PARASITISM OF WATER MITE LARVAE OF THE GENUS *EYLAIS* ON WATER BEETLE IN POLAND

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Table 1

TABLE. 1 pars 1/4. Infection of water beetles by various species of water mites :
A - number of larvae, B - infestation rate (in %), C - intensity of infestation (on the average)

Host species	*Eylais hamata*			*Eylais koenikei*			*Eylais setosa*		
	A	B	C	A	B	C	A	B	C
Peltodytes caesus (Duft.)									
Haliplus confinis Steph.									
Haliplus flavicollis Sturm									
Haliplus laminatus (Schall.)									
Haliplus fluviatilis Aubé									
Haliplus immaculatus Gehr.									
Haliplus lineolatus Mann.									
Haliplus ruficollis (Deg.)									
Haliplus wehnckei Gehr.									
Noterus crassicornis (O.F.Müll.)									
Hydroporus angustatus Sturm				1	1(0,5)	1			
Hydroporus dorsalis (Fabr.)				1	1(1,0)	1			
Hydroporus erythrocephalus (L.)				11	4(5,1)	1-6 (2,8)			
Hydroporus palustris (L.)							2	2(0,2)	1
Hydroporus striola (Gyll.)									
Hydroporus umbrosus (Gyll.)				2	2(0,6)	1			
Graptodytes granularis (L.)				1	1(1,7)	1			
Graptodytes pictus (Fabr.)									
Porhydrus lineatus (Fabr.)									
Coelambus impressopunctatus (Schall.)									
Hygrotus ineaqualis (Fabr.)							37	18(2,4)	1-5 (2,1)
Hygrotus versicolor (Schall.)							20	10(0,6)	1-5 (2,0)
Scarodytes halensis (Fabr.)									
Bidessus pusillus (Fabr.)									
Hyphydrus ovatus (L.)				1	1(0,2)	1	12	11(0,2)	1-2 (1,1)
Laccophilus hyalinus (Degeer)									
Laccophilus minutus (L.)									
Colymbetes striatus (L.)									
Acilius canaliculatus (Nic.)									
Ochthebius minimus (Fabr.)									
Helophorus aquaticus (L.)									
Helophorus flavipes Fabr.	1	1 (1,1)	1						
Helophorus granularis (L.)									
Helophorus griseus Herbst									
Helophorus minutus Fabr.									
Helophorus nanus Sturm									
Coelostoma orbiculare (Fabr.)							3	1(2,1)	3
Hydrobius fuscipes (L.)									
Anacena limbata (Fabr.)									

Anacena lutescens (Steph.)									
Laccobius minutus (L.)							4	1(0,1)	4
Laccobius sinuatus Motsch.									
Helochares lividus (Forst.)									
Helochares obscurus (O. F. Müll.)									
Enochrus melanocephalus (Oliv.)									
Enochrus quadripunctatus (Herbst)									
Enochrus testaceus (Fabr.)									
Enochrus affinis (Thunb.)									
Enochrus coarctatus (Gredl.)									
Cymbiodyta marginella (Fabr.)									
Total	1	1 (0,004)	1	17	10 (0,04)	1-6 (1,7)	78	43 (0,16)	1-5 (1,8)

TABLE. 1. pars 2/4 Infection of water beetles by various species of water mites :
A - number of larvae, B - infestation rate (in %), C - intensity of infestation (on the average)

	Eylais extendens			*Eylais undulosa*			*Eylais tullgreni*		
	A	B	C	A	B	C	A	B	C
Peltodytes caesus (Duft.)	1	1(2,6)	1						
Haliplus confinis Steph.	1	1(1,2)	1						
Haliplus flavicollis Sturm	5	5(2,6)	1						
Haliplus laminatus (Schall.)	1	1(0,4)	1						
Haliplus fluviatilis Aubé	4	4(0,7)	1						
Haliplus immaculatus Gehr.	31	17(0,9)	1-2 (1,8)						
Haliplus lineolatus Mann.	3	3(4,6)	1						
Haliplus ruficollis (Deg.)	8	8(1,0)	1						
Haliplus wehnckei Gehr.	1	1(0,3)	1						
Noterus crassicornis (O.F.Müll.)	10	6(0,2)	1-2 (1,7)						
Hydroporus angustatus Sturm	1	1(0,5)	1						
Hydroporus dorsalis (Fabr.)									
Hydroporus erythrocephalus (L.)	1	1(1,3)	1						
Hydroporus palustris (L.)	1	1(0,08)	1	1	1(0,1)	1			
Hydroporus striola (Gyll.)	10	4(2,8)	1-7 (2,5)						
Hydroporus umbrosus (Gyll.)									
Graptodytes granularis (L.)									
Graptodytes pictus (Fabr.)	2	1(0,3)	2						
Porhydrus lineatus (Fabr.)				1	1(0,1)	1			
Coelambus impressopunctatus (Schall.)				1	1(0,5)	1			
Hygrotus ineaqualis (Fabr.)									
Hygrotus versicolor (Schall.)									
Scarodytes halensis (Fabr.)	7	2(0,9)	3-4 (3,5)	2	1(0,4)	2			
Bidessus pusillus (Fabr.)	2	2(0,7)	1						
Hyphydrus ovatus (L.)	8	8(1,4)	1	2	2(0,4)	1			
Laccophilus hyalinus (Degeer)	2	2(0,6)	1						
Laccophilus minutus (L.)	3	3(1,5)	1	1	1(0,5)	1			
Colymbetes striatus (L.)	2	2(0,4)	1						
Acilius canaliculatus (Nic.)	1	1(4,3)	1						
Ochthebius minimus (Fabr.)							5	5(0,7)	1
Helophorus aquaticus (L.)				2	1(0,9)	2			
Helophorus flavipes Fabr.				1	1(1,1)	1			
Helophorus granularis (L.)				1	1(0,3)	1			
Helophorus griseus Herbst							3	1(0,3)	3
Helophorus minutus Fabr.				3	3(1,5)	1			

Helophorus nanus Sturm				1	1(0,4)	1			
Coelostoma orbiculare (Fabr.)									
Hydrobius fuscipes (L.)				3	3(0,9)	1			
Anacena limbata (Fabr.)	1	1(0,2)	1						
Anacena lutescens (Steph.)				4	4(0,5)	1			
Laccobius minutus (L.)	2	2(0,1)	1	7	7(0,4)	1	1	1(0,06)	1
Laccobius sinuatus Motsch.				1	1(2,2)	1			
Helochares lividus (Forst.)				2	1(0,5)	2			
Helochares obscurus (O. F. Müll.)	1	1(0,9)	1	3	1(0,9)	3			
Enochrus melanocephalus (Oliv.)				1	1(2,0)	1			
Enochrus quadripunctatus (Herbst)				1	1(1,5)	1			
Enochrus testaceus (Fabr.)	1	1(2,1)	1	6	1(2,1)	6			
Enochrus affinis (Thunb.)				1	1(0,1)	1			
Enochrus coarctatus (Gredl.)				9	2(2,7)	2-7 (4,5)			
Cymbiodyta marginella (Fabr.)				3	3(1,0)	1			
Total	110	80 (0,3)	1-7 (1,4)	57	40 (0,15)	1-7 (1,4)	9	7 (0,03)	1-3 (1,3)

Table. 1. pars 3/4Infection of water beetles by various species of water mites :
A - number of larvae, B - infestation rate (in %), C - intensity of infestation (on the average)

Species of parasite	*Eylais longipalpis*			*Eylais muelleri*			*Eylais bisinuosa*		
Host species	A	B	C	A	B	C	A	B	C
Haliplus immaculatus Gehr.	1	1(0,05)	1						
Haliplus ruficollis (Deg.)	2	2(0,4)	1	1	1(0,1)	1			
Noterus clavicornis (Deg.)	1	1(0,3)	1						
Noterus crassicornis (O.F.Müll.)	1	1(0,03)	1						
Hygrotus ineaqualis (Fabr.)									
Hyphydrus ovatus (L.)	1	1(0,2)	1						
Platambus maculatus (L.)	1	1(0,4)	1						
Agabus bipustulatus (L.)	1	1(0,8)	1						
Agabus sturmii (Gyll.)	4	2(0,6)	2 (2,0)						
Agabus undulatus (Schrank)	11	1(0,2)	11						
Ilybius fenestratus (Fabr.)	3	3(1,8)	1						
Ilybius fuliginosus(Fabr.)	12	8(4,1)	1-2 (1,5)						
Ilybius quadriguttatus (Lacord.)	1	1(2,4)	1						
Ilybius subaeneus Er.	5	2(11,8)	2-3 (2,5)						
Rhantus grapii (Gyll.)	1	1(2,9)	1						
Rhantus exsoletus (Forst.)	5	4(2,9)	1-2 (1,3)						
Rhantus incognitus R. Scholz	25	9(6,8)	1-10 (2,8)						
Rhantus latitans Sharp	1	1(4,3)	1						
Colymbetes fuscus (L.)	51	23(2,9)	1-5 (2,2)						
Colymbetes striatus (L.)	14	10(2,0)	1-2 (1,4)						
Hydaticus seminiger (Degeer)	1	1(0,8)	1						
Hydaticus transversalis (Pontopp.)	2	2(1,1)	1						
Dytiscus dimidiatus Bergstr.	3	3(1,5)	1						
Dytiscus marginalis L.	1	1(0,3)	1						
Acilius canaliculatus (Nic.)	1	1(4,3)	1						
Acilius sulcatus (L.)	3	3(2,3)	1						
Gyrinus aeratus Steph.									
Gyrinus distinctus Aubé									
Gyrinus marinus Gyll.									
Hydraena palustris Er.							6	4(2,2)	1-2 (1,5)
Limnebius truncatulus Thoms.									

Cercyon bifenestratus Kust.	1	1(10,0)	1						
Anacena limbata (Fabr.)				2	2(0,3)	1			
Anacena lutescens (Steph.)	3	2(0,2)	1-2 (1,5)	2	2(0,2)	1			
Laccobius bipunctatus (Fabr.)				4	3(2,1)	1-2 (1,3)			
Laccobius minutus (L.)	2	2(0,13)	1	51	34(2,2)	1-6 (1,5)			
Laccobius striatulus (Fabr.)				1	1(3,3)	1			
Helochares obscurus (O. F. Müll.)				1	1(0,9)	1			
Total	158	89 (0,33)	1-11 (1,8)	62	44 (0,17)	1-6 (1,4)	6	4 (0,015)	1-2 (1,5)

TABLE. 1. pars 4/4 Infection of water beetles by various species of water mites :
A - number of larvae, B - infestation rate (in %), C - intensity of infestation (on the average)

Species of parasite	Eylais glubokensis Udal.			Eylais « cf. relicta » Halb.			Eylais sp.		
Host species	A	B	C	A	B	C	A	B	C
Haliplus immaculatus Gehr.									
Haliplus ruficollis (Deg.)									
Noterus clavicornis (Deg.)									
Noterus crassicornis (O.F.Müll.)									
Hygrotus ineaqualis (Fabr.)							6	1(0,1)	6
Hyphydrus ovatus (L.)									
Platambus maculatus (L.)									
Agabus bipustulatus (L.)									
Agabus sturmii (Gyll.)									
Agabus undulatus (Schrank)									
Ilybius fenestratus (Fabr.)									
Ilybius fuliginosus(Fabr.)							1	1(0,5)	1
Ilybius quadriguttatus (Lacord.)									
Ilybius subaeneus Er.									
Rhantus grapii (Gyll.)									
Rhantus exsoletus (Forst.)									
Rhantus incognitus R. Scholz									
Rhantus latitans Sharp									
Colymbetes fuscus (L.)									
Colymbetes striatus (L.)									
Hydaticus seminiger (Degeer)									
Hydaticus transversalis (Pontopp.)									
Dytiscus dimidiatus Bergstr.									
Dytiscus marginalis L.									
Acilius canaliculatus (Nic.)									
Acilius sulcatus (L.)									
Gyrinus aeratus Steph.				11	6(0,9)	1-5 (1,8)			
Gyrinus distinctus Aubé				94	19(12,0)	1-21 (4,9)			
Gyrinus marinus Gyll.				1	1(0,4)	1			
Hydraena palustris Er.									
Limnebius truncatulus Thoms.	7	2(0,7)	3-4 (3,5)						
Cercyon bifenestratus Kust.									
Anacena limbata (Fabr.)									
Anacena lutescens (Steph.)									
Laccobius bipunctatus (Fabr.)									
Laccobius minutus (L.)							42	29(1,8)	1-3 (1,4)
Laccobius striatulus (Fabr.)									
Helochares obscurus (O. F. Müll.)									
Total	7	2 (0,008)	3-4 (3,5)	106	26 (0,1)	1-21 (4,1)	50	31 (0,12)	1-6 (1,6)