



Spider fauna (Araneae) of the Sieraków Landscape Park (Central Poland) – preliminary data

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Abstract: The paper presents preliminary data on araneofauna of the selected habitats in the Sieraków Landscape Park, where spiders have not yet been studied. The fauna was sampled by sweep net and pitfall trap methods in crop fields, forest and in the ecotone zones: forest/crop field and forest/lake. It was found 44 spider species and four genera represented by young specimens, i.e. *Metellina* sp., *Neriene* sp., *Haplodrassus* sp. and *Xysticus* sp. The largest number of taxa (24) was found in the forest/lake ecotone, and the smallest one (10) in the crop field, 200 m distant from the forest. The recorded spiders belong to the common species, but they were characteristic for their biotopes.

Key words: araneofauna, crop fields, ecotone, forest, lake, habitat disturbances

INTRODUCTION

The spiders of the protected areas in the Greater Poland (Wielkopolska) are poorly investigated. There are two national parks within Wielkopolskie Voivodeship: the Wielkopolski National Park (NP) and a part of the Drawieński NP. In addition to those, there are 12 landscape parks (LP). There are some studies concerning spider fauna of the Wielkopolski National Park (Dziabaszewska 1961, Dziabaszewski 1961, 1976). Araneofauna was studied in three of the region's landscape parks: the Lednicki LP (Rozwałka et al. 2014), the Rogaliński LP (which was then a part of the Wielkopolski National Park) (Dziabaszewski 1973, 1975, 1992, Szymkowiak 1992) and the Dezydery Chłapowski LP. In the last one, research focused mainly on the spider fauna of arable fields and the wooded strips situated among them, i.e. habitats characteristic for the Park (Kajak & Oleszczuk 2004, Kajak 2007, Oleszczuk 2010, 2014, Oleszczuk et al. 2010, Oleszczuk & Karg 2012). There is a lack of data about the araneofauna of the Sieraków Landscape Park (SLP). The exception is the record of *Psilochorus simoni* (Berland, 1911) found on the wall of a building in the Chalin village (Rozwałka et al. 2013).

The Sieraków Landscape Park (SLP) was set up in 1991 and is situated in Międzychód County in the western part of Wielkopolska Voivodeship. It covers an area of 30,143 ha on the boundary of the Gorzów Basin and the Poznań Lake District. The Park protects a varied post-glacial landscape with innumerable moraine hills, river valleys and dunes. The latitudinal flowing Warta River splits into the northern part typified by landscape with dunes of the Noteć Forest and the southern moraine part with hillocks and lakes. More than 33% of the park area is covered with forest. A vast pine monoculture grows on the dunes in the northern part, while beech and mixed forests prevail in the south (Łęcki 1996). The main component of the bigger, southern part are cultivated fields, with forests and lakes situated among them.

Some groups of the invertebrate fauna of SLP were studied previously. There are papers on Coleoptera (Przewoźny 2011), Hymenoptera (Karg et al. 2011, Wendzonka 2011), Acari

(Błoszyk et al. 2002) as well as Chilopoda (Leśniewska 2002), Lepidoptera (Śliwa & Lewandowski 2013), and Trichoptera (Adamek & Czachorowski 2004).

The aim of the study is the preliminary evaluation of spider fauna of SLP, taking into account the mosaic of its characteristic habitats.

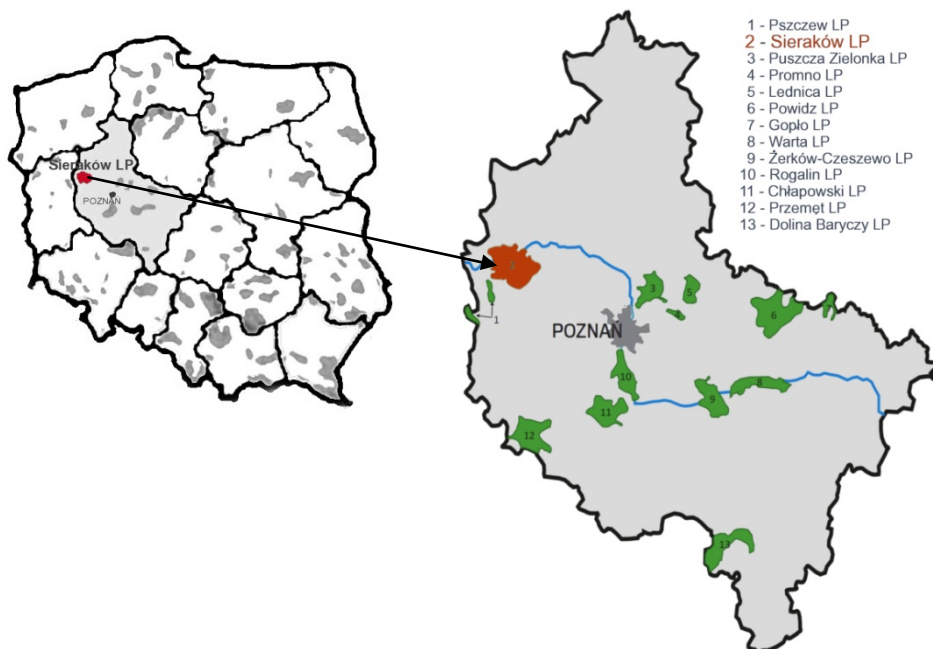


Fig. 1. Landscape Parks of the Greater Poland Voivodeship.

MATERIAL AND METHODS

The studies were conducted in the southern part of the Park (WU72) (Fig. 1). The terrain of the SLP is a mosaic of crop fields, forests and lakes, but the crop fields are the majority of the Park area. In the diversified and mosaic landscape, the most distinctive habitats were selected, i.e. crop fields, forest and the ecotone zone between the two, as well as edge zone of a lake. The spiders were collected across the transect: forest, forest-field ecotone, i.e.: cereal field 10 m away from forest and cereal field 200 m away from forest; additionally, forest-lake ecotone was studied. The following sites were investigated:

- Lake edge (LE) – the belt of herbaceous layer with reed rush between lake and forest with *Alnus glutinosa* Gaertn (52°36'7.49" N, 16°2'47.83" E);
- Deciduous forest (F) with *Ulmus laevis* Pall, *Acer platanoides* L. and *Fraxinus excelsior* L. (52°36'15.28" N, 16°2'19.06" E);
- Forest edge (FE) – about two meters wide belt of herbaceous layer between deciduous forest and cultivated field (52°36'13.14" N, 16°2'17.07" E);
- Crop field 10 (CF10) – the field with oat crop, ten meters from the forest (52°36'12.86" N, 16°2'16.01" E);
- Crop field 200 (CF200) – the field with wheat crop, 200 meters from the forest (52°36'11.39" N, 16°2'6" E).

The samples were taken with the use of sweep net and pitfall traps between 9th and 17th July 2014. On each site two traps with 50 ml of ethylene glycol were placed in the distance of two meters apart. Plant-dwelling spiders were collected by 6 x 10 hits of sweep net per study site.

Spiders were identified to species level; juvenile specimens – mostly to genus or family level. Identification of spider species was based on guidelines in Nentwig et al. (2016) and the habitat preferences on Nentwig et al. (2016) and Buchar & Růžička (2002). The used nomenclature follows the World Spider Catalog (2016). As there is a lack of any data on spiders of the studied area, not only species, but all recorded spider taxa were included in the presented material. The collected spider specimens are deposited in the Institute for Agricultural and Forest Environment (IAFE) of Polish Academy of Sciences in Poznań, Research Station in Turew.

RESULTS

Altogether, 235 spider individuals representing 44 species were collected (51 taxa). The following list presents the recorded spider taxa (Table 1).

Table 1. Spiders collected in the studied habitats; LE – lake edge, F – forest, FE – forest edge, CF10 – cereal field 10 m distant from the forest, CF200 – cereal field 200 m distant from the forest.

No.	Taxon	LE	F	FE	CF10	CF200
Araneidae						
1.	<i>Aculepeira ceropegia</i> (Walckenaer, 1802)			+		+
2.	<i>Araneus diadematus</i> Clerck, 1757	+	+		+	
3.	<i>Argiope bruennichi</i> (Scopoli, 1772)					+
4.	<i>Mangora acalypha</i> (Walckenaer, 1802)			+		
5.	<i>Nuctenea umbratica</i> (Clerck, 1757)		+			
-	Araneidae juv.			+	+	
Clubionidae						
6.	<i>Clubiona lutescens</i> Westring, 1851	+			+	
7.	<i>Clubiona neglecta</i> O. Pickard-Cambridge, 1862				+	
-	<i>Clubiona</i> sp. Latreille, 1804	+			+	+
Dictynidae						
8.	Dictynidae juv.				+	
Gnaphosidae						
9.	<i>Haplodrassus</i> sp. Chamberlin, 1922	+	+			
Linyphiidae						
10.	<i>Abacoproeces saltuum</i> (L. Koch, 1872)		+			
11.	<i>Agyreta rurestris</i> (C. L. Koch, 1836)				+	
12.	<i>Araeoncus humilis</i> (Blackwall, 1841)				+	+
13.	<i>Bathyphantes nigrinus</i> (Westring, 1851)	+				
14.	<i>Diplostyla concolor</i> (Wider, 1834)	+	+			
15.	<i>Erigone atra</i> Blackwall, 1833			+	+	+
16.	<i>Erigone dentipalpis</i> (Wider, 1834)	+		+	+	
17.	<i>Gongylidellum vivum</i> (O. Pickard-Cambridge, 1875)				+	
18.	<i>Linyphia hortensis</i> Sundevall, 1830		+			
19.	<i>Linyphia triangularis</i> (Clerck, 1757)	+	+	+		
20.	<i>Neriene</i> sp. Blackwall, 1833	+				
21.	<i>Oedothorax apicatus</i> (Blackwall, 1850)			+	+	+
22.	<i>Oedothorax fuscus</i> (Blackwall, 1834)	+				
23.	<i>Oedothorax retusus</i> (Westring, 1851)	+				
24.	<i>Palliduphantes pallidus</i> (O. P.-Cambridge, 1871)		+			
25.	<i>Pocadicnemis pumila</i> (Blackwall, 1841)	+				
26.	<i>Tenuiphantes menzei</i> (Kulczyński, 1887)		+			
27.	<i>Walckenaeria atrotibialis</i> (O. P.-Cambridge, 1878)		+			
-	Linyphiidae juv.	+	+	+		

Table 1 continued on the next page

Continuation of the Table 1

No.	Taxon	LE	F	FE	CF10	CF200
Liocranidae						
28.	<i>Apostenus fuscus</i> Westring, 1851	+				
Lycosidae						
29.	<i>Pardosa lugubris</i> (Walckenaer, 1802)			+		
-	<i>Pardosa</i> sp. C. L. Koch, 1847	+				
30.	<i>Piratula hygrophila</i> (Thorell, 1872)	+				
31.	<i>Pirata</i> sp. Sundevall, 1833	+				
32.	<i>Trochosa ruricola</i> (De Geer, 1778)		+	+		
33.	<i>Trochosa terricola</i> Thorell, 1856		+			
34.	<i>Xerolycosa miniata</i> (C. L. Koch, 1834)				+	+
-	<i>Lycosidae</i> juv.					+
Miturgidae						
35.	<i>Zora spinimana</i> (Sundevall, 1833)			+		
Philodromidae						
36.	<i>Philodromus albidus</i> Kulczyński, 1911		+			
-	<i>Philodromus</i> sp. Walckenaer, 1826	+	+	+		
37.	<i>Tibellus oblongus</i> (Walckenaer, 1802)	+				
Pisauridae						
38.	<i>Pisaura mirabilis</i> (Clerck, 1757)	+		+		
Salticidae						
39.	Salticidae juv.			+		
Tetragnathidae						
40.	<i>Metellina</i> sp. Chamberlin & Ivie, 1941	+	+	+	+	+
41.	<i>Pachygnatha clercki</i> Sundevall, 1823				+	
42.	<i>Pachygnatha degeeri</i> Sundevall, 1830				+	
-	<i>Pachygnatha</i> sp. Sundevall, 1823	+				
43.	<i>Tetragnatha montana</i> Simon, 1874	+		+	+	
-	<i>Tetragnatha</i> sp. Latreille, 1804	+		+	+	
Theridiidae						
44.	<i>Enoplognatha latimana</i> Hippa & Oksala, 1982			+		
45.	<i>Enoplognatha ovata</i> (Clerck, 1757)		+	+		
-	<i>Enoplognatha</i> sp. Pavesi, 1880	+				
46.	<i>Euryopis flavomaculata</i> (C. L. Koch, 1836)	+				
47.	<i>Cryptachaea riparia</i> (Blackwall, 1834)			+		
48.	<i>Phylloneta impressa</i> (L. Koch, 1881)					+
49.	<i>Theridion pictum</i> (Walckenaer, 1802)	+				
Thomisidae						
50.	<i>Ebrechtella tricuspidata</i> (Fabricius, 1775)				+	
51.	<i>Xysticus</i> sp. C. L. Koch, 1835		+		+	+
	Number of individuals	48	93	33	42	19
	Number of taxa	24	17	17	17	10

The community structure of the spider caught by the two methods showed to be very different in the each study habitat and very few species were captured simultaneously by both methods (Table 2). The most large dominant group (with share more than 10%) was found in the material collected by pitfall traps in the forest. However, the most diversified material was collected by sweep net in the lake edge.

DISCUSSION

Faunistical characteristic. The found spider species (44) represent 5% of the Polish araneofauna. The reported species were common. Nevertheless, the results provided some data on spider diversity of this area and demonstrated the preferences of spider species in relation the studied biotopes (Table 1). In the light of the results obtained, the spider communities studied can be characterized as follows:

Lake edge (LE) – 24 taxa were recorded; the largest proportion among plant-dwelling spiders, collected with pitfall traps, was that of *Metellina* sp. (28.1%), followed by *Tetragnatha* sp. (15.6%) (Table 2). *Piratula hygrophila*, *Pirata* sp. and *Oedothorax retusus* were eudominant epigeic spiders (Table 3). Other species, like: *Clubiona lutescens*, *Bathypantes nigrinus*, *Oedothorax fuscus*, *Pocadicnemis pumila*, *Tetragnatha montana* are typical inhabitants of swamp and wet habitats (Buchar & Růžička 2002). In Poland, they were reported, e.g. in swamp alder forests (Stańska et al. 2002) or among sphagnum on a lake (Kupryjanowicz 2010).

Forest (F) – 17 taxa recorded, with species preferring shaded places and a layer of bushes (Nentwig et al. 2016): *Linyphia triangularis* (32.1 %), *Metellina* sp. (22.6 %), *Philodromus* sp. (15.5%) (Table 2). Less abundant were: *Enoplognatha ovata*, *Palliduphantes pallidus*, *Linyphia hortensis*, *Trochosa terricola*, *Araneus diadematus* and *Nuctenea umbratica*.

Table 2. Contribution of the most abundant spider taxa (> 10%) in the material collected by two different methods: sweep net and pitfall traps.

No.	Taxon	LE	F	FE	CF10	CF200
Sweep net						
1	<i>Metellina</i> sp.	28.1	22.6	19.2	62.5	11.1
2	<i>Tetragnatha</i> sp.	15.6				
3	<i>Linyphia triangularis</i>		32.1			
4	<i>Linyphiidae</i> juv.		13.1			
5	<i>Philodromus</i> sp.		15.5			
6	<i>Enoplognatha ovata</i>			11.5		
7	<i>Aculepeira ceropegia</i>					33.3
8	<i>Argiope bruennichi</i>					11.1
9	<i>Clubiona</i> sp.					11.1
10	<i>Phylloneta impressa</i>					11.1
11	<i>Xysticus</i> sp.					22.2
12	other	56.3	16.7	69.2	37.5	0.0
Number of taxa listed		15	12	15	11	6
Pitfall traps						
1	<i>Oedothorax retusus</i>	12.5				
2	<i>Pirata</i> sp.	12.5				
3	<i>Abacoproeces saltuum</i>		22.2			
4	<i>Diplostyla concolor</i>		11.1			
5	<i>Palliduphantes pallidus</i>		11.1			
6	<i>Walckenaeria atrotibialis</i>		11.1			
7	<i>Linyphiidae</i> juv.		11.1			
8	<i>Trochosa ruricola</i>		11.1			
9	<i>Trochosa terricola</i>		11.1			
10	<i>Xysticus</i> sp.		11.1			
11	<i>Erigone atra</i>			28.6		20.0
12	<i>Erigone dentipalpis</i>			28.6		
13	<i>Oedothorax apicatus</i>			14.3	20.0	40.0
14	<i>Trochosa ruricola</i>			14.3		
15	<i>Zora spinimana</i>			14.3		
16	<i>Lycosidae</i> juv.					20.0
17	other	75.0	0.0	0.0	80.0	20.0
Number of taxa listed		13	8	5	9	5
Number of taxa common to both methods		4	3	0	3	1

Metellina (common species: *M. segmentata* and *M. mengei*), *Linyphia triangularis*, *Enoplognatha ovata* and *Araneus diadematus* occur in open and light forest habitats on herb vegetation and bushes, but typical habitat of *Linyphia hortensis* and *Nuctenea umbratica* is a forest. *Trochosa terricola* prefers forest edges and forests (Buchar & Růžička 2002).

Forest edge (FE) adjacent to the crop field – 17 taxa were collected, with *Metellina* sp. being abundant at 19.2% and *Enoplognatha ovata* at 11.5% (Table 2). Other spider species with preferences for the forest interior and dense vegetation cover (Łuczak 1993, 1995) were: *Pardosa lugubris*, *Mangora acalypha*, *Linyphia triangularis* and *Tetragnatha montana*, while those preferring open areas included *Pisaura mirabilis*, *Erigone atra*, *E. dentipalpis*, *Aculepeira ceropegia*, *Oedothorax apicatus*, and *Trochosa ruricola*.

Crop field (CF10), 10 meters from the forest – 17 taxa were collected. *Metellina* sp. accounted for 62.5% of all individuals collected with sweep net. Species characteristic for the crop fields, i.e. agrobionts (Łuczak 1979) were recorded: *Oedothorax apicatus*, *Agyneta rurestris*, *Araeoncus humilis*, *Erigone atra*, *E. dentipalpis*, *Pachygnatha degeeri*, *P. clercki*, and *Xerolycosa miniata*. Species requiring shaded places were also present there: *Araneus diadematus*, *Tetragnatha montana*, and *Gongylidellum vivum* (Tab. 1).

Crop field (CF200), 200 meters from the forest – 10 taxa were recorded, among which the agrobiont species were much more abundant: *Oedothorax apicatus* – 40%, *Erigone atra* – 20% of all epigeic spiders and, *Aculepeira ceropegia* – 33.3 % of all individuals collected with sweep net. The following spiders were recorded in the number of one specimen each: *Phylloneta impressa*, *Araeoncus humilis*, *Argiope bruennichi*, *Metellina* sp. and *Xerolycosa miniata*.

Ecological evaluation. The results show the direction of spider species diversity gradient. According to this species preferring high humidity were followed by species resistant to disturbance of ecosystems and the eurytopic ones. In the light of the obtained results the lakes, and more precisely, their ecotone, presented the largest potential of spider species diversity in this area. The lake edge were inhabited by species preferring habitats subject to the minimal human interference, as well as semi-natural ones (*Tetragnatha* sp., *Piratula hygrophila*, *Bathyphantes nigrinus*, *Pocadicnemis pumila*). Other habitats, which increased the landscape and species diversity were forests and their ecotones with crop fields. In the forest some species of little disturbed areas, like *Palliduhphantes pallidus* and *Linyphia hortensis*, were also found. The species tolerant partially altered habitats were: *Linyphia triangularis*, *Trochosa terricola* and *Araneus diadematus*. In the fields the spider species of open and highly disturbed habitats were recorded: *Oedothorax apicatus*, *Erigone atra* and *E. dentipalpis*, *Aculepeira ceropegia*, *Argiope bruennichi*, *Araeoncus humilis* and *Phylloneta impressa* (Buchar & Růžička 2002).

The results revealed importance of natural habitats, like lakes and forests for biodiversity of the Sieraków Landscape Park, as the number of spider species inhabited undisturbed habitats is much greater than in the crop fields. It was mentioned above that spiders of SLP were not studied so far, therefore there are no comparable results. As the SLP is composed to a large extent of natural and semi-natural habitats – the lakes and forest complexes among them – a rich and diversified spider fauna, even with some rare species, is expected. To confirm this, some further research of araneofauna of this area should be carried out.

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REFERENCES

- ADAMEK H. & CZACHOROWSKI S. 2004. Chruściki (Trichoptera) Sierakowskiego Parku Krajobrazowego – wyniki wstępnych badań. Biuletyn Parków Krajobrazowych Wielkopolski 10: 199–202.

- BŁOSZYK J., KRYSIAK D., NAPIERAŁA A. & BAJACZYK R. 2002. Materiały do znajomości Uropodina (Acari: Mesostigmata) wybranych rezerwatów położonych na obszarze parków krajobrazowych województwa wielkopolskiego. *Biuletyn Parków Krajobrazowych Wielkopolski* 8: 61–72.
- BUCHAR J. & RŮŽIČKA V. 2002. Catalogue of spiders of the Czech Republic. Peres, Praha, 351 pp.
- DZIABASZEWSKA J. 1961. Pająki z rodziny *Thomisidae* Wielkopolskiego Parku Narodowego. *Prace monograficzne nad przyrodą WPN pod Poznaniem* 4: 1–29.
- DZIABASZEWSKI A. 1961. Pająki z rodziny *Theridiidae* Wielkopolskiego Parku Narodowego. *Prace monograficzne nad przyrodą WPN pod Poznaniem* 3: 1–45.
- DZIABASZEWSKI A. 1973. Z badań nad pająkami Wielkopolski. I. Badania Fizjograficzne nad Polską Zachodnią B, 26: 231–237.
- DZIABASZEWSKI A. 1975. Z badań nad pająkami Wielkopolski. III. Badania Fizjograficzne nad Polską Zachodnią B, 28: 101–108.
- DZIABASZEWSKI A. 1976. Studium ekologiczno-faunistyczne nad pajęczakami (*Araneae*, *Opiliones*, *Pseudoscorpionidea*) koron drzew. Wydawnictwa UAM, 218 pp.
- DZIABASZEWSKI W. 1992. Pogońce (*Lycosidae* s. lat.) łągów rogalińskich. *Morena* 1: 39–41.
- KAJAK A. 2007. Effects of forested strips on spider assemblages in adjacent cereal fields: dispersal activity of spiders. *Polish Journal of Ecology* 55: 691–704.
- KAJAK A. & OLESZCZUK M. 2004. Effect of Shelterbelts on adjoining cultivated Fields: patrolling intensity of carabid beetles (*Carabidae*) and spiders (*Araneae*). *Polish Journal of Ecology* 52: 155–172.
- KARG J., ŚLIWA P. & WENDZONKA J. 2011. Smukwa kosmata (*Scolia hirta* Schrank) rzadki gatunek błonkówki w Parku Krajobrazowym im. Gen. D. Chłapowskiego, w Parku Krajobrazowym Promno i w Sierakowskim Parku Krajobrazowym. *Biuletyn Parków Krajobrazowych Wielkopolski* 17: 114–115.
- KUPRYJANOWICZ J. 2010. Inwentaryzacja pająków (*Araneae*) na terenie Parku Narodowego “Bory Tucholskie”. *PNBT i NWFOŚ*: 1–23.
- LEŚNIEWSKA M. 2002. Badania pareczników (*Chilopoda*) w rezerwacie przyrody „Buki nad Jeziorem Lutomskim” (Sierakowski Park Krajobrazowy). *Biuletyn Parków Krajobrazowych Wielkopolski* 8: 73–77.
- ŁĘCKI W. 1996. Sierakowski Park Krajobrazowy. *Biuletyn Parków Krajobrazowych Wielkopolski* 1: 21–24.
- ŁUCZAK J. 1979. Spiders in agrocoenoses. *Polish Ecological Studies* 5: 151–200.
- ŁUCZAK J. 1993. Ecotone zones between forest islands and crop fields in the Masurian Lakeland, Poland, as barrier for migration of spiders to crop fields. *Bulletin Societé Neuchâtel Science Naturelle* 116: 161–167.
- ŁUCZAK J. 1995. Plant-dwelling spiders of the ecotone between forest islands and surrounding crop fields in agricultural landscape of the Masurian Lakeland. *Ekologia Polska* 43: 79–102.
- NENTWIG W., BLICK T., GLOOR D., HÄNGGI A. & KROPF C. 2016. Spiders of Europe. Version 02.2016. Available at www.araneae.unibe.ch (8 Jan 2017)
- OLESZCZUK M. 2010. Refugia śródpolne jako siedliska rzadziej spotykanych i zagrożonych gatunków pająków (*Araneae*) w Polsce. *Chrońmy Przyrodę Ojczyzną* 66: 361–374.
- OLESZCZUK M. 2014. Pająki (*Araneae*) drzew iglastych w zadrzewieniach śródpolnych na terenie Parku Krajobrazowego im. gen. Dezyderego Chłapowskiego. *Parki Narodowe i Rezerваты Przyrody* 33: 15–23.
- OLESZCZUK M. & KARG J. 2012. Ballooning spiders (*Araneae*) over the forest island in an agricultural landscape of Wielkopolska. *Fragmenta Faunistica* 55: 19–24.
- OLESZCZUK M., ULIKOWSKA M. & KUJAWA K. 2010. Effect of distance from forest edge on the distribution and diversity of spider webs in adjacent maize field. *Polish Journal of Ecology* 58: 793–802.
- PRZEWOŹNY M. 2011. Rare and interesting beetles (*Coleoptera*) caught in the Sierakowski Landscape Park. *Badania Fizjograficzne. Seria C – Zoologia (CS2)*: 33–45.
- ROZWĄŁKA R., RUTKOWSKI T. & BIELAK-BIELECKI P. 2013. New data on introduced and rare synanthropic spider species (*Arachnida: Araneae*) in Poland. *Annales UMCS, Sectio C – Biologia* 68: 127–149.
- ROZWĄŁKA R., RENN K. & SIENKIEWICZ P. 2014. Pająki *Araneae* i kosarze *Opiliones* Lednickiego Parku Krajobrazowego. *Przegląd Przyrodniczy* 25: 42–63.
- STAŃSKA M., HAJDAMOWICZ I. & ŻABKA M. 2002. Epigeic spiders of alder swamp forests in Eastern Poland. In: TOFT S. & SCHARFF N. (eds), *European Arachnology 2000, Proceedings of the 19th European Colloquium of Arachnology*, Århus, 17–22 July 2000. Aarhus University Press, Aarhus: 191–197.
- SZYMKOWIAK P. 1992. Pająki (*Aranei*) łągów rogalińskich. *Morena* 1: 36–38.
- ŚLIWA W. & LEWANDOWSKI R. 2013. Motyle większe (*Lepidoptera*) Sierakowskiego Parku Krajobrazowego. *Biuletyn Parków Krajobrazowych Wielkopolski* 19: 83–98.
- WENDZONKA J. 2011. Wybrane grupy żądłówek (*Hymenoptera, Aculeata*) użytku ekologicznego „Jaskółcza Skarpa” w Sierakowskim Parku Krajobrazowym. *Biuletyn Parków Krajobrazowych Wielkopolski* 17: 83–89.
- WORLD SPIDER CATALOG 2016. World Spider Catalog. Natural History Museum Bern. Version 17. Available at <http://wsc.nmbe.ch> (10 Feb 2016).

STRESZCZENIE

[Pierwsze dane na temat pajaków (Araneae) Sierakowskiego Parku Krajobrazowego]

Badano pająki pięciu środowisk uwzględniając stopień antropopresji oraz złożoność struktury roślinności w Sierakowskim Parku Krajobrazowym. Próby pobierano w lesie liściastym, ekotonie polno-leśnym, na polu z uprawą owsa w odległości 10 m od lasu, na polu z uprawą pszenicy w odległości 200 m od lasu, i dodatkowo w ekotonie jezioro/las. Wykazano ogółem 51 taksonów pajaków, w tym 44 gatunki. Były to gatunki pospolite. Środowiskiem najbogatszym w taksony (gatunki, rodzaje i rodziny) pajaków okazał się ekoton między lasem a jeziorem, a najuboższym – pole 200 m od lasu. Preferencje środowiskowe gatunków (wilgotność i nasłonecznienie) zanotowanych na poszczególnych stanowiskach korespondowały z cechami zajmowanych biotopów.

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