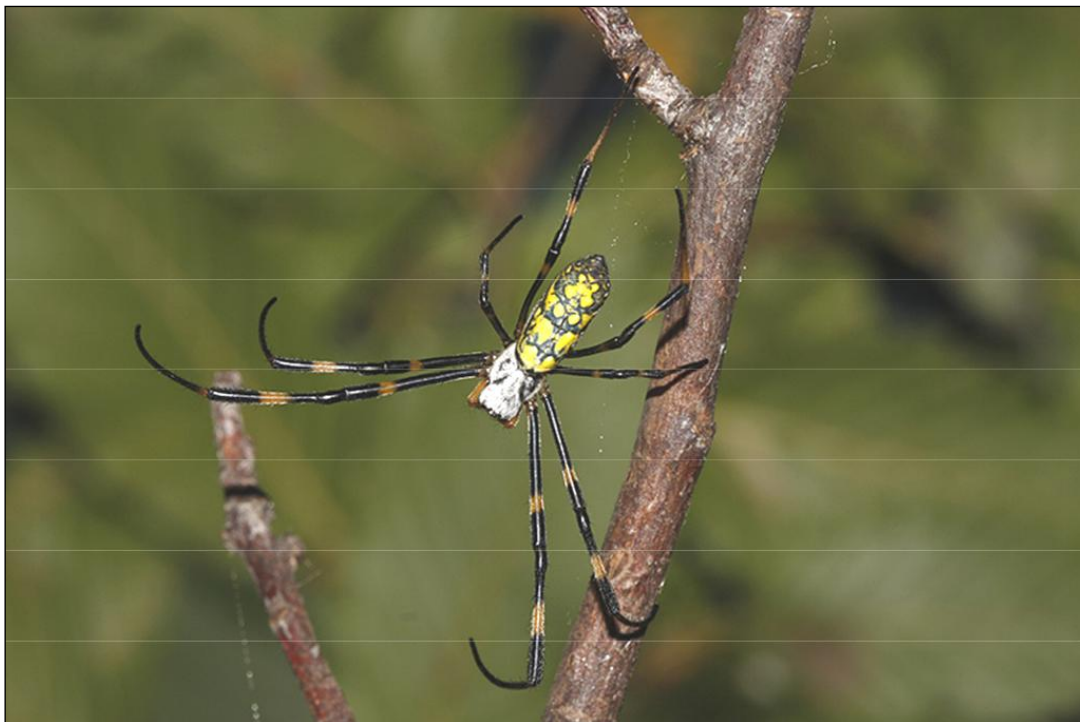


Fig. 1: Possibly *Nephila* sp., specimen, found in a private front garden

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## Introduction

The reporting of imported spiders is still carried out on a random and non structured basis in Belgium. Efforts have been made to convince authorities of the necessity to monitor the import of all organisms - especially in harbour environments- in a structured way, but without success up to now. Already noticeable is the recent increase in captures by non-arachnologists, who then come into contact with the members of the Belgian arachnological society. Only reports verified by these specialists are included.

The gathering of data concerning imported spiders in Belgium has recently been transferred to Dr. Léon Baert of the Royal Belgian Institute for Natural Sciences, which is a first and important step towards the centralization of these data at an official institute.

The article at hand adds the newly reported exotic spiders from Belgium since VAN KEER 2007 and up to november 2010. The same methodology as in VAN KEER 2007 is used.

## Remarks

- \* A female individual of *Selenops radiatus* Latreille, 1819 was already reported in VAN KEER 2007, but the article describing the bite which brought to the attention the find of the spider was published lateron (KEKENBOSCH, 2008). The literature reference is included below.
- \* The list includes another three older finds (2001), because they were mentioned in an article post-dating VAN KEER 2007 (28, KEKENBOSCH, 2008).
- \* On the 10th of October 2010, a female specimen was found of what seems to be a *Nephila* sp. or a specimen of a closely related genus (see fig. 1). The specimen was sent to Matjaz Kuntner, a Slovenian *Nephila* specialist, but the identity of the spider was not yet known at the time of submission of this article.



Fig. 2: *Zoropsis spinimana*, adult male found in a Ghent city garden

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## Discussion

The recent records confirm some of the tendencies of the past. One of these is the abundance of *Holocnemus pluchei* which remains one of the most successful imported spiders and can be regarded as established. *Uloborus plumipes* Lucas, 1846, might be considered as equally successful although in Belgium, the habitat of the latter species remains restricted to greenhouses and garden centers. *Holocnemus* on the contrary was found on several occasions outside of buildings and was even reported to have overwintered in open air in empty truck tires (VAN KEER, 2007). The pholcid is probably also the most imported exotic spider in our country. Surprisingly, *Holocnemus pluchei* has now on several occasions been shown to have been introduced with goods from the United States to where it was introduced –at least since the 1970's– from the Mediterranean, its apparent native region (VAN KEER & VAN KEER, 2001). The fact that this southern European spider now reaches western Europe via North America is very interesting and could be useful to identify species introduction pathways.

The increased numbers of finds of *Latrodectus mactans* (Fabricius, 1775) are connected to oldtimer car imports from the USA. The heightened focus on these transports is undoubtedly an important reason for the rise in reports, but it is equally certain that the reports represent but a fraction of the actual import of this species. Statements from people working in this branch of the automobile sector have convinced us of this.

The survival chances of the organisms travelling with "biological" shipments (where goods are not treated with biocides) are often higher than in other types of shipments. It's notable that the two imported south American bird spiders, as well as two of the three newly reported individuals of *Heteropoda venatoria* (Linnaeus, 1767), were found in this type of shipment. During a long period (probably since the late 1980's) it seems that bird spiders have scarcely been found in Belgian harbours (according to harbour workers). The recent finds are possible indications that this could be changing with the increasing import of these "untreated" loads.

## Invasive species

Although it is difficult to predict what species have an actual potential for "invasiveness" at a moment where this process is not yet manifesting itself in a clear way, we could attempt a cautious prediction based on two important elements:

- is the species reproducing outside protective environments like heated houses and greenhouses
- does it display "disruptive" behaviour towards indigenous fauna or flora

Based on these two elements, we think it not imaginary that both *Holocnemus pluchei* and *Zoropsis spinimana* (Dufour, 1820) could become "invasive species" in Belgium. IJLAND (2010), mentions the probability of a settlement of *Z. spinimana* in The Netherlands, after it was introduced in other European countries such as Austria, Switzerland and Germany and even in the USA (GRISWOLD & UBICK, 2001). It is probably not entirely coincidental, that in the same recent issue of *SPINED*, VAN HELSDINGEN (2010) reports on the expanding distribution of *Holocnemus pluchei* in The Netherlands.

## Acknowledgements

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Fig. 3: *Steatoda nobilis*, ad. female, imported with garden statues from China

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**Appendix:** species list (PC = Personal communication; nc = not collected; cRBINS = coll. Royal Belgian Institute for Natural Sciences; Desclean = harbour extinction firm; cRB = coll. Robert Bosmans; cHDK = coll. Herman De Koninck; cBG = coll. Bryan Goethals; cMJ = coll. Marc Janssen; cJVK = coll. Johan Van Keer; cHV = coll. Herman Vanuytven).  
\* = probable (or certain) 1st generation importation; ≠ = several individuals, number not specified

Species name	m	f	j	Date	Place	Circumstances	Leg.	Det.	Ref.
<i>Cryptachaea acreensis</i>		3		02-09-2010	Gent	Heated greenhouse Ghent University ("Victoriakas")	K. Van Keer	J. Van Keer	cJVK
<i>Grammostola cala</i> *		1		15-05-2008	Antwerpen	In container from unknown destination [Chiil?] in Antwerp harbour	— (dock labourer)	B. Goethals	cBG
<i>Hasariius adansonii</i>		1		15-01-2001	Drogenbos	Garden center	R. Kekenbosch	R. Kekenbosch	28
"	5	1		oct-nov 2007	Antwerpen	In greenhouse botanic garden	H. Vanuytven	H. Vanuytven	cHV
"	1			20-11-2008	Gent	Ghent University, botanical garden, greenhouse "Victoriakas"	J. Mortelmans	K. Lamberts	PC
<i>Heteropoda venatoria</i> *		1		10-10-2007	Gent	In container	Y. Henckaerts	M. Janssen	cMJ
"	1			02-07-2008	Puurs	In "biological" banana shipment from the Dominican Republic (Cie: Spiers (Chiquita))	— (worker)	J. Van Keer	cJVK
"	1			03-11-2008	Puurs	In "biological" banana shipment from the Dominican Republic (Cie: Spiers (Chiquita))	— (worker)	J. Van Keer	cJVK
<i>Holocnemus pluchei</i>		-		19-05-2008	Antwerpen	Against buildings in shopping street (Meir) near Central Station	K. Van Keer	K. Van Keer	nc
"	2			29-05-2008	Nieuwenrode	Against private house	J. Robijn	J. Van Keer	cJVK
"	10			01-07-2008	Brussel	In urban green area "Moeraske" (between Neder-over-Heembeek and Evere)	B. Hanssens	K. Van Keer	PC
"	1			02-09-2008	Antwerpen	In commercial garage (Plessens), imported with old car (Porsche) from California (USA)	K. Van Keer	K. Van Keer	nc
"	2			20-04-2009	Brecht	In old Volkswagen cars, imported from California (USA)	K. Van Keer	K. Van Keer	nc
"	-			27-06-2010	Edegem	Garden center ("Claes")	K. Van Keer	K. Van Keer	nc
"	-			11-09-2010	Schoten	Garden center ("Rodenburg")	K. Van Keer	K. Van Keer	nc
<i>Latrodectus mactans</i> *		1		02-09-2008	Antwerpen	In commercial garage (Plessens), imported with old car (Porsche) from California (USA)	K. Van Keer	J. Van Keer	cJVK
"	2			01-02-2009	Brecht	On old Volkswagen cars, imported from California (USA)	A. Van Dijk	K. Van Keer	nc
"	9			20-04-2009	Brecht	On 2 old Volkswagen cars, imported from California (USA)	K. Van Keer	J. Van Keer	cJVK
"	2			21-08-2009	Brecht	On an old Volkswagen van, imported from California (USA)	K. Van Keer	J. Van Keer	cJVK
"	1			17-09-2009	Antwerpen	In container -at harbour company Desclean Belgium- from the USA	E. Williams (Desclean)	K. Van Keer	Desclean
"	-			23-03-2010	Antwerpen	In container -at harbour company Desclean Belgium- from the USA	E. Williams (Desclean)	K. Van Keer	Desclean
<i>Latrodectus sp. cf. mactans</i> *		1		19-08-2010	Antwerpen	On American army trucks -at Antwerp harbour- in shipment from the USA	P. Boodts (Desclean)	J. Van Keer	cJVK
<i>Macaroeis nidicolens</i>		1		06-06-2007	Antwerpen	In private garden (with web)	K. Van Keer	J. Van Keer	cJVK
"	-			2007-2009	Brussel	Private park of financial bank (ING)	R. Louvigny	L. Baet (1 ind.)	cRBINS
"	1			16-06-2009	Merebeke	In private garden (semi-rural area)	K. Verplaetse	K. Van Keer	nc
<i>Macrothele calpeiana</i> *		1		30-06-2008	Esen (Diksmuide)	Found alive on driveway next to fruit store (in village center)	—	J. Van Keer	cJVK
[Possibly] <i>Nephila sp.</i> *		1		10-10-2010	Nijlen	In private front garden	W. Heylen	to be det. by M. Kunther	cJVK
<i>Oecobius sp.</i>		1		26-07-2007	Duffel	Showers in aluminium works factory (Aleris Aluminium Duffel)	J. Van Keer	J. Van Keer	26
<i>Phidippus sp. cf. regius</i> *		1		19-10-2009	Zeebrugge	In container -at harbour company- from the USA	B. Remeker	J. Van Keer	cJVK
<i>Phormictopus cancerides</i> *		1		13-05-2008	Antwerpen	In "biological" cacao-shipment from the Dominican Republic	— (via SGS)	B. Goethals	cBG
<i>Saitis barbipes</i>		1		08-09-2009	Oudergem	In Jardin Botanique Jean Massart (ULB)	S. Van Onsem	K. Lamberts	PC
<i>Steatoda nobilis</i> *		1		21-11-2009	Rijkvorsel	In garden centre (found in closed box with little statues, coming from China)	O. Van Es	J. Van Keer	cJVK
<i>Thanatus vulgaris</i> *		1		Jan. 1999	Ganshoren	In box with crickets (food for reptiles in captivity) from animal shop (origin unknown)	—	R. Kekenbosch	28
<i>Uloborus plumipes</i>		-		15-01-2001	Drogenbos	Garden center	R. Kekenbosch	R. Kekenbosch	28
"	-			27-06-2010	Edegem	Garden center ("Claes")	K. Van Keer	K. Van Keer	nc
<i>Zoropsis spinimana</i>		-		2005-2010	Gent	Inside private house + private garden	R. Bosmans	R. Bosmans	27 + nc
"	1			23-04-2007	Gent	Student apartment	B. Lutin-Smet	R. Bosmans	27
"	1			03-09-2008	Merebeke	In garden shed	J. Danneel	R. Bosmans	cRB
"	1			28-11-2010	Lembeek	With tent from vacation in Portugal (Algarve)	F. Van der Perre	H. De Koninck	cHDK

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