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RESEARCH ARTICLE ARAŞTIRMA MAKALESİ

THE ROTIFERA FAUNA OF TURKISH THRACE (EDIRNE, TEKIRDAĞ, KIRKLARELI)

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Abstract: This study was carried out to determine freshwater Rotifera species of Turkish Thrace (Edirne, Tekirdağ, Kırklareli) between September 2007-April 2009. Rotifera samples were collected by using a plankton net (55µm mesh size) from 126 different localities. At 65 of 126 localities, water temperature, pH, conductivity, dissolved oxygen were measured during the field survey, in terms of showing general character of surface waters of Turkish Thrace. As a result of this study, a total of 115 Rotifera species belonging to 22 families were identified in Turkish Thrace. 47 of these species were new records for Turkish Thrace. The number of species in Edirne which had formerly been determined as 97, increased to 114 with this study. 72 species which were identified in this study in Tekirdağ were accepted as the first records for Tekirdağ, because it had not been done any former studies concerning Rotifera in Tekirdağ. 99 species identified in this study in Kırklareli were also accepted as the first records for Kırklareli because the taxons found in the former study, which had been performed in Kırklareli, were in genus level.The result of this and former studies shows that Turkish Thrace has 138 species.

Keywords: Rotifera, Fauna, Taxonomy, Turkish Thrace

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Özet: Trakya Bölgesi (Edirne, Tekirdağ, Kırklareli) Rotifera Faunası

Bu çalışma Eylül 2007–Nisan 2009 tarihleri arasında Trakya bölgesi (Edirne, Tekirdağ, Kırklareli) tatlı su Rotifera türlerini belirlemek amacıyla gerçekleştirildi. Rotifer örnekleri 126 farklı lokaliteden 55 mm göz açıklığına sahip plankton kepçesi ile toplandı. Arazi çalışması esnasında Trakya bölgesinin ve üç ilin yüzey sularının genel karakterini yansıtması bakımından örnekleme yapılan 126 lokaliteden 65 tanesinde pH, çözünmüş oksijen, elektrik iletkenliği, su sıcaklığı ve hava sıcaklığı gibi fizikokimyasal parametreler de ölçüldü. Bu çalışma sonucunda Trakya Bölgesinde Rotifera filumundan 22 familyaya ait toplam 115 tür tespit edildi. Tespit edilen türlerin 47'si Trakya bölgesi için yeni kayıttır. Daha önceki çalışmalarda 97 tür tespit edilen Edirne ilinin tür sayısı bu çalışma ile birlikte 114 e ulaştı. Tekirdağ ilinde daha önceden Rotifera ile ilgili yapılmış çalışma bulunmadığı için, Tekirdağ ilinde tespit edilen 72 tür Tekirdağ için yeni kayıttır. Kırklareli ilinde daha önceden yapılan çalışmalarda bulunan taksonlar cins düzeyinde olduğu için bu çalışmada tespit edilen 99 tür de Kırklareli için yeni kayıttır. Trakya bölgesinde daha önce yapılan çalışmalarda dikkate alındığında Trakya bölgesinin 138 türle temsil edildiği görülmektedir.

Anahtar Kelimeler: Rotifera, Fauna, Taksonomi, Trakya bölgesi

Introduction

Rotifera has an important role in the continuity of matter and energy cycle in the aquatic ecosystem and abundance of rotifera species in an aquatic habitat give clues in determining productivity level of this aquatic habitat (Demir et al., 2007). Besides, Rotifera is used as indicator for pollution and eutrophication because of their high reproduction rate and sensitivity to any ecological change in the waterbody (Lucinda et al., 2004).

Turkish Thrace which is located in Northwest of Turkey has borders to Balkan countries. Meriç and Tunca Rivers from Bulgaria and Arda River from Greece pour into Aegean Sea crossing the region. Besides, wetlands located in this region provide resting and staging area for birds that migrate from Europea to Asia or vice versa**.** Turkish Thrace is expected to have a high biodiversity because it includes species from Balkan fauna because of its geological location.

In addition, agricultural activities are carried out by using modern technologies in Turkish Thrace, due to its vast lowlands and productive plains. Pollution caused by agriculture, industry and excessive population growth destroys a huge amount of freshwater ecosystems and causes more pollution at the wetlands in the region especially by expanding via Meriç and Ergene rivers. Therefore many living organisms disappear or migrate to other regions.

There were limited number of researches done concerning Rotifera fauna of Turkish Thrace up to now and as a result of these studies, 82 species were identified in Turkish Thrace (Segers et al., 1992; Güher, 2003; Güher et al., 2004; Erdoğan and Güher, 2005; Güher and Erdoğan, 2008). But, when reasons pointed out above are considered, there may be the possibility of new species arrivals or extinction, the studies performed seems insufficient. So, biological diversity have to be brought to light at once, in order to keep track of the possible alterations that might occur and take the necessary precautions in wetlands in Turkish Thrace.

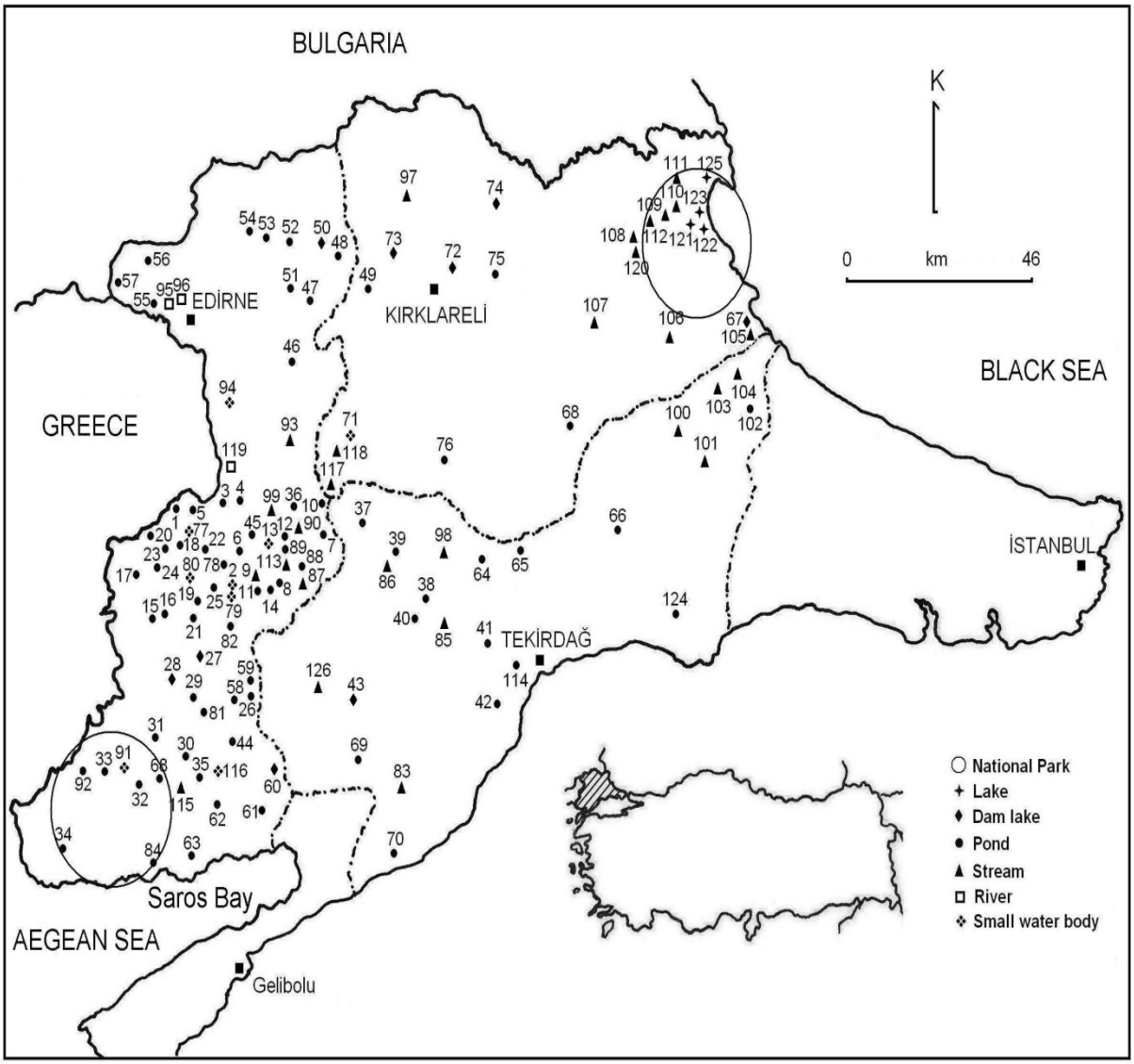
Materials and Methods

This study was done between September 2007–April 2009, to determine freshwater rotifera species of Turkish Thrace (Edirne, Tekirdağ, Kırklareli). Samples were collected from 126 different localities including all kinds of freshwater ecosystems like lakes, ponds, rivers and streams by using plankton net (55µm mesh size) (Figure 1). Not only horizontal sampling by using simple plankton net but also vertical sampling by using Hensen type plankton net were done in big and deep lakes like Altınyazı and Kadıköy dams. Furthermore, it was carried out by using small hand nets in shallow densely planted ecosystems. The names of the localities, sampling dates, coordinates and the numbers of the localities are given in Table 1.

Samples were fixed in 4% formalin. Rotifera species were examined under the microscope of Olympus brand. By using diluted sodium hypo-

chlorite, Trophi were isolated from some specimen, and were prepared for light microscope. In identification of rotifer species, utilized by Kolisko (1974); Koste (1978a,b); Pontin (1978); Koste and Shiel (1989, 1990); Segers (1995); Jersabek et al. (2003).

Also during field survey physicochemical parameters like pH, dissolved oxygen, electric conductivity, and water temperature were measured at 65 localities in Turkish Thrace in order to indicate the general characteristics of three cities. These localities are given at Table 2.



*Numbers in figure show the locality numbers in the Table 1.

Figure 1. The sampling localities in Turkish Thrace

Table 1. Sampling localities and dates in Turkish Thrace

Loc. No.	Sampling dates	Coordinates	Provinces	Sampling localities
1	15.09.2007, 08.12.2007, 12.04.2008	41°16' K, 26°30' D	Edirne	Rahmança Pond
2	15.09.2007, 29.12.2007	41°09' K, 26°39' D	Edirne	Hamidiye, water body
3	15.09.2007, 08.12.2007	41°17' K, 26°37' D	Edirne	Kiremitçisalih Pond
4	15.09.2007, 08.12.2007, 13.04.2008, 09.08.2008	41°19' K, 26°43'D	Edirne	*Değirmenciköy Pond
5	15.09.2007, 08.12.2007	41°17' K, 26°32' D	Edirne	Akçadam Pond
6	16.09.2007, 29.12.2007, 12.04.2008, 09.08.2008	41°13' K, 26°41' D	Edirne	*Bülbüldere Pond
7	16.09.2007, 26.01.2008, 09.08.2008	41°14' K, 26°55' D	Edirne	*Turnacı Pond
8	16.09.2007, 26.01.2008, 12.04.2008, 09.08.2008	41°09' K, 26°47' D	Edirne	*Beykonak Pond
9	16.09.2007, 29.12.2007	41°09' K, 26°42' D	Edirne	Dereköy Stream
10	16.09.2007, 26.01.2008, 12.04.2008, 09.08.2008	41°12' K, 26°55' D	Edirne	*Conkara Pond
11	16.09.2007, 29.12.2007	41°08' K, 26°43' D	Edirne	Dereköy Pond
12	16.09.2007, 26.01.2008	41°15' K, 26°48' D	Edirne	Başağıl Pond
13	16.09.2007, 26.01.2008, 12.04.2008	41°16' K, 26°46' D	Edirne	Malkoç, water body
14	16.09.2007, 26.01.2008, 12.04.2008, 09.08.2008	41°09' K, 26°45' D	Edirne	*Hasanpınar Pond
15	23.09.2007, 12.04.2008, 09.08.2008	41°06' K, 26°24' D	Edirne	*Küçükaltıağaç Pond
16	23.09.2007, 09.12.2007	41°08' K, 26°26' D	Edirne	Yenice Görüce Pond
17	23.09.2007, 09.12.2007, 12.04.2008, 09.08.2008	41°11' K, 26°26' D	Edirne	*Meriç Merkez Pond
18	23.09.2007, 09.12.2007, 12.04.2008, 09.08.2008	41°14' K, 26°30' D	Edirne	*Kavaklı Pond
19	23.09.2007, 29.12.2007	41°07' K, 26°33' D	Edirne	Kavakayazma Pond
20	23.09.2007, 09.12.2007, 12.04.2008, 09.08.2008	41°15' K, 26°25' D	Edirne	*Karayusuflu Pond
21	23.09.2007, 29.12.2007, 20.04.2008	41°06' K, 26°33' D	Edirne	Balabanköy Göleti
22	23.09.2007, 09.12.2007	41°15' K, 26°36' D	Edirne	Çiftlikköy Pond
23	23.09.2007, 09.12.2007	41°12' K, 26°28' D	Edirne	Olacak Pond
24	23.09.2007, 09.12.2007	41°13' K, 26°28' D	Edirne	Küpdere Pond
25	23.09.2007, 29.12.2007, 20.04.2008, 10.08.2008	41°11' K, 26°35' D	Edirne	*Kurtbey Pond
26	23.09.2007, 09.12.2007	41°07' K, 26°24' D	Edirne	Küçükdoğanca Pond
27	29.09.2007, 29.12.2007, 20.04.2008, 10.08.2008	41°03' K, 26°35' D	Edirne	*Altınyazı Dam lake
28	29.09.2007, 29.12.2007, 20.04.2008, 10.08.2008	41°01' K, 26°28' D	Edirne	*Sultanköy Dam lake
29	29.09.2007, 29.12.2007	40°55' K, 26°34' D	Edirne	Beğendik Pond
30	29.09.2007, 27.01.2008	40°51' K, 26°31' D	Edirne	Boztepe Pond
31	29.09.2007, 27.01.2008	40°51' K, 26°26' D	Edirne	Esetçe Pond
32	29.09.2007, 27.01.2008	40°49' K, 26°24' D	Edirne	Kocahıdır Pond
33	29.09.2007, 27.01.2008, 20.04.2008, 10.08.2008	40°49' K, 26°18' D	Edirne	*Yenikarpuzlu Pond
34	29.09.2007	40°41' K, 26°10' D	Edirne	Çavuşköy Pond
35	29.09.2007	40°47' K, 26°34' D	Edirne	Kılıçköy Pond
36	29.09.2007, 26.01.2008	41°17' K, 26°48' D	Edirne	Bayramlı Pond
37	30.09.2007, 20.01.2008, 19.04.2008, 17.08.2008	41°15' K, 27°02' D	Tekirdağ	*Çerkezmüsellim Pond
38	30.09.2007, 20.01.2008, 19.04.2008, 17.08.2008	41°07' K, 27°12' D	Tekirdağ	*Bayramşah Pond
39	30.09.2007, 20.01.2008, 19.04.2008, 17.08.2008	41°13' K, 27°03' D	Tekirdağ	*Hayrabolu Pond
40	30.09.2007, 20.01.2008, 19.04.2008, 17.08.2008	41°04' K, 27°10' D	Tekirdağ	*Parmaksız Pond
41	30.09.2007, 20.01.2008, 19.04.2008, 17.08.2008	41°00' K, 27°23' D	Tekirdağ	*Bıyıkali Pond
42	30.09.2007, 20.01.2008, 19.04.2008, 17.08.2008	40°55' K, 27°24' D	Tekirdağ	*Yazır Pond
43	30.09.2007, 19.01.2008, 19.04.2008, 17.08.2008	40°56' K, 26°29' D	Tekirdağ	*Karaidemir Dam lake
44	30.09.2007, 30.12.2007	40°52' K, 26°38' D	Edirne	Keşan Kocadere Pond
45	07.10.2007, 26.01.2008	41°14' K, 26°44' D	Edirne	Uzunköprü Pond
46	07.10.2007, 02.02.2008, 13.04.2008, 22.06.2008	41°34' K, 26°51' D	Edirne	*Havsa Osmanlı Pond
47	07.10.2007, 02.02.2008, 13.04.2008, 22.06.2008	41°43' K, 26°53' D	Edirne	*Havsa Küküler Pond
48	07.10.2007, 02.02.2008, 13.04.2008, 22.06.2008	41°47' K, 26°59' D	Edirne	*Keramettin Pond
49	07.10.2007	41°47' K, 27°02' D	Kırklareli	Dolhan Pond
50	07.10.2007, 02.02.2008, 13.04.2008, 22.06.2008	41°48' K, 26°55' D	Edirne	*Süleoğlu Dam lake

51	07.10.2007	41°46' K, 26°52' D	Edirne	Geçkinli Pond
52	07.10.2007	41°49' K, 26°50' D	Edirne	Sülecik Pond
53	07.10.2007	41°49' K, 26°46' D	Edirne	Taşlımüsellim Pond
54	07.10.2007, 02.02.2008, 13.04.2008, 22.06.2008	41°50' K, 26°45' D	Edirne	*Lalapaşa Pond
55	19.10.2007, 02.02.2008, 13.04.2008, 22.06.2008	41°42' K, 26°27' D	Edirne	*Eskikadın Pond
56	19.10.2007	41°48' K, 26°24' D	Edirne	Uzgaç Pond
57	19.10.2007, 02.02.2008	41°45' K, 26°21' D	Edirne	Budakdoğanca Pond
58	27.10.2007, 30.12.2007	40°56' K, 26°39' D	Edirne	Çobançeşme Pond
59	27.10.2007, 30.12.2007	40°58' K, 26°41' D	Edirne	Karasatı Pond
60	27.10.2007, 30.12.2007, 20.04.2008, 10.08.2008	40°49' K, 26°47' D	Edirne	*Kadıköy Dam lake
61	27.10.2007, 30.12.2007, 20.04.2008, 10.08.2008	40°44' K, 26°42' D	Edirne	*Dokuzdere Pond
62	27.10.2007	40°43' K, 26°36' D	Edirne	Mercan Pond
63	27.10.2007, 19.01.2008, 20.04.2008, 10.08.2008	40°38' K, 26°33' D	Edirne	*Mecidiye Pond
64	28.10.2007, 24.02.2008, 04.05.2008, 31.08.2008	41°11' K, 27°22' D	Tekirdağ	*Hanoğlu Pond
65	28.10.2007, 24.02.2008	41°10' K, 27°27' D	Tekirdağ	İnanlı Pond
66	28.10.2007, 24.02.2008, 04.05.2008, 31.08.2008	41°14' K, 27°44' D	Tekirdağ	*Ulaş Pond
67	28.10.2007, 16.03.2008, 17.05.2008, 31.08.2008	41°38' K, 28°03' D	Kırklareli	*Pabuçdere Dam lake
68	28.10.2007, 24.02.2008, 17.05.2008, 31.08.2008	41°28' K, 27°36' D	Kırklareli	*Ahmetbey Pond
69	10.11.2007, 19.01.2008, 19.04.2008, 17.08.2008	40°49' K, 27°00' D	Tekirdağ	*Balabancık Pond
70	10.11.2007, 19.01.2008, 19.04.2008, 17.08.2008	40°38' K, 27°05' D	Tekirdağ	*Şarköy Pond
71	11.11.2007, 23.02.2008, 04.05.2008, 24.08.2008	41°25' K, 27°01' D	Kırklareli	*Minnetler, water body
72	11.11.2007, 23.02.2008, 17.05.2008, 24.08.2008	41°44' K, 27°17' D	Kırklareli	*Kırklareli Dam lake
73	11.11.2007, 23.02.2008, 17.05.2008, 24.08.2008	41°48' K, 27°07' D	Kırklareli	*Kayalıköy Dam lake
74	11.11.2007, 23.02.2008, 17.05.2008, 24.08.2008	41°53' K, 27°25' D	Kırklareli	*Armağan Dam lake
75	11.11.2007, 23.02.2008, 17.05.2008, 24.08.2008	41°45' K, 27°26' D	Kırklareli	*Üsküp Pond
76	11.11.2007, 24.02.2008, 04.05.2008, 24.08.2008	41°22' K, 27°13' D	Kırklareli	*Sarıcaali Pond
77	08.12.2007, 12.04.2008	41°15' K, 26°31' D	Edirne	Karahamza, water body
78	29.12.2007	41°10' K, 26°40' D	Edirne	Kavacık Pond
79	29.12.2007	41°08' K, 26°40' D	Edirne	Hamidiye, water body 2
80	29.12.2007, 20.04.2008, 10.08.2008	41°08' K, 26°33' D	Edirne	*Kurtbey, water body
81	29.12.2007	40°56' K, 26°34' D	Edirne	Beğendik Stream
82	30.12.2007	41°04' K, 26°39' D	Edirne	Alıç Pond
83	19.01.2008, 19.04.2008, 17.08.2008	40°46' K, 27°05' D	Tekirdağ	*Çınarlıdere Stream
84	19.01.2008	40°37' K, 26°28' D	Edirne	Erikli Tuzla Pond
85	20.01.2008	41°04' K, 27°14' D	Tekirdağ	Ortaca Stream
86	20.01.2008, 19.04.2008, 17.08.2008	41°07' K, 27°03' D	Tekirdağ	*Hayrabolu Stream
87	26.01.2008	41°10' K, 26°51' D	Edirne	Yağmurca Stream
88	26.01.2008	41°09' K, 26°51' D	Edirne	Yağmurca Pond
89	26.01.2008, 12.04.2008, 09.08.2008	41°12' K, 26°50' D	Edirne	*Çöpköy Pond
90	26.01.2008	41°16' K, 26°50' D	Edirne	Ömerbey Stream
91	27.01.2008	40°49' K, 26°24' D	Edirne	Kocahıdır, water body
92	27.01.2008	40°50' K, 26°19' D	Edirne	Sığırcılı Pond
93	02.02.2008, 13.04.2008	41°25' K, 26°49' D	Edirne	Kırcasalih Ova Stream
94	03.02.2008, 13.04.2008, 22.06.2008	41°27' K, 26°37' D	Edirne	*Orhaniye, water body
95	03.02.2008	41°40' K, 26°33' D	Edirne	Tunca River, 1st Bridge
96	03.02.2008, 13.04.2008, 22.06.2008	41°41' K, 26°33' D	Edirne	*Tunca River, Sarayiçi
97	23.02.2008, 17.05.2008, 24.08.2008	41°55' K, 27°09' D	Kırklareli	*Kofçaz Stream
98	24.02.2008, 04.05.2008, 31.08.2008	41°13' K, 27°14' D	Tekirdağ	*Dambaslar Stream
99	16.03.2008, 18.05.2008	41°22' K, 26°57' D	Edirne	*Kanlıgeçit Stream
100	16.03.2008	41°25' K, 27°53' D	Tekirdağ	Çukuryurt Stream

101	16.03.2008	41°22' K, 27°55' D	Tekirdağ	Büyükyoncalı Stream
102	16.03.2008	41°26' K, 28°05' D	Tekirdağ	Safaalan Pond
103	16.03.2008	41°28' K, 27°58' D	Tekirdağ	Güngörmez Stream
104	16.03.2008, 17.05.2008, 31.08.2008	41°32' K, 28°03' D	Tekirdağ	*Bahçeköy Stream
105	16.03.2008, 17.05.2008, 31.08.2008	41°37' K, 28°05' D	Kırklareli	*Kıyıköy Stream
106	16.03.2008, 17.05.2008	41°37' K, 28°53' D	Kırklareli	*Kömürköy Stream
107	16.03.2008	41°38' K, 27°39' D	Kırklareli	Soğucak Stream
108	16.07.2008, 12.10.2008, 01.02.2009,25.04.2009	41°46' K, 27°51' D	Kırklareli	*Bulanıkdere Stream
109	27.03.2008	41°'"K, 27°'"D	Kırklareli	İğneada Stream
110	16.07.2008, 12.10.2008, 01.02.2009, 25.04.2009	41°52' K, 27°58' D	Kırklareli	*Madara Stream
111	27.03.2008	41°53' K, 27°59' D	Kırklareli	Efendi Stream
112	27.03.2008	41°'"K, 27°'"D	Kırklareli	Asker Stream
113	12.04.2008, 12.04.2008	41°12' K, 26°49' D	Edirne	Çöpköy Stream
114	19.04.2008	40°59' K, 27°26' D	Tekirdağ	Yağcı Pond
115	20.04.2008	40°46' K, 26°30' D	Edirne	Keşan Stream
116	20.04.2008	40°47' K, 26°34' D	Edirne	Kılıçköy, water body
117	18.05.2008	41°20' K, 26°55' D	Edirne	*Kanlıdere Stream
118	18.05.2008	41°22' K, 26°57' D	Kırklareli	*Kuştepe Stream
119	18.05.2008	41°24' K, 26°37' D	Edirne	*Meriç River, Sığırcılı
120	16.07.2008, 12.10.2008, 01.02.2009, 25.04.2009	41°49' K, 27°45' D	Kırklareli	*Değirmen Stream
121	16.07.2008, 12.10.2008, 01.02.2009, 25.04.2009	41°50' K, 27°55' D	Kırklareli	*Lake Pedina
122	16.07.2008, 12.10.2008, 01.02.2009, 25.04.2009	41°49' K, 27°57' D	Kırklareli	*Lake Hamam
123	16.07.2008, 12.10.2008,01.02.2009, 25.04.2009	41°51' K, 27°58' D	Kırklareli	*Lake Mert
124	09.11.2008	41°01' K, 27°53' D	Tekirdağ	*Türkmenli Pond
125	01.02.2009, 25.04.2009	41°53' K, 27°59' D	Kırklareli	*Lake Erikli
126	31.01.2009	40°49' K, 27°03' D	Tekirdağ	Malkara Stream

* Localities where physicochemicals were measured

Table 2. pH, Water temperature (°C), Dissolved oxygen (mg L^{-1}) and Electrical conductivity (µS cm^{-1}) values measured at localities.

Date	City	Localities	pH	Water temp.	DO	EC
04.05.2007	Tekirdağ	Dambaslar Stream	7,84	16,3	-	-
04.05.2007	Tekirdağ	Hanoğlu Pond	8,2	16,2	-	-
04.05.2007	Tekirdağ	Ulaş Pond	8,65	17,8	-	-
04.05.2007	Tekirdağ	Ulaş Pond, Drainage channel	7,69	16,2	-	-
04.05.2007	Kırklareli	Sarıcaali Pond	8,52	17,5	-	-
04.05.2007	Kırklareli	Minnetler, water body	7,9	17,5	-	-
17.05.2007	Kırklareli	Kayalıköy Dam lake	8,9	18,3	-	-
17.05.2007	Kırklareli	Kofçaz Stream	8,6	15,2	-	-
17.05.2007	Kırklareli	Kırklareli Dam lake	9,3	19,4	-	-
17.05.2007	Kırklareli	Armağan Dam lake	9,4	18,3	-	-
17.05.2007	Kırklareli	Üsküp Pond		21	-	-
17.05.2007	Kırklareli	Kömürköy Stream	9,18	18,1	-	-
17.05.2007	Kırklareli	Pabuçdere Dam lake	7,82	19,7	-	-
17.05.2007	Kırklareli	Kıyıköy Stream	7,7	20,6	-	-
17.05.2007	Tekirdağ	Bahçeköy Stream	7,93	16,2	-	-
17.05.2007	Kırklareli	Ahmetbey Pond	7,97	19,9	-	-

18.05.2008	Edirne	Kanlıgeçit Stream	9,01	19	-	-
18.05.2008	Edirne	Kanlıdere Stream	9,53	21,7	-	-
18.05.2008	Edirne	Kanlıdere Stream	9,72	22,6	-	-
18.05.2008	Edirne	Kuştepe Stream	9,91	19,6	-	-
18.05.2008	Edirne	Meriç River	8,6	22,7	-	-
22.06.2008	Edirne	Havsa Osmanlı Pond	8,33	26,6	6,22	-
22.06.2008	Edirne	Küküler Pond	8,6	27,3	6,8	-
22.06.2008	Edirne	Keramettin Pond	9,34	26,6	18,8	-
22.06.2008	Edirne	Süloğlu Dam lake	8,93	26	15,95	-
22.06.2008	Edirne	Lalapaşa Pond	8,88	28	16,3	-
22.06.2008	Edirne	Eskikadın Pond	8,93	28,5	14,75	-
22.06.2008	Edirne	Tunca River, Sarayiçi	8,46	27,1	14,2	-
22.06.2008	Edirne	Orhaniye, water body	9,75	29,3	18,86	-
16.07.2008	Kırklareli	Değirmen Stream	8,20	19,5	14,32	-
16.07.2008	Kırklareli	Bulanıkdere Stream	7,66	20,5	12,25	-
16.07.2008	Kırklareli	Madara Stream	7,12	19,8	10,23	-
16.07.2008	Kırklareli	Lake Mert	9,93	29,7	12,27	-
16.07.2008	Kırklareli	Lake Pedina	7,56	22	10,26	-
16.07.2008	Kırklareli	Lake Hamam	7,81	25,9	11,59	-
09.08.2008	Edirne	Bülbüldere Pond	10,2	28,3	-	671
09.08.2008	Edirne	Hasanpınar Pond	9,27	28,3	-	566
09.08.2008	Edirne	Beykonak Pond	9,88	28,1	-	590
09.08.2008	Edirne	Çöpköy Pond	9,83	29,3	-	363
09.08.2008	Edirne	Turnacı Pond	9,78	28,3	-	719
09.08.2008	Edirne	Conkara Pond	10,8	30,6	-	540
09.08.2008	Edirne	Kavaklı Pond	10,38	29,9	-	521
09.08.2008	Edirne	Meriç Pond	10,90	30,5	-	477
09.08.2008	Edirne	Küçükaltıağaç Pond	10,77	29,8	-	277
09.08.2008	Edirne	Karayusuflu Pond	10,62	28,7	-	1050
09.08.2008	Edirne	Değirmenciköy Pond	10,92	28,6	-	1113
10.08.2008	Edirne	Kurtbey, water body1	9,59	25,5	-	799
10.08.2008	Edirne	Kurtbey, water body2	10,56	24,7	-	302
10.08.2008	Edirne	Altınyazı Dam lake	9,12	26,3	0,7	645
10.08.2008	Edirne	Sultanköy Dam lake	9,36	24,5	0,9	892
10.08.2008	Edirne	Yenikarpuzlu Pond	9,52	26,4	-	716
10.08.2008	Edirne	Mecidiye Pond	9,26	27,2	1,3	754
10.08.2008	Edirne	Kadıköy Dam lake	9,2	25,3	1,14	402
10.08.2008	Edirne	Dokuzdere Pond	8,72	25,8	-	541
17.08.2008	Tekirdağ	Hayrabolu Pond	8,56	26,8	2,2	551
17.08.2008	Tekirdağ	Çerkezmüsellim Pond	8,73	28,6	-	550
17.08.2008	Tekirdağ	Hayrabolu Stream	7,83	23,2	1,5	820
17.08.2008	Tekirdağ	Bayramşah Pond	8,35	29,5	2,8	525
17.08.2008	Tekirdağ	Parmaksız Pond	8,35	28,4	-	546
17.08.2008	Tekirdağ	Bıyıkali Pond	8,75	28,5	2,09	446
17.08.2008	Tekirdağ	Yazır Pond	8,59	27,3	2,2	611
17.08.2008	Tekirdağ	Karaidemir Dam lake	9,03	30,6	2,8	658
17.08.2008	Tekirdağ	Balabancık Pond	8,7	28	-	279
17.08.2008	Tekirdağ	Şarköy Pond	8,56	27	3,04	436
17.08.2008	Tekirdağ	Çınarlıdere Stream	8,34	23	1,5	402
24.08.2008	Kırklareli	Minnetler, water body	8,12	26,2	0,9	1250
24.08.2008	Kırklareli	Kayalıköy Dam lake	8,88	26,1	1,1	288
24.08.2008	Kırklareli	Kofçaz Stream	8,15	21,7	0,9	593
24.08.2008	Kırklareli	Kırklareli Dam lake	8,55	26,5	0,9	336
24.08.2008	Kırklareli	Armağan Dam lake	8,71	27,3	1,9	426

24.08.2008	Kırklareli	Üsküp Pond	8,8	25	1,3	163
24.08.2008	Kırklareli	Sarıcaali Pond	8,83	27,1	-	832
31.08.2008	Tekirdağ	Dambaslar Stream	8,29	19	0,9	650
31.08.2008	Tekirdağ	Hanoğlu Pond	8,44	23	2	553
31.08.2008	Tekirdağ	Ulaş Pond	8,35	21,5	1,14	803
31.08.2008	Tekirdağ	Bahçeköy Stream	8,12	17,5	1,14	414
31.08.2008	Kırklareli	Kıyıköy Stream	8,26	22	1,5	455
01.09.2008	Kırklareli	Pabuçdere Dam lake	8,38	23	1,14	352
02.09.2008	Kırklareli	Ahmetbey Pond	8,7	20	1,9	1898
12.10.2008	Kırklareli	Bulanıkdere Stream	8,11	13,8	2,4	200
12.10.2008	Kırklareli	Madara Stream	7,63	14,6	2,8	231
12.10.2008	Kırklareli	Değirmen Stream	8,48	12,7	2,8	329
12.10.2008	Kırklareli	Lake Pedina	7,58	16,2	1,9	146
12.10.2008	Kırklareli	Lake Hamam	7,83	17	1,3	99
12.10.2008	Kırklareli	Lake Mert	8,55	17,6	0,9	19540
09.11.2008	Tekirdağ	Türkmenli Pond	8,51	15,1	2,8	400
25.04.2009	Kırklareli	Değirmen Stream	8,2	8,4	8,5	381
25.04.2009	Kırklareli	Bulanıkdere Stream	7,8	10,5	7,7	212
25.04.2009	Kırklareli	Madara Stream	7,38	9,8	8,1	268
25.04.2009	Kırklareli	Lake Hamam	6,8	16	8,6	97
25.04.2009	Kırklareli	Lake Mert	8,3	14,7	9,1	11650
25.04.2009	Kırklareli	Lake Erikli	7,4	13,4	6,3	33000

Results and Discussion

As a result of the examination of rotifer samples taken from 126 localities in Turkish Thrace (Edirne, Tekirdağ, Kırklareli) between September 2007-April 2009, a total of 115 Rotifera species belonging to 22 families have been identified. 47 of these species (referenced with stars) were new records for Turkish Thrace. Below is distribution according to localities and ecological properties determined for the species.

Philodina megalotrocha Ehrenberg, 1832: **Locs.** 1, 4, 9, 10, 14, 15, 20, 22, 26, 31, 35, 39, 41, 42, 43, 46, 47, 50, 54, 55, 57, 60, 62, 63, 65, 66, 67, 68, 69, 71, 75, 86, 94, 97, 98, 99, 101, 102, 104, 105, 107, 108, 110, 115, 116, 117, 118, 119, 121, 125.

It was found on *Myriophylum sp., Thypa sp., Potamogeton sp.* and *Phragmites sp.* pH: 7.2-9.9, Water temp.: 15-28 ^{o}C, DO: 1.3 mg L^{-1}, EC: 206-754 µS cm^{-1}.

****Rotaria neptunia*** (Ehrenberg, 1832): **Locs.** 23, 25, 38, 67, 68.

pH: 8.3; Water temp.: 29.5 ^{o}C; DO: 2.8 mg L^{-1}; EC: 525 µS cm^{-1}.

Dissotrocha aculeata (Ehrenberg, 1832): **Locs.** 4, 42, 71, 108.

It was found on *Thypa sp.* and *Ceratophyllum sp.* pH: 8.1-8.5; Water temp.: 26.2-27.3 ^{o}C; DO: 0.9-2.2 mg L^{-1}; EC: 611-1250 µS cm^{-1}.

****Adineta sp.*: Loc.** 71.

pH: 8.1; Water temp.: 26.2 ^{o}C; DO: 0.9 mg L^{-1}; EC: 1250 µS cm^{-1}.

***Habrotrocha sp.*: Locs.** 4, 39, 55, 57, 66, 71, 97, 117, 122.

It was found on *Potamogeton sp., Myriophyllum sp.* and *Phragmites sp.* pH: 8.2; Water temp.: 19 ^{o}C; DO: 0.9 mg L^{-1}; EC: 650 µS cm^{-1}.

****Epiphanes macroura*** (Barrois & Daday, 1894): **Locs.** 12, 17, 25.

pH: 10.9; Water temp.: 30.5 ^{o}C; EC: 477 µS cm^{-1}.

Proalides tentaculatus De Beuchamp, 1907: **Locs.** 2, 9, 17, 24, 26, 29, 44, 58.

****Proalides subtilis*** (Rodewald, 1940): **Locs.** 2, 6, 10, 14, 23, 29, 30, 31.

pH: 9.2; Water temp.: 28.3 ^{o}C; EC: 566 µS cm^{-1}.

****Anuraeopsis coelata*** (De Beuchamp, 1932): **Locs.** 16, 17, 24, 30.

Anuraeopsis fissa Gosse, 1851: **Locs.** 1, 6, 8, 9, 14, 16, 23, 25, 30, 37, 58, 67, 88, 94, 105, 121, 122.

It was found on *Trapa natans*. pH: 7.5-9.7; Water temp.: 16.2-29.3 ^{o}C; DO: 1.3-1.9 mg L^{-1}; EC: 99-550 µS cm^{-1}.

Anuraeopsis navicula Rousselet, 1911: **Locs.** 1, 2, 5, 6, 8, 9, 10, 14, 17, 22, 23, 24, 26, 29, 30, 31, 35, 36, 44, 45, 116, 122.

It was found on *Potamogeton sp.* pH: 7.8; Water temp.: 17^{o}C; DO: 1.3 mg L^{-1}; EC: 99 µS cm^{-1}.

Brachionus angularis Gosse, 1851: **Locs.** 1, 2, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 48, 53, 55, 56, 57, 58, 60, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 76, 77, 78, 79, 80, 81, 82, 86, 88, 89, 91, 92, 94, 95, 96, 98, 114, 116, 119, 121, 122.

It was found on *Myriophyllum sp.* pH: 6,8-10,3; Water temp.: 16-29.9 ^{o}C; DO: 0.9-6.2 mg L^{-1}; EC: 97-1250 µS cm^{-1}.

Brachionus bidentatus (Anderson, 1889): **Locs.** 12, 15, 25, 55, 119.

pH: 8,6- 10,7; Water temp.: 22.7- 29.8 ^{o}C; EC: 277 µS cm^{-1}.

Brachionus budapestinensis Daday, 1885: **Locs.** 2, 5, 9, 12, 23, 45, 48, 56, 94, 108

pH: 9.7, Water temp.: 29.3; ^{o}C; DO: 18.8 mg L^{-1}.

Brachionus calyciflorus Pallas, 1766: **Locs.** 4, 5, 6, 7, 10, 11, 12, 13, 14, 16, 17, 19, 21, 23, 25, 26, 27, 28, 33, 34, 41, 43, 44, 45, 46, 49, 52, 53, 56, 65, 66, 68, 71, 72, 73, 74, 76, 77, 78, 79, 80, 82, 89, 92, 94, 96, 115, 116, 117, 119, 121.

pH: 8.6; Water temp.: 17.8 ^{o}C.

Brachionus diversicornis (Daday, 1883): **Locs.** 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 21, 24, 25, 26, 27, 29, 30, 31, 32, 36, 37, 41, 44, 46, 49, 54, 55, 56, 58, 60, 66, 76, 80, 88, 94, 109, 112.

pH: 8.3-10.9; Water temp.: 25.3-30.6 ^{o}C; DO: 0.7- 6.2 mg L^{-1}; EC: 277-832 µS cm^{-1}.

Brachionus falcatus Zacharias, 1898: **Locs.** 4, 7, 13, 17, 18, 20, 22, 40, 42, 46, 47, 55, 59, 64, 68, 70, 71, 105, 122.

pH: 6.8-10.6; Water temp.: 16-29.9 ^{o}C; DO: 0.9-6.8 mg L^{-1}; EC: 97-1250 µS cm^{-1}.

****Brachionus forficula*** Wierzejski, 1891: **Locs.** 1, 3, 5, 6, 7, 14, 15, 16, 17, 23, 24, 26, 46, 89, 94.

pH: 8.3-10.9; Water temp.: 26.6-30.5 ^{o}C; DO: 6.22 mg L^{-1}; EC: 277-719 µS cm^{-1}.

Brachionus leydigi Cohn, 1862: **Locs.** 1, 5, 12, 13, 14, 25, 28, 33, 37, 38, 41, 61, 68, 66, 93, 96, 98, 101, 112.

pH: 7.6-9.2; Water temp.: 16.2-28.3 ^{o}C; EC: 566 µS cm^{-1}.

Brachionus patulus (O.F.Müller, 1786): **Locs.** 121 and 122

It was found on *Myriophyllum sp., Ceratophyllum sp.* and *Trapa natans*. pH: 7,5; Water temp.: 16.2 ^{o}C; DO: 1.9 mg L^{-1}; EC: 146 µS cm^{-1}.

Brachionus plicatilis O.F.Müller, 1786: **Locs.** 117, 123, 125.

pH: 7.4-9.7; Water temp.: 13.4-22.6 ^{o}C; DO: 6.3-9.1 mg L^{-1}; EC: 11650 µS cm^{-1}.

Brachionus quadridentatus Hermann, 1783: **Locs.** 2, 4, 9, 12, 22, 23, 25, 26, 29, 41, 42, 44, 45, 52, 53, 55, 56, 57, 60, 63, 68, 77, 80, 83, 89, 93, 96, 101, 112, 116, 117, 119, 121, 122, 123.

It was found on *Thypa sp., Myriophyllum sp., Ceratophyllum sp., Phragmites sp., Potamogeton sp.* and *Trapa natans*. pH: 6.8-10.5; Water temp.: 16-27.3 ^{o}C; DO: 0.9-2.2 mg L^{-1}; EC: 97-611 µS cm^{-1}.

Brachionus urceolaris (O.F.Müller, 1773): **Locs.** 1, 4, 5, 7, 9, 12, 14, 21, 25, 33, 37, 38, 41, 42, 43, 46, 48, 49, 53, 54, 55, 56, 59, 60, 66, 71, 73, 76, 77, 80, 83, 86, 89, 93, 94, 95, 96, 99, 114, 115, 116, 117, 119, 121, 122.

pH: 9.5-9.7; Water temp.: 21.7-22.6 ^{o}C.

Keratella cochlearis (Gosse, 1851): **Locs.** 1, 4, 5, 7, 8, 12, 14, 16, 17, 18, 19, 20, 21, 24, 25, 27, 28, 31, 33, 36, 37, 38, 39, 40, 41, 43, 44, 46, 47, 49, 50, 51, 52, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 78, 81, 88, 89, 92, 95, 96, 101, 102, 105, 114, 119, 124.

pH: 7.7-10.6; Water temp.: 15.1-30.6 ^{o}C; DO: 0.9-6.8 mg L^{-1}; EC: 163-1250 µS cm^{-1}.

Keratella tecta (Lauterborn, 1900): **Locs.** 1, 2, 4, 5, 6, 7, 8, 9, 11, 13, 15, 16, 17, 18, 19, 21, 22, 23, 24, 26, 27, 28, 29, 31, 33, 36, 37, 38, 44, 45, 46, 48, 49, 50, 52, 53, 54, 55, 56, 58, 60, 63, 67, 68,

69, 76, 79, 81, 88, 92, 94, 105, 116, 119, 122, 124.

pH: 6.8-9.8; Water temp.: 16-29.8 ^{o}C; DO: 8.6 mg L^{-1}; EC: 97-892 µS cm^{-1}.

Keratella tropica (Apstein, 1907): **Locs.** 9, 13, 19, 20, 25, 26, 27, 28, 31, 33, 43, 44, 45, 46, 48, 58, 59, 63, 66, 68, 73, 91

It was found on *Potamogeton sp.*. pH: 9.3-10.6; Water temp.: 24.5-28.7 ^{o}C; DO: 0.9-18.8 mg L^{-1}; EC: 799-1050 µS cm^{-1}.

Keratella quadrata (O.F.Müller, 1786): **Locs.** 2, 4, 11, 13, 14, 25, 26, 27, 28, 33, 38, 40, 41, 43, 44, 46, 47, 49, 50, 51, 52, 57, 58, 59, 60, 61, 63, 64, 66, 67, 68, 71, 72, 73, 76, 92, 95, 96, 97, 98, 101, 115, 117, 122, 125, 126.

pH: 7.4-9.7; Water temp.: 13.4-27.3 ^{o}C; DO: 6.3 mg L^{-1}; EC: 99-1250 µS cm^{-1}.

****Kellicottia longispina*** (Kellicott, 1879): **Locs.** 47, 48, 50, 54, 73, 74, 75.

pH: 8.7-8.9; Water temp.: 18.3-27.3 ^{o}C; DO: 1.9 mg L^{-1}; EC: 426 µS cm^{-1}.

Notholca acuminata (Ehrenberg, 1832): **Locs.** 26, 33, 57, 66, 72, 73, 75, 86, 92, 93, 98, 99, 102, 123, 125.

pH: 8.3-9.3; Water temp.: 14.7-21 ^{o}C; DO: 9.1 mg L^{-1}; EC : 11650 µS cm^{-1}.

Notholca squamula (O.F.Müller, 1786): **Locs.** 1, 5, 9, 11, 12, 14, 23, 37, 42, 46, 55, 63, 64, 66, 67, 70, 71, 72, 75, 76, 83, 84, 89, 90, 94, 99, 100, 102, 108, 112, 117, 120, 126.

pH: 9.5; Water temp.: 19.4-22.6 ^{o}C.

Platyias quadricornis (Ehrenberg, 1832): **Locs.** 4, 71, 72, 117, 121.

It was found on *Thypa sp.*. *Trapa natans* and *Ceratophyllum sp.*. pH: 8.1-9.7; Water temp.: 21.7-26.2 ^{o}C; DO: 0.9 mg L^{-1}; EC: 1250 µS cm^{-1}.

Euchlanis dilatata Ehrenberg, 1832: **Locs.** 2, 4, 7, 9, 18, 20, 33, 39, 40, 41, 42, 43, 46, 47, 48, 50, 54, 55, 57, 63, 64, 65, 66, 67, 72, 73, 83, 86, 94, 98, 99, 100, 104, 105, 106, 107, 108, 110, 115, 117, 118, 119, 124, 126.

It was found on *Thypa sp., Myriophyllum sp., Potamogeton sp., Ceratophyllum sp.* and *Phragmites sp.*. pH: 7.7- 9.9; Water temp.: 17.5-28.5 ^{o}C; DO: 0.9-6.8 mg L^{-1}; EC: 414-1113 µS cm^{-1}.

Euchlanis meneta Myers, 1930: **Locs.** 4, 12, 39, 54, 65, 69, 71, 83, 117.

It was found on *Thypa sp.*. pH: 8.3-9.7; Water temp.: 21.7-28 ^{o}C; DO: 0.9-16.3 mg L^{-1}; EC: 402-1250 µS cm^{-1}.

****Euchlanis deflexa*** (Gosse, 1851): **Locs.** 9, 18, 21, 33, 39, 40, 41, 42, 47, 48, 55, 69, 70, 83, 86, 92, 93, 95, 96, 98, 99, 100, 101, 102, 104, 105, 106, 107, 108, 110, 115, 121, 122, 126.

It was found on *Thypa sp.* and *Potamogeton sp.*. pH: 6.8-8.5; Water temp.: 10.5-27.3 ^{o}C; DO: 1.1-2.8 mgL^{-1}; EC: 97-611 µS cm^{-1}.

****Euchlanis incisa*** Carlin, 1939: **Locs.** 26, 104, 105, 110.

pH: 7.6-8.1; Water temp.: 14.6-17.5 ^{o}C; DO: 1.1-2.8 mg L^{-1}; EC: 231-414 µS cm^{-1}.

****Euchlanis lyra*** Hudson, 1886: **Locs.** 13, 16, 39, 41, 42, 63, 66, 72, 75, 83, 86, 93, 98, 100, 104, 106, 107, 120.

pH: 8.2-9.3; Water temp.: 8.4-19.4 ^{o}C; DO: 8.5 mg L^{-1}; EC: 381 µS cm^{-1}.

Mytilina mucronata (Müller, 1773): **Loc.** 121.

pH: 6.8; Water temp.: 16 ^{o}C; DO: 8.6 mg L^{-1}; EC: 97 µS cm^{-1}.

Mytilina ventralis (Ehrenberg, 1832): **Locs.** 47.

It was found on *Potamogeton sp.*.

Lopocharis salpina (Ehrenberg, 1834): **Locs.** 6, 26, 38, 47, 48, 63, 71, 110, 117, 121, 122.

It was found on *Trapa natans*. pH: 7.6-9.7; Water temp.: 14.6-27.3 ^{o}C; DO: 0.9- 6.8 mg L^{-1}; EC: 231-1250 µS cm^{-1}.

Trichotria pocillum (O.F.Müller, 1776): **Locs.** 47, 71, 72, 73, 77, 82, 105, 117, 121.

It was found on *Myriophyllum sp.*. pH: 7.9-9.7; Water temp.: 17.5-22.6 ^{o}C.

Trichotria tetractis (Ehrenberg, 1830): **Locs.** 33, 39, 47, 57, 65, 72, 86, 117, 124.

It was found on *Thypa sp.* and *Myriophyllum sp.*. pH: 7.8-9.7; Water temp.: 15.1-27.3 ^{o}C; DO: 1.5-6.8 mg L^{-1}; EC: 400-820 µS cm^{-1}.

Colurella adriatica Ehrenberg, 1831: **Locs.** 26, 33, 39, 64, 66, 70, 83, 94, 102, 105, 107, 108, 110, 117, 121, 122, 123.

It was found on *Thypa sp., Potamogeton sp., Myriophyllum sp., Ceratophyllum sp.* and *Trapa*

natans. pH: 7.8-9.7; Water temp.: 10.5-22.6 ^{o}C; DO: 7.7 mg L^{-1}; EC: 212 µS cm^{-1}.

Colurella uncinata (Müller, 1773): **Locs.** 39, 63, 66, 121, 122.

It was found on *Myriophyllum sp., Potamogeton sp., Trapa natans, Ceratophyllum sp.*.

Colurella colurus (Ehrenberg, 1830): **Locs.** 65, 72, 82, 97, 106, 107, 120.

pH: 8.2-9.1; Water temp.: 8.4-26.5 ^{o}C; DO: 8.5 mg L^{-1}; EC: 336-381 µS cm^{-1}.

Lepadella acuminata (Ehrenberg, 1834): **Locs.** 22, 57, 76, 121, 122.

It was found on *Thypa sp., Potamogeton sp., Trapa natans* and *Myriophyllum sp.*. pH: 8.83; Water temp.: 27.1 ^{o}C; EC: 832 µS cm^{-1}.

Lepadella patella (O.F.Müller, 1786): **Locs.** 40, 46, 47, 65, 70, 105, 110.

It was found on *Myriophyllum sp.*. pH: 7.6-8.2; Water temp.: 14.6-22 ^{o}C; DO: 1.5-2.8 mg L^{-1}; EC: 231-455 µS cm^{-1}.

Lepadella ovalis (O.F.Müller, 1786): **Locs.** 12, 13, 14, 42, 47, 97, 100, 105, 110, 117, 121.

It was found on *Potamogeton sp.* and *Myriophyllum sp.*. pH: 7.3-9.7; Water temp.: 9.8-22.6 ^{o}C; DO: 1.5 mg L^{-1}; EC: 268-455 µS cm^{-1}.

****Lepadella ehrenbergi*** (Perty, 1850): **Loc.** 39.

It was found on *Potamogeton sp.*. pH: 8.5; Water temp.: 26.8 ^{o}C; DO: 2.2 mg L^{-1}; EC: 551 µS cm^{-1}.

Lecane bulla (Gosse, 1851): **Locs.** 4, 7, 10, 12, 14, 22, 26, 33, 39, 41, 42, 47, 48, 55, 63, 65, 66, 71, 98, 105, 117, 121, 122.

It was found on *Thypa sp., Potamogeton sp., Phragmites sp., Myriophyllum sp., Trapa natans* and *Ceratophyllum sp.*. pH: 7.5-9.7; Water temp.: 16.2-28.3 ^{o}C; DO: 0.9-18.8 mg L^{-1}; EC: 146-1250 µS cm^{-1}.

Lecane closterocerca (Schmarda, 1859): **Locs.** 39, 47, 57, 65, 66, 67, 72, 98, 99, 105, 110, 117, 121, 122, 123.

It was found on *Potamogeton sp., Thypa sp., Trapa natans, Ceratophyllum sp.* and *Myriophyllum sp.*. pH: 7.7-9.7; Water temp.: 19-26.8 ^{o}C; DO: 0.9-2.2 mg L^{-1}; EC: 336-803 µS cm^{-1}.

Lecane hamata (Stokes, 1896): **Locs.** 4, 22, 25, 31, 39, 47, 46, 66, 94, 98, 121, 122.

It was found on *Thypa sp., Potamogeton sp., Myriophyllum sp., Trapa natans* and *Ceratophyllum sp.*. pH: 8.2-9.7; Water temp.: 19-29.3 ^{o}C; DO: 0.9-18.8 mg L^{-1}; EC: 650-799 µS cm^{-1}.

****Lecane hastata*** (Murray, 1913): **Locs.** 5, 6, 9, 10, 12, 14, 25, 30, 31, 35, 38, 41, 61, 116.

pH: 8.3-9.5; Water temp.: 25.5-29.5 ^{o}C; DO: 2.8 mg L^{-1}; EC: 525-799 µS cm^{-1}.

Lecane inermis (Bryce, 1892): **Locs.** 4, 9 ve 53

It was found on *Thypa sp.*. pH: 8.5; Water temp.: 26.8 ^{o}C; DO: 2.2 mg L^{-1}; EC: 551 µS cm^{-1}.

Lecane furcata (Murray, 1913): **Locs.** 7, 9, 22, 39, 47, 58, 105, 121, 122.

It was found on *Thypa sp., Nuphar lutea, Potamogeton sp., Trapa natans, Ceratophyllum sp.* and *Myriophyllum sp.*. pH: 8.2-9.7; Water temp.: 22-28.3 ^{o}C; DO: 1.5 mg L^{-1}; EC: 455-719 µS cm^{-1}.

****Lecane flexilis*** (Gosse, 1886): **Locs.** 71, 105, 121.

It was found on *Myriophyllum sp.* pH: 8.2; Water temp.: 22 ^{o}C; DO: 1.5 mg L^{-1}; EC: 455 µS cm^{-1}.

****Lecane lamellata*** (Daday, 1893): **Loc.** 123.

pH: 8.3-8.5; Water temp.: 14.7-17.6 ^{o}C; DO: 9.1 mg L^{-1}; EC: 11650-19540 µS cm^{-1}.

Lecane lunaris (Ehrenberg, 1832): **Locs.** 13, 26, 33, 39, 40, 42, 47, 54, 55, 57, 65, 66, 67, 75, 79, 83, 105, 108, 110, 117, 121.

It was found on *Thypa sp.,Potamogeton sp., Myriophyllum sp., Phragmites sp.* and *Ceratophyllum sp.* pH: 7.7-9.7; Water temp.: 20.6-28 ^{o}C; DO: 2.2-14.75 mg L^{-1}; EC: 551 µS cm^{-1}.

Lecane luna (O.F.Müller, 1776): **Locs.** 6, 7, 10, 12, 14, 26, 33, 39, 41, 42, 47, 48, 55, 59, 63, 64, 65, 66, 67, 69, 71, 72, 73, 74, 75, 79, 96, 117, 121, 124.

It was found on *Thypa sp., Potamogeton sp., Phragmites sp., Myriophyllum sp., Trapa natans* and *Ceratophyllum sp.*. pH: 7.6-10.8; Water temp.: 15.1-30.6 ^{o}C; DO: 0.9-14.2 mg L^{-1}; EC: 163-1250 µS cm^{-1}.

***Lecane nana* (Murray, 1913): Locs.** 13, 105, 122.

pH: 8.2; Water temp.: 22 ^{o}C; DO: 1.5 mg L^{-1}; EC: 455 µS cm^{-1}.

Lecane quadridentata (Ehrenberg, 1832): **Locs.** 39, 42, 47.

It was found on *Potamogeton sp.* pH: 8.5; Water temp.: 26.8°C; DO: 2.2 mg L^{-1}; EC: 551 µS cm^{-1}.

Lecane stenroosi (Meissner, 1908): **Locs.** 5, 41, 45, 67, 68, 79.

pH: 8.3-8.7; Water temp.: 20-23 °C; DO: 1.1-1.9 mg L^{-1}; EC: 352-1898 µS cm^{-1}.

****Lecane pyriformis*** (Daday, 1905): **Locs.** 22, 39, 105, 122.

It was found on *Thypa sp., Potamogeton sp.* and *Trapa natans*. pH: 8.2; Water temp.: 22 °C; DO: 1.5 mg L^{-1}; EC: 455 µS cm^{-1}.

****Lecane stichaea*** Hauer, 1940: **Locs.** 105, 121.

It was found on C*eratophyllum sp., Trapa natans* and *Myriophyllum sp.* pH: 8.2; Water temp.: 22 °C; DO: 1.5 mg L^{-1}; EC: 455 µS cm^{-1}.

****Lecane ungulata*** Gosse, 1887: **Locs.** 39, 57, 66, 105, 121.

It was found on *Thypa sp.* pH: 8.5; Water temp.: 26.8 °C; DO: 2.2 mg L^{-1}; EC: 551 µS cm^{-1}.

****Proales fallaciosa*** Wulfert, 1937: **Locs.** 66, 82, 83, 85, 86, 87, 90, 93, 95, 96, 97, 98, 100, 103, 105, 106, 115, 117.

It was found on *Potamogeton sp.*

Cephalodella gibba (Ehrenberg, 1838): **Locs.** 2, 9, 12, 13, 17, 23, 35, 43, 45, 46, 47, 64, 65, 66, 67, 71, 72, 80, 83, 86, 87, 93, 94, 97, 98, 101, 102, 104, 105, 107, 108, 116, 117, 125.

It was found on *Potamogeton sp.* and *Myriophyllum sp.*. pH: 7.4-9.7; Water temp.: 13.4-22.6 °C; DO: 6.3 mg L^{-1}; EC: 650-33000 µS cm^{-1}.

****Cephalodella forficula*** Ehrenberg, 1830: **Locs.** 30, 55, 121, 122.

It was found on *Phragmites sp., Ceratophyllum sp.* and *Myriophyllum sp.*

****Cephalodella megalocephala*** (Glascott, 1893): **Loc.** 80.

***Monommata sp.*: Locs.** 47, 121.

It was found on *Potamogeton sp., Myriophyllum sp.* and *Trapa natans*.

****Notommata glyphura*** Wulfert 1935: **Locs.** 9, 66, 97, 117, 121.

It was found on *Ceratophyllum sp.* and *Myriophyllum sp.* pH: 8.6-9.7; Water temp.: 15.2-22.6 °C.

****Notommata copeus*** Ehrenberg 1834: **Locs.** 117.

pH: 9.5-9.7; Water temp.: 21.7-22.6 °C.

Itura myersi Wulfert, 1935: **Locs.** 6, 10, 22, 66, 97, 115, 117, 121.

It was found on *Thypa sp.* and *Ceratophyllum sp.*. pH: 7.5-9.7; Water temp.: 15.2-22.6 °C; DO: 1.9 mg L^{-1}; EC: 146 µS cm^{-1}.

****Eospora ehrenbergi*** Weber, 1918: **Locs.** 42, 123.

pH: 8.5; Water temp.: 27.3 °C; DO: 2.2 mg L^{-1}; EC: 611 µS cm^{-1}.

****Pleurotrocha petromyzon*** Ehrenberg, 1830: **Locs.** 85, 90, 97, 115.

****Trichocerca capucina*** Wierzejski&Zacharias, 1893: **Locs.** 1, 4, 5, 7, 11, 14, 16, 19, 20, 21, 24, 27, 37, 38, 40, 41, 43, 48, 54, 57, 60, 65, 67, 68, 69, 74, 76, 78, 88, 89.

pH: 7.9-10.9; Water temp.: 17.5- 30.6 °C; DO: 0.7-16 mg L^{-1}; EC: 352-1113 µS cm^{-1}.

Trichocerca elongata (Gosse, 1886): **Locs.** 1, 2, 5, 6, 9, 10, 14, 17, 22, 23, 25, 26, 44, 94.

pH: 9.75; Water temp.: 29.3 °C; DO: 18.8 mg L^{-1}.

****Trichocerca cylindrica*** (Imhof, 1891): **Locs.** 16, 37, 41, 46, 48, 56, 57, 60, 67, 105, 122.

pH: 7.7-8.3; Water temp.: 20.6-23 °C; DO: 1.1 mg L^{-1}; EC: 352 µS cm^{-1}.

****Trichocerca iernis* (Gosse 1887): Locs.** 121, 122.

It was found on *Trapa natans*. pH: 7.81; Water temp.: 25 °C; DO: 11.5 mg L^{-1}.

****Trichocerca longiseta*** (Schrank, 1802): **Loc.** 121.

****Trichocerca porcellus*** (Gosse, 1886): **Locs.** 13, 25, 26, 39, 47, 65, 71, 121.

Trichocerca pusilla (Jennings, 1903): **Locs.** 2, 14, 17, 31, 39, 43, 47, 48, 53, 58, 61, 71, 75, 122.

pH: 7.8-10.9; Water temp.: 17-30.5 °C; DO: 1.3-18.8 mg L^{-1}; EC: 99-477 µS cm^{-1}.

Trichocerca rattus (O.F.Müller, 1776): **Locs.** 13, 47, 109, 121, 122.

It was found on *Potamogeton sp.*

***Trichocerca similis** (Wierzejski, 1893): **Locs.** 48, 50, 71, 75, 122.

pH: 6.8-9.3; Water temp.: 16-26.6 ^{o}C; DO: 8.6 mg L^{-1}; EC: 97-1250 µS cm^{-1}.

***Trichocerca tenuior** (Gosse, 1886): **Locs.** 121.

It was found on *Trapa natans*. pH: 7.56; Water temp.: 22 ^{o}C; DO: 10.2 mg L^{-1}.

***Trichocerca tigris** (Müller, 1786): **Locs.** 121, 122.

***Trichocerca insignis** (Herrick, 1885): **Locs.** 122.

pH: 7.81; Water temp.: 25.9 ^{o}C; DO: 11.59 mg L^{-1}.

Synchaeta pectinata (Ehrenberg, 1832): **Locs.** 1, 3, 4, 5, 7, 11, 12, 14, 16, 17, 18, 20, 21, 22, 24, 26, 29, 30, 31, 33, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 54, 55, 56, 57, 58, 60, 62, 63, 64, 65, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 81, 82, 86, 89, 92, 96, 98, 101, 102, 105, 114, 121, 124, 125.

pH: 7.5-10.6; Water temp.: 15.1-28.7 ^{o}C; DO: 0.9-16.3 mg L^{-1}; EC: 146-1250 µS cm^{-1}.

Synchaeta oblonga Ehrenberg, 1832: **Locs.** 1, 2, 7, 11, 12, 16, 18, 20, 23, 26, 28, 29, 33, 37, 38, 39, 41, 42, 47, 50, 54, 58, 60, 61, 62, 63, 64, 66, 67, 72, 73, 74, 75, 82, 88, 92, 93, 94, 102, 105, 110, 119, 122, 123, 124, 125.

***Synchaeta stylata** (Wierzejski, 1893): **Loc.** 72

***Synchaeta sp.*: Loc.** 123.

***Polyarthra euryptera** (Wierzejski, 1893): **Loc.** 27

Polyarthra vulgaris (Carlin, 1943): **Locs.** 1, 2, 4, 5, 6, 7, 8, 11, 14, 15, 16, 17, 18, 19, 20, 21, 27, 28, 29, 34, 37, 38, 39, 40, 41, 42, 43, 46, 47, 48, 50, 52, 53, 54, 55, 57, 59, 60, 61, 63, 64, 65, 67, 69, 72, 73, 74, 75, 76, 78, 81, 88, 94, 105, 109, 122.

Polyarthra dolichoptera (Idelson, 1925): **Locs.** 1, 2, 6, 7, 10, 12, 14, 17, 20, 22, 23, 24, 26, 29, 31, 33, 37, 38, 41, 42, 46, 47, 54, 55, 58, 63, 64, 71, 76, 79, 81, 92, 95, 105, 122.

Polyarthra remata (Skorikov, 1896): **Locs.** 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 14, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 41, 42, 44, 45, 46, 47, 48, 50, 54, 56, 57, 58, 60, 63, 64, 66, 67, 68, 69, 71,73, 74, 75, 79, 80, 81, 82, 87, 88, 89, 95, 96, 98, 99, 105, 114, 116, 121, 122, 124.

***Asplanchna girodi** (De Guerne, 1888): **Loc.** 36.

Asplanchna priodonta Gosse, 1850: **Locs.** 1, 3, 4, 5, 6, 7, 8, 11, 12, 14, 16, 17, 18, 19, 20, 21, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 62, 63, 64, 65, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 78, 81, 89, 94, 102, 105, 114, 121, 122, 125.

Asplanchna sieboldi (Leydig, 1854): **Locs.** 4, 5, 8, 9, 13, 14, 15, 17, 18, 19, 20, 21, 25, 26, 27, 28, 29, 30, 32, 33, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 48, 49, 53, 55, 58, 59, 60, 62, 63, 67, 68, 74, 75, 76, 78, 79, 88, 89, 116.

Dicranophorus grandis (Ehrenberg, 1832): **Locs.** 4, 9, 39, 41, 46, 47, 71, 72, 110, 115, 117.

***Dicranophoroides caudatus** (Ehrenberg, 1834): **Loc.** 121.

Paradicranophorus hudsoni Glascott, 1893: **Locs.** 86, 99, 115, 117, 118, 126.

Encentrum saundersiae (Hudson, 1885): **Loc.** 122.

***Floscularia sp.*: Locs.** 4, 42, 46, 47, 55, 65, 66, 71, 77, 105, 121, 122.

Testudinella patina (Hermann, 1783): **Locs.** 41, 42, 50, 62, 63, 66, 70, 73, 80, 86, 100, 104, 121, 123, 125.

Testudinella emarginula (Stenroos, 1898): **Locs.** 39, 105, 121.

***Testudinella mucronata** (Gosse, 1886): **Loc.** 105.

***Testudinella parva** (Ternetz, 1892): **Loc.** 39.

Pompholyx sulcata (Hudson, 1885): **Locs.** 1, 4, 8, 11, 14, 17, 18, 20, 25, 26, 27, 28, 30, 32, 33, 37, 38, 41, 43, 46, 48, 49, 50, 51, 52, 53, 54, 55, 58, 60, 61, 63, 64, 66, 67, 68, 69, 70, 73, 75, 76, 81, 86, 105, 122.

Filinia longiseta (Ehrenberg, 1834): **Locs.** 2, 5, 6, 12, 14, 15, 17, 25, 26, 28, 29, 33, 35, 37, 38, 39, 41, 42, 43, 45, 46, 55, 56, 57, 60, 66, 67, 68, 70, 74, 77, 78, 80, 91, 105, 116, 121, 122.

Filinia longiseta saltator Gosse, 1886: **Locs.** 31, 79, 89, 94.

Filinia opoliensis (Zacharias, 1898): **Locs.** 4, 7, 11, 13, 18, 20, 25, 28, 33, 39, 40, 42, 43, 45, 52, 55, 59, 64, 65, 67, 70, 73, 109.

Filinia terminalis (Plate, 1886): **Locs.** 1, 4, 5, 7, 11, 12, 14, 16, 17, 18, 23, 26, 25, 29, 30, 32, 33, 37, 39, 40, 41, 43, 44, 46, 48, 54, 55, 57, 58, 60, 66, 68, 70, 71, 73, 74, 75, 76, 80, 86, 89, 92, 95, 98, 105, 116, 122, 125.

****Conochilus dossuarius*** Hudson, 1875: **Locs.** 1, 3, 4, 5, 6, 7, 8, 10, 11, 13, 15, 16, 17, 18, 20, 21, 24, 25, 26, 29, 30, 32, 33, 37, 38, 39, 40, 41, 42, 43, 46, 47, 48, 49, 50, 54, 55, 60, 61, 63, 64, 67, 68, 69, 70, 72, 73, 74, 75, 76, 78, 88, 89.

****Conochilus unicornis*** Rousselet, 1892: **Locs.** 40, 121.

Hexarthra fennica (Levander, 1892): **Locs.** 28, 37, 41, 45, 48.

****Hexarthra mira*** Hudson, 1871: **Locs.** 33, 65, 73.

****Collotheca ornata*** (Ehrenberg, 1832): **Locs.** 1, 3, 5, 6, 7, 9, 13, 14, 15, 20, 21, 26, 29, 35, 39, 54, 60, 61, 63, 64, 66, 70, 72, 74, 75, 77.

It was found on *Thypa sp., Potamogeton sp., Myriophyllum sp.* and *Trapa natans*. pH: 8.2-10.7; Water temp.: 16.2-29.8 ^{o}C; DO: 1.1-2 mg L^{-1}; EC: 277-803 µS cm^{-1}.

At 65 of 126 localities physicochemical parameters such as water temperature, pH, conductivity, and dissolved oxygen were also measured during the field study to show the overall characteristics of Turkish Thrace and the three provinces (Table 2).

When the distribution of species identified in Turkish Thrace is examined, it is seen that *Brachionus angularis, Asplanchna priodonta, Polyarthra remata, Synchaeta pectinata* and *Keratella cochlearis* are the most common species in the region. These are cosmopolite species with wide distribution. They can tolerate low and high ranges of temperature and salinity and are seen in waterbody throughout the year. So, they can be found in every kind of aquatic ecosystem (Koste, 1978a; De Manuel Barrabin, 2000; Fontenato et al., 2008). Two rare species in the region, *Mytilina ventralis* and *Mytilina mucronata*, inhabit in littoral and benthic region and rarely in plankton. *Lecane lamellata* prefers saline habitats (Segers et al., 1992; Fontenato et al., 2008). So, it was found only in lake Mert which is a lagoon in this study. The distribution of *T.bicristata, T.longiseta, T.tenuior* and *T.insignis* is limited with lakes Hamam and Pedina. These species are periphytic (Pejler and Berzins, 1993a). These species are found less in number in the region because sampling was done specifically for planktonic species.

When the distribution of 115 species which were identified according to provinces is examined, it is seen that Kırklareli has the highest number in species richness with 99. Edirne is the second with 97 species and Tekirdağ is the third with 72 species. 82 species have been recorded in Edirne as result of former studies done in Turkish Thrace, (DSİ., 1986; Segers et al., 1992; Erdoğan and Güher, 2005; Güher and Erdoğan, 2008). 65 of these species are found in this study as well, 17 of them could not be found and 32 new species discovered in this study. Although, some rotifer species exist throughout the year, some exist in spesific seasons of the year or disappear for a long time and appear again (Kolisko, 1974; Pennak, 1989). It is thought that this is the reason why 17 species identified in the former studies could not be identified in this study. 72 species which were identified in this study are evaluated as first records for Tekirdağ because there weren't any former studies concerning Rotifera in Tekirdağ. In Kırklareli, Güher (2003) had examined zooplanktonic organisms of Mert, Erikli, Hamam and Pedina lakes and had recorded 17 genuses belonging to Rotifera. One of these, genus *Ascomorpha*, could not be found in this study. 99 species in this study are evaluated as first records for Kırklareli, because there is no record on rotifera in species level in the region.

Edirne is rich in wetlands, especially with ponds, and has the highest number of sampling locality (78 localities). Edirne is expected to have much more species because rotifera species are more common in shallow waters. In Tekirdağ and Kırklareli, number of localities are equal where samplings are done (24 localities). But when the number of species identified is considered, it is seen that Kırklareli is superior to other provinces in terms of species richness. Kırklareli and especially İğneada is a region that hosts specific habitats such as lagoons, containing high diversity of species. Besides, there are streams sourcing from Istranca Mountains feeding lakes and ponds in Kırklareli. Tekirdağ has wide and flat agricultural lands and a limited number of water reservoirs which are built for agricultural irrigation. In addition, pollution caused by intensive industrial areas limit species diversity in Tekirdağ.

The physicochemical parameters measured in Turkish Thrace vary as follows: pH 6.8-10.9,

Conductivity 97-33000 µS cm^{-1} and Dissolved oxygen 0.7-18.8 mg L^{-1} (Tablo 2).

When measured pH values are considered, it is seen that freshwaters in Turkish Thrace are alkaline. pH is higher in Edirne than other provinces. This situation is supported by *Brachionus, Filinia* and *Polyarthra* species which are characteristic for the alkaline waters and which widely distribute in Edirne (Emir, 1989; Koste, 1978a; Kaya and Altındağ, 2007a).

Although electrical conductivity is lower in Tekirdağ, it was found quite high in Mert and Erikli lagoons located in İğneada region of Kırklareli. The extensive existance of *Brachionus plicatilis, Synchaeta sp.* and *Hexartra* species in these lakes, which are usually common in saline water, supports this view (Altındağ and Sözen, 1996).

When measured dissolved oxygen values are examined it is seen that, the amount of dissolved oxygen in ponds and small lakes, is related to the increase in phytoplankton density due to the increase in water temperature in spring.

Polyarthra vulgaris and *Keratella quadrata* are found in oxygen-rich waters (Koste, 1978a; Emir and Demirsoy, 1996; Pennak, 1989). These species are found commonly in ponds and small lakes in this study, too. The distribution of Rotifera species is directly proportional to water temperature. Branco et al. (2002) stated that the existence of *E.dilatata.* and *B.calyciflorus* is closely related to the increase in water temperature. Most of the species identified in the region, appear due to the increase in water temperature, especially in spring and summer.

Of these species identified in Turkish Thrace, *Rotaria neptunia, Anuraeopsis coelata, A.fissa, Brachionus angularis, B.calyciflorus, B.leydigi, B.plicatilis, Keratella quadrata, K. tecta, Euchlanis dilatata, Mytilina mucronata, Trichotria pocillum, Lecane lunaris, Pleurotrocha petromyzon, Trichocerca capucina, T.cylindrica, T.pusilla, T.porcellus, Polyarthra dolichoptera, P.vulgaris, P.euryptera, Synchaeta pectinata, S.oblonga, Asplanchna girodi, Pompholyx sulcata, Filinia longiseta* and *F.terminalis* are indicators of eutrophycation (Kolisko, 1974; Koste, 1978a; Berzins and Pejler, 1989; Pejler and Berzins, 1993a; Altındağ and Sözen 1996; Michaloudi et al.,1997; Altındağ and Özkurt, 1998; Bekleyen, 2001, 2003; De Manuel Barrabin, 2000; Koste and Terlutter, 2001; Bekleyen and Taş, 2008; Kehayıas et al., 2008). In addition, *Lopocharis salpina* is indicator of dystrophy, *Kellicottia longispina, Keratella cochlearis, Asplanchna priodonta, Conochilus unicornis* are indicators of oligotrophy (Kolisko, 1974; Koste, 1978a; Emir and Demirsoy, 1996; De Manuel Barrabin, 2000).

Whereas the species which are indicator of eutrophy distribute widespreadly, species which are indicator of oligotrophy have limited distribution. This situation shows that most of the wetlands in the region are eutrophic. Besides, distribution of rotifer species identified gives information about pollution degree of wetlands in Turkish Thrace.

Asplanchna priodonta, Keratella cochlearis, Trichocerca bicristata and *T.porcellus* are indicator of Oligosaprobi, *Asplanchna girodi, A.sieboldi, Philodina megalotrocha, Dissotrocha aculeata, Trichotria pocillum, T.tetractis, Mytilina ventralis, Lepadella patella, Lecane luna, L.closterocerca, L.lunaris, L.bulla, Platyias quadricornis, Colurella adriatica, Euchlanis dilatata, E.incisa, Notommata copeus, Cephalodella gibba, Trichocerca rattus, T.bicristata, T.longiseta* and *Polyarthra vulgaris* are indicator of Oligo-Beta saprobi, *Testudinella patina, Pompholyx sulcata* and *Filinia longiseta* are indicator of Beta mesosaprobi, *Brachionus angularis, B.calyciflorus* and *Dicranophoroides caudatus* is indicator of Alfa-Beta mesosaprobi and *Lepadella patella* is indicator of Alfa-mesosaprobi. However, *Rotaria neptunia* is indicator of polimesosaprobi (Kolisko, 1974; Koste, 1978a; Berzins and Pejler, 1989; Pejler and Berzins, 1993a; De Manuel Barrabin, 2000; Tasevska et al., 2004; Shumka and Miho, 2006).

The majority of the species commonly found in Turkish Thrace, inhabit in less and moderately polluted waters. But, some of these species like *Brachionus angularis* and *Brachionus calyciflorus* which are widely distributed in the region inhabit critically polluted waters. This situation indicates that wetland in Turkish Thrace is gradually polluted, when we consider whole Turkish Thrace.

70 of the Rotifera species identified in Turkish Thrace are also seen in Balkan countries. (Zarfdjian and Economidis 1989; Zarfdjian et al., 1990; Michaloudi et al., 1997; Zarfdjian et al., 2000; Michaloudi and Kostecka 2004; Tasevska et al., 2004; Djurkovic et al., 2008; Kozuharov et

al., 2009, Tasevska et al., 2006). Rotifera species distribute widely in the world because rotifer eggs can be carried easily everywhere by streams, birds, other animals and wind. In addition to these, Northeast South bird migration route passing through Turkish Thrace and Arda from Greece, Tunca and Meriç from Bulgaria pouring into Aegean sea by crossing the region, cause the species which are common in Balkans appear in Turkish Thrace as well. Therefore, the Rotifera fauna of Turkish Thrace is similar to Balkan fauna.

Ustaoğlu, (2004) who collected the researches concerning Rotifera in Turkish freshwaters, listed 229 species belonging to Rotifera in Turkey and together with the following studies, this number increased to 297. Number of species in Turkish Thrace increased to 138 together with former studies. If it was considered that Turkish Thrace covers 3% of Turkish mainland, it is concluded that Turkish Thrace is rich in species diversity having border to Balkan countries cause an increase in species diversity and spread of the species in Balkans into Turkish Thrace.

Conclision

As a result, if the former studies performed in the region were also considered, it is visible that the Rotifera fauna of Edirne is represented with 114 species, Tekirdağ with 72 species, Kırklareli with 99 species and Turkish Thrace with 138 species. Turkish Thrace and especially İğneada region support high biodiversity. However, according to the rotifer species identified in the region, it can be said that water bodies in Thrace are eutrophic and are getting polluted.

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