

Appendix. Annotated checklist of Branchiopoda in Uzbekistan

Article title: Revised checklist of Branchiopoda (Crustacea) in Uzbekistan highlights existing blind spots in the knowledge on regional fauna

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19 **Phylum Arthropoda Latreille, 1829**

20 **Subphylum Crustacea Brünnich, 1772**

21 **Class Branchiopoda Latreille, 1817**

22 **Subclass Sarsostraca Tasch, 1969**

23 **Order Anostraca Sars, 1867**

24 **Family Artemiidae Leach, 1819**

25 ****Artemia* sp.**

26 *Artemia parthenogenetica* Bowen et Sterling, 1978

27 **Previous observations. Karakalpakstan:** Large Aral Sea (Arashkevich et al. 2009; Marden et
28 al. 2012; Plotnikov 2013; Aladin et al. 2019; Plotnikov et al. 2021; Utemuratova et al. 2022)

29 **Remarks.** The genus is widely distributed in the south temperate zone of Eurasia (Boyer et al.
30 2021). In this study, two parthenogenetic populations of *Artemia* were observed in brackish
31 waters of the Arnasay lake system, Djizak Province (locs. 2, 11). Representatives of *Artemia*
32 have been repeatedly encountered in the Large Aral Sea and neighbouring saline water bodies
33 and were previously recorded from the territory of Uzbekistan as *Artemia parthenogenetica*
34 Bowen et Sterling, 1978, now considered as *nomen dubium* (Asem et al. 2024). To date, at least
35 five valid *Artemia* species and several parthenogenetic lineages of different ploidy (2n, 3n,
36 5n) have been reported from Asia (Asem et al. 2023 2024). Thus, populations of *Artemia* from
37 Uzbekistan require specific morphological and genetic studies.

38

39 **Family Branchinectidae Daday, 1910**

40 ***Branchinecta orientalis* Sars, 1901**

41 **Previous observations. Bukhara Province:** Bukhara (Daday 1910)

42 **Remarks.** The species is widely distributed in the South Palearctic occurring in freshwater
43 and brackish temporary pools (Atashbar et al. 2016). The presence of *Branchinecta orientalis*
44 in Uzbekistan should be confirmed.

45

46 **Family Thamnocephalidae Packard, 1883**

47 ***Phallocryptus spinosus* (Milne-Edwards, 1840) (sensu Rogers, 2003)**

48 *Branchinella spinosa* (Milne-Edwards, 1840)

49 **Previous observations. Karakalpakstan:** The Large Aral Sea (Rogers 2003; Ketmaier et al.
50 2008)

51 **Remarks.** The species is widely distributed in the South Palearctic (Ketmaier et al. 2008),
52 preferring brackish and saline waters. In Uzbekistan, *Phallocryptus spinosus* was only
53 observed in the Aral Sea (Ketmaier et al. 2008).

54

55

56 **Subclass Phyllopoda Preuss, 1951**

57 **Order Notostraca Sars, 1867**

58 **Family Triopsidae Keilhack, 1909**

59 *Triops cancriformis* (Bosc, 1801) *s. lat.*

60 **Previous observations. Samarkand Province:** Samarkand (Mukhamediev 1986)

61 **Remarks.** *Triops cancriformis* is a species complex widespread in Eurasia and North Africa
62 (Korn et al. 2006). In Uzbekistan, a single record of this species in a rice field near Samarkand
63 is known (Mukhamediev 1986). Presence of the taxon in Uzbekistan should be re-checked.

64

65

66 **Superorder Diplostraca Latreille, 1829**

67 **Order Anomopoda Sars, 1865**

68 **Family Daphniidae Straus, 1820**

69 **Ceriodaphnia cornuta* Sars, 1885 *s. lat.*

70 *Ceriodaphnia rigaudi* Richard, 1894

71 *Ceriodaphnia rigaudi* var. *cornuta* (Sars, 1885)

72 **Previous observations. Andijan Province:** Andijan, Butakara, rice fields in Asaka District
73 (Stepanova and Ledyeva 1957; Mukhamediev 1986; Abdinazarov et al. 2019b); **Fergana**
74 **Province:** Kokon, Margilan, fishponds in Beshariq District (Mukhamediev 1986;
75 Abdinazarov 2018); **Karakalpakstan** (Aripov 1966 1972; Rakhmatullaeva 1998;
76 Turemuratova and Kuzmetov 2016; Turemuratova et al. 2018 2024; Aladin et al. 2019 2021;
77 Turemuratova et al. 2021; Abdinazarov and Madumarov 2022); **Khorezm Province:** rice
78 fields in Khiva and Gurlan Districts (Aripov 1966 1972; Rakhmatullaeva 1998); **Namangan**
79 **Province:** Namangan (Mukhamediev 1986); **Surkhandarya Province:** rice fields in
80 Kumkurgan District, Shurchi, Termez, Degrez Reservoir, Southern-Surkhan Reservoir
81 (Mukhamediev and Mukhitdinov 1967; Mukhitdinov 1967; Sibirtseva et al. 1972); **Syrdarya**
82 **Province** (Mirabdullayev 1998; Rakhmatullaeva 1998); **Tashkent Province** (Lyakhnovich et
83 al. 1972; Rakhmatullaeva 1998); **Uzbekistan without an exact locality** (Rakhmatullaeva
84 2007; Kuzmetov and Abdinazarov 2016)

85 **Remarks.** A cosmopolitan species complex observed in tropical and subtropical zone of all
86 continents (Korovchinsky et al. 2021). In our study, *Ceriodaphnia cornuta* was recorded in
87 rice field near Bakhmal, Syrdarya Province (loc. 88). In Uzbekistan, *C. cornuta* is relatively
88 common and inhabits a variety of water bodies, including rice fields, reservoirs, and
89 fishponds.

90

91 *Ceriodaphnia dubia* Richard, 1894 *s. lat.*

92 *Ceriodaphnia affinis* Lilljeborg, 1901

93 **Previous observations. Karakalpakstan:** Lake Chernoe, Lake Karateren, Lake Sudochoye,
94 Lake Khodjakul, rice fields in Chimbay District (Aripov 1972; Kazakhbaev 1988;
95 Rakhmatullaeva 1998; Ginatullina 2010; Turemuratova et al. 2021; Abdinazarov and
96 Madumarov 2022); **Tashkent Province:** Lake Urungach (Rakhmatullaeva 1998);
97 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007; Kuzmetov 1998)

98 **Remarks.** A cosmopolitan species complex widely distributed on all continents
99 (Korovchinsky et al. 2021). In Uzbekistan, *Ceriodaphnia dubia s. lat.* usually occurs in the
100 littoral zone of fishponds and lakes, including montane water bodies (Rakhmatullaeva 1998).

101

102 **Ceriodaphnia laticaudata* P.E. Müller, 1867 (Figs. 2A, B)

103 **Previous observations.** **Fergana Province:** Kokon (Ulyanin 1875); **Karakalpakstan:** Lake
104 Pomido (Rakhmatullaeva 1998); **Uzbekistan without an exact locality** (Rakhmatullaeva
105 2007)

106 **Remarks.** In our study, the species was observed in a lake with muddy sediment (loc. 26) in
107 Djizak Province. The species can be identified by form of postabdomen having the greatest
108 height in its basal portion (Fig. 2B, black arrow). *Ceriodaphnia laticaudata* is widely
109 distributed in North Eurasia and Africa (Korovchinsky et al. 2021), but is rare in Uzbekistan.

110

111 *Ceriodaphnia pulchella* Sars, 1862 s. lat.

112 **Previous observations.** **Fergana Province:** Kokon (Ulyanin 1875); **Karakalpakstan:** Lake
113 Saikul, Lake Sudochoye, Lake Khodjakul, the Aral Sea (Akatova 1950; Kazakhbaev 1988;
114 Rakhmatullaeva 1998; Ginatullina 2010; Aladin et al. 2019 2021; Turemuratova and
115 Kosymbetova 2024); **Khorezm Province** (Rakhmatullaeva 1998); **Syrdarya Province:** Lake
116 Kalgansyr (Keiser 1925); **Tashkent Province:** Lake Kargaly (Keiser 1925); **Uzbekistan**
117 **without an exact locality** (Rakhmatullaeva 2007)

118 **Remarks.** The species is widely distributed in Holarctic (Korovchinsky et al. 2021). In
119 Uzbekistan, *Ceriodaphnia pulchella s. lat.* primarily occurs in large lakes.

120

121 **Ceriodaphnia quadrangula* (O.F. Müller, 1785) s. lat.

122 **Previous observations.** **Andijan Province:** rice fields in Khodjaobod and Asaka Districts
123 (Stepanova and Ledyeva 1957); **Fergana Province** (Mukhamediev 1967 1986);
124 **Karakalpakstan:** Lake Sudochoye, Lake Dovutkul, rice fields in Chimbay, Shumanai and
125 Kungrad Districts (Akatova 1950; Aripov 1972; Kazakhbaev 1988; Rakhmatullaeva 1998);
126 **Khorezm Province:** rice fields in Khiva and Gurlan Districts (Aripov 1972); **Namangan**
127 **Province:** Lake Mingbulak (Mukhamediev 1967 1986); **Surkhandarya Province:** Southern-
128 Surkhan Reservoir (Sibirtseva et al. 1972); **Tashkent Province:** Akkurgan fishery
129 (Lyakhnovich et al. 1972); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007;
130 Kuzmetov and Abdinazarov 2016)

131 **Remarks.** A cosmopolitan species complex distributed worldwide (Korovchinsky et al.
132 2021). In our study, *Ceriodaphnia quadrangula* was observed in Sentab Reservoir (loc. 42)
133 and Lake Fozilmon (loc. 47), Navoiy Province, in a puddle in the vicinity of Zeravshan River,
134 Samarkand Province (loc. 61), and in the pelagic zone of Chartak Reservoir, Namangan
135 Province. The taxon is rather common in Uzbekistan, occurring in rice fields, lakes,
136 reservoirs, and fishponds.

137

138 **Ceriodaphnia reticulata* (Jurine, 1820)

139 *Ceriodaphnia reticulata* var. *kurzi* (Stingelin, 1895)

140 **Previous observations. Bukhara Province:** Devkhona Reservoir (Khodjayeva and
141 Shamsiyev 2020); **Fergana Province** (Mukhamediev 1967 1986); **Karakalpakstan** (Akatova
142 1950; Aripov 1972; Kazakhbaev 1988; Andreev 1989; Plotnikov 2013; Ginatullina et al. 2017;
143 Turemuratova and Kuzmetov 2016; Aladin et al. 2019 2021; Turemuratova et al. 2018 2021
144 2024; Abdinazarov and Madumarov 2022; Turemuratova and Kosymbetova 2024); **Khorezm**
145 **Province:** rice fields in Gurlan District, Lake Bogatli (Aripov 1966 1972; Ginatullina 2010);
146 **Namangan Province:** Lake Mingbulak, Namangan (Mukhamediev 1967 1986); **Samarkand**
147 **Province** (Pazhitnova 1935; Mustafaeva and Mirzayev 2018a); **Surkhandarya Province:**
148 Southern-Surkhan Reservoir (Sibirtseva et al. 1972); **Syrdarya Province** (Mirabdullayev
149 1998); **Uzbekistan without an exact locality** (Kuzmetov 1998; Kuzmetov and Abdinazarov
150 2016)

151 **Remarks.** The species is widely distributed in Palearctic (Korovchinsky et al. 2021). In our
152 study, the species was recorded in the open pelagic zone of Lake Tuzkan, Djizak Province (loc.
153 87), two reservoirs in Namangan Province (locs. 102, 103), and in several water bodies of
154 Andijan Province (locs. 105, 107, 108). In Uzbekistan, *C. reticulata* is a common species
155 inhabiting lakes, fish ponds and reservoirs. However, *C. reticulata* can be easily confused with
156 its congener, *C. turkestanica* Berner and Rakhmatullaeva, 2001, which diagnostic feature is
157 absence of major head pore (Berner and Rakhmatullaeva 2001).

158

159 ****Ceriodaphnia turkestanica* Berner and Rakhmatullaeva 2001**

160 *Ceriodaphnia* cf. *reticulata* (Jurine, 1820)

161 **Previous observations. Andijan Province:** Andijan fishery (Abdinazarov et al. 2019b);
162 **Bukhara Province** (Rakhmatullaeva 1998; Berner and Rakhmatullaeva 2001); **Djizak**
163 **Province:** AydarArnasay lake system (Rakhmatullaeva 1998; Berner and Rakhmatullaeva
164 2001; Ginatullina et al. 2006a 2023; Ginatullina 2023; Mustafaeva et al. 2006 2021b 2022;
165 Karimov 2021); **Fergana Province:** Lake Sarikamish, fishponds in Beshariq District
166 (Abdinazarov 2018; Abdinazarov et al. 2019a; Abdinazarov and Madumarov 2022);
167 **Karakalpakstan** (Rakhmatullaeva 1998; Berner and Rakhmatullaeva 2001; Mirzambetov
168 and Mirabdullayev 2022); **Kashkadarya Province** (Berner and Rakhmatullaeva 2001);
169 **Khorezm Province** (Rakhmatullaeva 1998; Berner and Rakhmatullaeva 2001; Ginatullina
170 2010); **Namangan Province:** Rizaq Reservoir, Namangan fishery (Abdinazarov 2018);
171 **Surkhandarya Province** (Rakhmatullaeva 1998; Berner and Rakhmatullaeva 2001);
172 **Tashkent Province** (Berner and Rakhmatullaeva 2001; Saparov et al. 2019); **Uzbekistan**
173 **without an exact locality** (Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016;
174 Korovchinsky et al. 2021)

175 **Remarks.** To date, *Ceriodaphnia turkestanica* is considered endemic to Central Asia
176 (Korovchinsky et al. 2021). In our study, *C. turkestanica* was registered in three localities in
177 Djizak Province (locs. 23, 26, 84), in a pool in Tashkent City (loc. 91), in Syr Darya River
178 oxbow in Fergana Province (loc. 95), in Ertikan Reservoir, Namangan Province (loc. 101),
179 and in fishpond near Avulmat, Andijan Province (loc. 106). In Uzbekistan, it is common and
180 inhabits temporary pools, fishponds, rice fields, puddles, and lakes.

181

182 ***Daphnia* (*Ctenodaphnia*) *lumholtzi* Sars, 1885**

183 **Previous observations. Karakalpakstan:** rice fields in Chimbay District (Aripov 1966
184 1972; Aripov and Mukhamediev 1967; Rakhmatullaeva 1998); **Surkhandarya Province:**

185 Southern-Surkhan Reservoir (Sibirtseva et al. 1972; Rakhmatullaeva 1998); **Uzbekistan**
186 **without an exact locality** (Rakhmatullaeva 2007)

187 **Remarks.** *Daphnia lumholtzi* is a tropical taxon of the Old World, recently colonizing North
188 America (Wittman et al. 2013). The species is rare in Uzbekistan and was observed in the
189 pelagic of lakes and reservoirs, including brackish waters (Rakhmatullaeva 1998 2007).

190

191 ***Daphnia (Ctenodaphnia) magna Straus, 1820**

192 *Daphnia schaefferi* Baird, 1850

193 **Previous observations.** **Andijan Province:** Andijan fishery (Rakhmatullaeva 1998;
194 Abdinazarov et al. 2019b); **Bukhara Province** (Rakhmatullaeva 1998); **Djizak Province:** the
195 Aydar-Arnasay lake system (Rakhmatullaeva 1998; Rakhmatullaeva and Khurshut 2001;
196 Karimov 2021; Ginatullina et al. 2006a 2023); **Fergana Province:** fishponds in Beshariq
197 District (Abdinazarov 2018); **Karakalpakstan:** Sudochoye lake system (Rakhmatullaeva
198 1998; Ginatullina et al. 2017); **Kashkadarya Province** (Rakhmatullaeva 1998); **Khorezm**
199 **Province** (Rakhmatullaeva 1998); **Samarkand Province** (Ulyanin 1875); **Surkhandarya**
200 **Province** (Rakhmatullaeva 1998); **Namangan Province:** Namangan fishery (Abdinazarov
201 2018); **Tashkent Province** (Ulyanin 1875; Rakhmatullaeva 1998); **Uzbekistan without an**
202 **exact locality** (Kuzmetov 1998; Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

203 **Remarks.** The species is widely distributed in Eurasia, Africa and North America, occurring
204 mostly in fishless or temporary water bodies (Korovchinsky et al. 2021). In our study,
205 *Daphnia magna* was found in Lake Fozilmon, Navoiy Province (loc. 47).

206

207 ***Daphnia (Ctenodaphnia) similis Claus, 1876**

208 *Daphnia (Ctenodaphnia) carinata* King, 1853

209 **Previous observations.** **Karakalpakstan** (Rakhmatullaeva 1998; Turemuratova et al. 2021;
210 Abdinazarov and Madumarov 2022); **Kashkadarya Province:** Tashkurgan (Rakhmatullaeva
211 1998); **Surkhandarya Province:** Degrez Reservoir (Mukhitdinov 1967); **Tashkent**
212 **Province:** ponds in Yangiyol District, Akkurgan fishery (Lyakhnovich et al. 1972;
213 Rakhmatullaeva 1998; Saparov et al., 2019); **Uzbekistan without an exact locality**
214 (Kuzmetov 1998; Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

215 **Remarks.** The species is known from the Mediterranean, East Europe (up to Ural Mountains),
216 and Central Asia (Korovchinsky et al. 2021). In Uzbekistan, *Daphnia similis* has a wide
217 distribution (Rakhmatullaeva 1998) and occurs in fish ponds, rice fields and collectors. In our
218 study, *Daphnia similis* was collected in a single lake in Samarkand Province (loc. 62).

219

220 ***Daphnia (Daphnia) cucullata Sars, 1862**

221 **Previous observations.** **Djizak Province:** Lake Aydarkul (Rakhmatullaeva and Khurshut
222 2001; Ginatullina 2023); **Karakalpakstan:** Lake Dovutkul (Ginatullina 2022); **Navoiy**
223 **Province:** Navoi (Rakhmatullaeva 1998); **Samarkand Province:** Karatepa Reservoir
224 (Mustafaeva and Mirzayev 2018a); **Surkhandarya Province:** Degrez Reservoir, Uchqizil
225 Reservoir (Mukhitdinov 1967; Afanasyeva et al. 1972); **Uzbekistan without an exact**
226 **locality** (Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

227 **Remarks.** The species is widespread in North Eurasia (Korovchinsky et al. 2021). In our
228 study, a single individual of *Daphnia cucullata* was recorded in Rezaksay Reservoir,
229 Namangan Province (loc. 100). In Uzbekistan, *D. cucullata* occurs in the pelagic of lakes and
230 reservoirs.

231

232 *Daphnia (Daphnia) curvirostris* Eylmann, 1887

233 **Previous observations.** **Andijan Province:** Andijan fishery (Rakhmatullaeva 1998;
234 Abdinazarov et al. 2019b); **Bukhara Province** (Rakhmatullaeva 1998); **Djizak Province**
235 (Rakhmatullaeva 1998); **Ferghana Province:** fishponds in Beshariq District, Kokon
236 (Abdinazarov 2018); **Karakalpakstan:** Lake Sokkuly, temporary water bodies in Muynak
237 (Rakhmatullaeva 1998; Ginatullina 2010); **Kashkadarya Province:** fishponds in
238 Kashkadarya fishery farm (Rakhmatullaeva 1998); **Khorezm Province** (Rakhmatullaeva
239 1998); **Surkhandarya Province:** Uzun fishery farm, ponds in Termez (Mirabdullayev 1993;
240 Rakhmatullaeva 1998); **Syrdarya Province** (Rakhmatullaeva 1998); **Tashkent Province**
241 (Rakhmatullaeva 1998); **Uzbekistan without an exact locality** (Kuzmetov 1998;
242 Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

243 **Remarks.** The species is widely distributed in Eurasia (including Central Asia), Africa and
244 North America, inhabiting lakes and temporary pools (Korovchinsky et al. 2021). At least
245 some of the previous records of *Daphnia pulex* (Linnaeus, 1758) in Uzbekistan in fact refer
246 to *D. curvirostris* (Rakhmatullaeva 1998), thus this species seems to be relatively common in
247 the country.

248

249 **Daphnia (Daphnia) galeata* Sars, 1863 s. lat.

250 **Previous observations.** **Andijan Province** (Rakhmatullaeva 1998); **Bukhara Province:**
251 Lake Dengizkul, Lake Shurkul (Mustafaeva and Mirzayev 2018b); **Fergana Province:** Lake
252 Sarikamish, Karkidon Reservoir (Abdinazarov 2018; Abdinazarov et al. 2019a; Abdinazarov
253 and Madumarov 2022); **Djizak Province:** the Aydar-Arnasay lake system (Ginatullina et al.
254 2006a; Mustafaeva et al. 2022); **Karakalpakstan** (Rakhmatullaeva 1998; Ginatullina 2010;
255 Ginatullina et al. 2017; Aladin et al. 2021; Turemuratova et al. 2021; Turemuratova and
256 Nagmetov 2021; Abdinazarov and Madumarov 2022); **Kashkadarya Province**
257 (Rakhmatullaeva 1998); **Khorezm Province** (Rakhmatullaeva 1998); **Namangan Province:**
258 Varziq Reservoir, Rizaq Reservoir, Namangan fishery (Abdinazarov 2018); **Samarkand**
259 **Province:** Karatepa Reservoir (Mustafaeva and Mirzayev 2018a); **Surkhandarya Province**
260 (Rakhmatullaeva 1998); **Tashkent Province:** Charvak Reservoir, Angren Reservoir
261 (Rakhmatullaeva 1998); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007;
262 Kuzmetov and Abdinazarov 2016)

263 **Remarks.** A common species in Eurasia, occurring in any types of water bodies
264 (Korovchinsky et al. 2021). In our study, the species was collected in a small lake with muddy
265 sediment in Samarkand Region (loc. 49), in the lakes Aydarkul and Tuzkan, Djizak and
266 Navoiy Provinces (locs. 84, 86), Tuyabuguz Reservoir, Tashkent Province (loc. 93), and two
267 fishponds in Feghana and Namangan Provinces (locs. 96, 97). In Uzbekistan, *D. galeata* is
268 one of the most common *Daphnia* species (Rakhmatullaeva 1998) and occurs in lakes and
269 reservoirs of various size. Some of the previous records of *D. cucullata* in fact refer to *D.*
270 *galeata* (Rakhmatullaeva 1998).

271

272 *Daphnia (Daphnia) hyalina* Leydig, 1860

273 *Daphnia longispina hyalina* (Leydig, 1860)

274 **Previous observations.** **Karakalpakstan:** Lake Eastern Karateren (Turemuratova and
275 Nagmetov 2021); **Surkhandarya Province:** Southern-Surkhan Reservoir (Sibirtseva et al.
276 1972); **Tashkent Province:** Tuyabuguz Reservoir (Ginatullina et al. 2023c)

277 **Remarks.** A lacustrine species widespread in Eurasia (Korovchinsky et al. 2021). The species
278 is rare in Uzbekistan, observed in the pelagic of large lakes and reservoirs (Turemuratova and
279 Nagmetov 2021; Ginatullina et al. 2023c).

280

281 **Daphnia (Daphnia) longispina* O.F. Müller, 1776 s. lat.

282 *Daphnia longispina* var. *caudata* Sars, 1863

283 *Daphnia longispina* var. *aspina* Verestschagin, 1932

284 *Daphnia lacustris* Sars, 1862

285 **Previous observations.** **Andijan Province** (Mukhamediev 1986; Abdinazarov et al. 2019b);
286 **Bukhara Province:** Devkhona Reservoir, Lake Dengizkul, Lake Shurkul (Mustafaeva and
287 Mirzayev 2018b; Khodjayeva and Shamsiyev 2020); **Djizak Province:** the Aydar-Arnasay
288 lake system (Ginatullina et al. 2006a 2023; Mustafaeva et al. 2022); **Fergana Province**
289 (Mukhamediev 1986; Abdinazarov 2018; Abdinazarov and Madumarov 2022);
290 **Karakalpakstan** (Nikolsky and Pankratova 1934; Akatova 1950; Aripov 1972;
291 Rakhmatullaeva 1998; Ginatullina 2010; Aladin et al. 2019 2021; Turemuratova et al. 2021;
292 Abdinazarov and Madumarov 2022; Turemuratova and Kosymbetova 2024); **Kashkadarya**
293 **Province** (Rakhmatullaeva 1998); **Khorezm Province:** rice fields in Gurlan and Khiva
294 Districts (Aripov 1972; Rakhmatullaeva 1998); **Namangan Province:** Lake Mingbulak
295 (Mukhamediev 1986); **Samarkand Province** (Mustafaeva and Mirzayev 2018a);
296 **Surkhandarya Province:** Uchqizil Reservoir (Mukhitdinov 1967; Afanasyeva et al. 1972);
297 **Syrdarya Province:** Lake Kalgansyr (Keiser 1925); Yuzhno-Golodnostepskii Channel
298 (Ginatullina et al. 2023b); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007;
299 Kuzmetov and Abdinazarov 2016)

300 **Remarks.** A cosmopolitan species-group very common in Uzbekistan, observed in lakes,
301 reservoirs, fish ponds, temporary pools and channels. In our study, *Daphnia longispina* s. lat.
302 was observed in Sentab Reservoir, Navoiy Province (loc. 42), Lake Fozilmon and its vicinity,
303 Navoi and Samarkand Provinces (locs. 47, 48), in Tuyabuguz Reservoir, Tashkent Province
304 (loc. 70), and in Andijan, Andijan Province (loc. 106). The record of alpine *D. lacustris* Sars,
305 1862 in Kuzmetov and Abdinazarov (2016) very probably refers to *D. longispina*, as the two
306 species are morphologically indistinct (Korovchinsky et al. 2021). The records of Nearctic *D.*
307 *laevis* Birge, 1878 for Uzbekistan should belong to the taxon of the *longispina*-group as well
308 (Korovchinsky et al. 2021). However, at least some previous records of *D. longispina* might
309 refer to *D. galeata* (Rakhmatullaeva 1998).

310

311 *Daphnia (Daphnia) pulex* (Linnaeus, 1758) s. lat.

312 *Daphnia pulex* var. *aspina* Mukhamediev, 1960

313 *Daphnia pulex middendoriana* (Fischer, 1851)

314 **Previous observations.** **Andijan Province:** Andijan (Mukhamediev 1986); **Bukhara**
315 **Province:** Devkhona Reservoir (Khodjayeva and Shamsiyev 2020); **Djizak Province**
316 (Ulyanin 1875); **Fergana Province** (Mukhamediev 1967 1986); **Karakalpakstan:** rice fields
317 in Shumanai and Kungrad Districts (Aripov 1972); **Kashkadarya Province** (Rakhmatullaeva
318 1998); **Khorezm Province:** rice fields in Gurlan District (Aripov 1972); **Samarkand**
319 **Province** (Ulyanin 1875); **Surkhandarya Province:** Uchqizil Reservoir (Afanasyeva et al.
320 1972); **Tashkent Province** (Rakhmatullaeva 1998); **Uzbekistan without an exact locality**
321 (Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

322 **Remarks.** It is a cosmopolitan species preferring temporary or small water bodies
323 (Korovchinsky et al. 2021). In Uzbekistan the species has been observed in reservoirs, fish
324 ponds, rice fields and other temporary pools. Previous records of *Daphnia pulex*
325 *middendorffiana* (Fischer, 1851) from fish ponds and rice fields of Andijan, Kokon and
326 Margilan (Mukhamediev 1986) also likely belongs to *D. pulex*, as *D. middendorffiana*
327 Fischer, 1851 is specific for oligotrophic water bodies of North Eurasia and Central Asian
328 mountain ranges (Korovchinsky et al. 2021). However, according to Rakhmatullaeva (1998),
329 *D. pulex* is relatively rare in Uzbekistan and its previous records might belong to its
330 congeners, e.g., *D. pulicaria* Forbes, 1893.

331

332 *Daphnia (Daphnia) pulicaria* Forbes, 1893 s. lat.

333 **Previous observations.** **Andijan Province:** Andijan fishery (Rakhmatullaeva 1998;
334 Abdinazarov et al. 2019b); **Djizak Province:** Lake Arnasay (Ginatullina et al. 2006a);
335 **Fergana Province:** Lake Sarikamish, fishponds in Beshariq District (Abdinazarov 2018);
336 **Kashkadarya Province:** Tashkurgan (Rakhmatullaeva 1998); **Namangan Province:** Rizaq
337 Reservoir (Abdinazarov 2018); **Surkhandarya Province** (Rakhmatullaeva 1998); **Tashkent**
338 **Province** (Rakhmatullaeva 1998); **Uzbekistan without an exact locality** (Kuzmetov 1998;
339 Rakhmatullaeva 2007)

340 **Remarks.** It is a cosmopolitan species common in permanent water bodies (Korovchinsky et
341 al. 2021). In Uzbekistan, this species has been registered in fishponds and lakes; note that
342 some of previous records might in fact refer to the closely related species *D. pulex*.

343

344 *Megafenestra aurita* (Fischer, 1849)

345 **Previous observations.** **Andijan Province:** Andijan fishery (Rakhmatullaeva 1998;
346 Abdinazarov et al. 2019b); **Fergana Province:** fishponds in Beshariq District (Abdinazarov
347 2018); **Surkhandarya Province** (Rakhmatullaeva 1998); **Syrdarya Province**
348 (Rakhmatullaeva 1998); **Tashkent Province** (Rakhmatullaeva 1998); **Uzbekistan without**
349 **an exact locality** (Rakhmatullaeva 2007)

350 **Remarks.** The species is widespread in Eurasia (Korovchinsky et al. 2021). According to
351 Rakhmatullaeva (1998), *Megafenestra aurita* is relatively common in Uzbekistan, occurring
352 in fishponds and rice fields throughout the country.

353

354 **Scapholeberis kingii* Sars, 1888 s. lat.

355 *Scapholeberis kingi* Sars, 1903

356 *Scapholeberis rammneri* Dumont et Pensaert, 1983 s. lat.

358 **Previous observations.** **Andijan Province:** Andijan fishery (Mukhamediev 1986;
 359 Abdinazarov et al. 2019b); **Fergana Province** (Mukhamediev 1967 1986; Abdinazarov 2018;
 360 Abdinazarov et al. 2019a; Abdinazarov and Madumarov 2022; Mukhamediev and
 361 Bekchonova 2023); **Karakalpakstan** (Aripov 1966 1972; Ginatullina 2010; Turemuratova
 362 and Kuzmetov 2016; Turemuratova et al. 2018 2024); **Khorezm Province:** rice fields in
 363 Khiva and Gurlan Districts (Aripov 1972); **Namangan Province:** Namangan fishery
 364 (Mukhamediev 1986; Abdinazarov 2018); **Surkhandarya Province:** Shurchi (Mukhamediev
 365 and Mukhitdinov 1967); **Syrdarya Province** (Mirabdullayev 1998); **Tashkent Province:**
 366 Akkurgan fishery (Lyakhnovich et al. 1972); **Uzbekistan without an exact locality**
 367 (Kuzmetov 1998; Rakhmatullaeva 2007)

368 **Remarks.** Our study recorded *Scapholeberis kingii s. lat.* in a number of localities in
 369 Karakalpakstan, Djizak, Navoi, Samarkand, Syrdarya and Tashkent Provinces (locs. 55, 56,
 370 58, 61, 62, 64–66, 69, 70, 72, 73, 85, 88, 90). The taxon seems to be common in Uzbekistan,
 371 occurring in the littoral zone of lakes, reservoirs, ponds, rice fields and temporary pools.
 372 Representatives of the *kingii*-group are widespread in tropics and subtropics of Eurasia,
 373 Africa, North and South America, and Australia (Garibian et al. 2020; Korovchinsky et al.
 374 2021). In East Eurasia, the *kingii*-group is represented by *Scapholeberis smirnovi* Garibian et
 375 al. 2020, but this species is distinct from *S. kingii* only genetically or by morphology of
 376 gamogenetic stages (Garibian et al. 2020). There is also a single unconfirmed record of *S.*
 377 *rammneri* Dumont et Pensaert, 1983 from Uzbekistan, without specification of locality
 378 (Kuzmetov and Abdinazarov 2016). In this respect, the status of the *kingii*-like *Scapholeberis*
 379 in Uzbekistan remains unclear, as these populations have never been revised.

380

381 *Scapholeberis mucronata* (O.F. Müller, 1776) *s. lat.*

382 **Previous observations.** **Andijan Province:** Andijan, Lake Shamshikul, rice fields in
 383 Khodjaobod and Asaka Districts (Stepanova and Ledyeva 1957; Mukhamediev 1986);
 384 **Djizak Province** (Ulyanin 1875); **Fergana Province** (Ulyanin 1875; Mukhamediev 1967
 385 1986); **Karakalpakstan** (Aripov 1972; Kazakhbaev 1988; Rakhmatullaeva 1998; Ginatullina
 386 2010); **Khorezm Province:** rice fields in Khiva and Gurlan Districts (Aripov 1972);
 387 **Namangan Province:** Lake Mingbulak (Mukhamediev 1967); **Samarkand Province:**
 388 Samarkand and its vicinity (Pazhitnova 1935; Keiser 1937; Mukhamediev 1986); **Tashkent**
 389 **Province:** Tashkent, Akkurgan fishery (Pazhitnova 1929; Keiser 1937; Lyakhnovich et al.
 390 1972); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

391 **Remarks.** The species is common in North Eurasia and occurs in the water bodies of any type
 392 (Korovchinsky et al. 2021). In Uzbekistan, the species prefers relatively cold habitats: littoral
 393 zone of lakes, reservoirs, springs, and channels, being rare in ponds and rice fields
 394 (Mukhamediev 1986).

395

396 *Simocephalus (Aquipiculus) heilongjiangensis* Shi et Shi, 1994

397 *Simocephalus mesorostris* Orlova-Bienkowskaja, 1995

398 **Previous observations.** **Khorezm Province** (Rakhmatullaeva 1998; Rakhmatullaeva and
 399 Mirabdullayev 1998); **Tashkent Province** (Rakhmatullaeva 1998; Rakhmatullaeva and

400 Mirabdullayev 1998); **Uzbekistan without an exact locality** (Kuzmetov 1998;
401 Rakhmatullaeva
402 2007)

403 **Remarks.** The species is primarily distributed in subtropics of East Asia (Korovchinsky et al.
404 2021). The conspecificity of Uzbek populations to the type material is to be proved. In
405 Uzbekistan, *S. heilongjiangensis* occurs in fishponds, channels and rice fields
406 (Rakhmatullaeva and Mirabdullayev 1998).

407

408 ****Simocephalus (Crowncephalus) serrulatus* (Koch, 1841)**

409 **Previous observations.** **Fergana Province** (Mukhamediev 1967 1986); **Karakalpakstan:**
410 Lake Saikul, Lake Murtaza, Lake Jokonly (Rakhmatullaeva 1998; Turemuratova et al. 2021;
411 Abdinazarov and Madumarov 2022); **Khorezm Province:** Lake Abulkul (Rakhmatullaeva
412 1998); **Namangan Province:** Lake Mingbulak (Mukhamediev 1967 1986); **Uzbekistan**
413 **without an exact locality** (Rakhmatullaeva 2007)

414 **Remarks.** It is a cosmopolitan eurybiotic species complex (Korovchinsky et al. 2021)
415 occurring in lakes, fishponds and temporary pools. In our study, *Simocephalus serrulatus* was
416 recorded in Tuyabuguz Rezervoir, Tashkent Province (loc. 69).

417

418 ****Simocephalus (Echinocaudus) exspinosus* (De Geer, 1778) s. lat.**

419 **Previous observations.** **Andijan Province:** Andijan fishery (Abdinazarov et al. 2019b);
420 **Fergana Province** (Mukhamediev 1967 1986; Abdinazarov 2018); **Karakalpakstan:** Lake
421 Saikul, Lake Sokkuly (Rakhmatullaeva 1998; Ginatullina 2010; Turemuratova et al. 2021;
422 Abdinazarov and Madumarov 2022); **Khorezm Province:** rice fields in Gurlan District
423 (Aripov 1972; Rakhmatullaeva 1998); **Namangan Province:** Lake Mingbulak
424 (Mukhamediev 1967 1986); **Samarkand Province:** Kattakurgan (Ulyanin 1875);
425 **Surkhandarya Province** (Rakhmatullaeva 1998); **Tashkent Province** (Rakhmatullaeva
426 1998); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

427 **Remarks.** This cosmopolitan species common in North Eurasia (Korovchinsky et al. 2021)
428 occurs in the littoral zone of lakes, fishponds and temporary pools. In our study, *Simocephalus*
429 *exspinosus* was recorded in Lake Fozilmon, Navoiy Province, and a small lake in its vicinity
430 (locs. 47, 48).

431

432 ****Simocephalus (Simocephalus) mixtus* Sars, 1903**

433 *Simocephalus (Simocephalus) elizabethae* (King, 1853)

434 **Previous observations.** **Andijan Province:** Butakara, Khakulabad (Mukhamediev 1986);
435 **Fergana Province** (Mukhamediev 1967 1986; Mukhamediev and Bekchonova 2023);
436 **Karakalpakstan:** rice fields in Chimbay, Shumanai and Kungrad Districts (Aripov 1972);
437 **Kashkadarya Province** (Rakhmatullaeva 1998); **Khorezm Province:** Bagat, Yangiarik, rice
438 fields in Khiva and Gurlan Districts (Aripov 1972; Mirabdullayev 1998; Rakhmatullaeva
439 1998); **Namangan Province:** Lake Mingbulak (Mukhamediev 1967); **Surkhandarya**
440 **Province** (Rakhmatullaeva 1998); **Syrdarya Province** (Rakhmatullaeva 1998); **Tashkent**
441 **Province** (Rakhmatullaeva 1998); **Uzbekistan without an exact locality** (Manuilova 1964;
442 Rakhmatullaeva 2007)

443 **Remarks.** In our study, *Simocephalus mixtus* was recorded in Tuyabuguz Reservoir, Tashkent
444 Province (loc. 93). *Simocephalus mixtus* is a cosmopolitan species (Korovchinsky et al. 2021)
445 reported to be very common in Uzbekistan (Rakhmatullaeva 1998), occurring in the littoral
446 zone of lakes, fishponds, rice fields, and even springs (Mukhamediev 1986). However,
447 juveniles of *S. mixtus* are very similar to those of its relatives, *S. vetulus* and *S. vetuloides*.

448

449 ****Simocephalus (Simocephalus) vetulus (O.F. Müller, 1776)***

450 **Previous observations.** **Andijan Province:** Lake Shamshikul, Andijan, rice fields in
451 Khodjaobod and Asaka Districts (Stepanova and Ledyeva 1957; Mukhamediev 1967;
452 Abdinazarov et al. 2019b); **Bukhara Province:** Devkhona Reservoir (Khodjayeva and
453 Shamsiyev 2020); **Djizak Province:** the Aydar-Arnasay lake system (Ginatullina et al. 2006a;
454 Ginatullina 2023); **Fergana Province** (Stepanova and Ledyeva 1957; Mukhamediev 1967
455 1986; Abdinazarov 2018; Abdinazarov et al. 2019a; Abdinazarov and Madumarov 2022);
456 **Karakalpakstan** (Akatova 1950; Ginatullina 2010; Ginatullina et al. 2006b 2017;
457 Mirabdullayev et al. 2016; Turemuratova and Kuzmetov 2016; Turemuratova et al. 2018
458 2024); **Khorezm Province** (Aripov 1972; Ginatullina 2010; Crootof et al. 2015); **Namangan**
459 **Province:** Lake Mingbulak, Namangan, the Lake Tudakul (Mukhamediev 1967 1986;
460 Abdinazarov 2018); **Samarkand Province:** Chumchuqli, Samarkand vicinity, Kattakurgan
461 (Ulyanin 1875; Pazhitnova 1935; Keiser 1937); **Surkhandarya Province:** Uchqizil
462 Reservoir (Afanasyeva et al. 1972); **Tashkent Province:** rice fields in the vicinity of
463 Tashkent, ponds in Yangiyol District, Chinoz (Ulyanin 1875; Keiser 1937; Saparov et al.
464 2019); **Uzbekistan without an exact locality** (Kuzmetov 1998; Rakhmatullaeva 2007;
465 Kuzmetov and Abdinazarov 2016)

466 **Remarks.** This is a cosmopolitan eurybiotic species (Korovchinsky et al. 2021). In our study,
467 *Simocephalus vetulus* was observed in a number of localities in Djizak, Samarkand and
468 Syrdarya Provinces (locs. 6, 17, 23, 26, 27, 34, 36, 55, 61, 88). In Uzbekistan, *S. vetulus* is
469 common in the littoral zone of lakes, reservoirs, fishponds, rice fields, despite some of these
470 records might refer to *S. mixtus* (Rakhmatullaeva 1998).

471

472 **Family Moinidae Goulden, 1968**

473 ****Moina brachiata (Jurine, 1820) s. lat.***

474 *Moina rectirostris* (Leydig, 1860)

475 *Moina mukhamedievi* Mirabdullayev, 1998

476 **Previous observations.** **Andijan Province:** Butakara, Andijan fishery (Mukhamediev 1986;
477 Abdinazarov 2018; Abdinazarov et al. 2019b); **Bukhara Province:** Devkhona Reservoir,
478 Lake Dengizkul, Lake Shurkul (Mustafaeva and Mirzayev 2018b; Khodjayeva and
479 Shamsiyev 2020); **Djizak Province:** the Aydar-Arnasay lake system (Mustafaeva et al. 2022;
480 Ginatullina et al. 2006a; 2023; Ginatullina 2023); **Fergana Province** (Mukhamediev 1967;
481 Abdinazarov 2018); **Karakalpakstan** (Aripov 1966 1972; Mirabdullayev et al. 2016;
482 Turemuratova and Kuzmetov 2016; Ginatullina et al. 2017; Turemuratova et al. 2018 2024);
483 **Khorezm Province:** rice fields in Khiva and Gurlan Districts (Aripov 1972); **Namangan**
484 **Province:** Uchkurgan (Mukhamediev 1986; Abdinazarov 2018); **Samarkand Province**
485 (Mustafaeva and Mirzayev 2018a); **Surkhandarya Province:** Southern-Surkhan Reservoir

486 (Sibirtseva et al. 1972); **Tashkent Province:** Akkurgan fishery (Lyakhnovich et al. 1972);
487 **Uzbekistan without an exact locality** (Kuzmetov 1998; Kuzmetov and Abdinazarov 2016)

488 **Remarks.** The species is widely distributed in North Eurasia (Korovchinsky et al. 2021). In
489 our study, *M. brachiata* was observed in a number of water bodies in Karakalpakstan, Djizak,
490 Navoi, Syrdarya, Tashkent and Fergana Provinces (locs. 37, 73, 85, 88, 92, 95). In Tajikistan,
491 the species group is rather common and inhabits various water bodies, including lakes, ponds,
492 reservoirs, and temporary pools. *Moina mukhamedievi* Mirabdullayev, 1998, a potentially
493 valid species reported from Khorezm and Syrdarya Provinces (Mirabdullayev 1998) and
494 probable endemic of Uzbekistan, also belongs to the *brachiata*-group and requires
495 redescription.

496

497 ****Moina lipini* Smirnov, 1976 s. lat.**

498 *Moina gouldeni* Mirabdullayev 1993

499 **Previous observations.** **Fergana Province:** Lake Toda (Abdinazarov and Madumarov 2022);
500 **Namangan Province:** Lake Tudakul (Abdinazarov 2018); **Surkhandarya Province**
501 (Mirabdullayev 1993); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

502 **Remarks.** *Moina lipini* is a species group widely distributed in the Palearctic, occurring in
503 various types of habitats (Korovchinsky et al. 2021). In our study, *M. lipini s. lat.* was found in
504 a fishpond near Navbakhor, Namangan Province (loc. 99). The species complex is rare in
505 Uzbekistan and was found in a single lake and few fishery ponds (Mirabdullayev 1993;
506 Abdinazarov and Madumarov 2022).

507

508 ****Moina macrocopa* (Straus, 1820) s. lat.**

509 **Previous observations.** **Andijan Province:** Andijan fishery (Abdinazarov et al. 2019b);
510 **Fergana Province:** fishponds in Beshariq District (Abdinazarov 2018); **Karakalpakstan**
511 (Aripov 1972; Turemuratova et al. 2021 2024; Turemuratova and Nagmetov 2021;
512 Abdinazarov and Madumarov 2022); **Khorezm Province:** rice fields in Khiva and Gurlan
513 Districts (Aripov 1972; Mukhamediev 1986); **Surkhandarya Province:** Southern-Surkhan
514 Reservoir (Sibirtseva et al. 1972); **Tashkent Province:** ponds in Yangiyol District (Saparov
515 et al. 2019); **Uzbekistan without an exact locality** (Mukhamediev 1986; Rakhmatullaeva
516 2007; Kuzmetov and Abdinazarov 2016)

517 **Remarks.** The species is widespread in Eurasia, being more common in southern regions
518 (Korovchinsky et al. 2021). In our study, *Moina macrocopa* was recorded in a puddle in
519 Djizak Province and a lake in Samarkand Province (locs. 28, 62). In Uzbekistan, *M.*
520 *macrocopa* occurs in small lakes, rice fields, fishponds, and temporary pools.

521

522 ****Moina micrura* Kurz, 1874 s. lat.**

523 *Moina weberi* Richard, 1891

524 *Moina dubia* Guerne and Richard, 1892

525 **Previous observations.** **Andijan Province:** Andijan, rice fields in Khodjaobod District
526 (Stepanova and Ledyeva 1957; Mukhamediev 1986; Abdinazarov 2018; Abdinazarov et al.
527 2019b); **Bukhara Province:** Lake Dengizkul, Lake Shurkul (Mustafaeva and Mirzayev

2018b); **Djizak Province**: Lake Arnasay (Ginatullina et al. 2006a); **Fergana Province** (Mukhamediev 1967 1986; Abdinazarov 2018; Mukhamediev and Bekchonova 2023; Madumarov et al. 2024); **Karakalpakstan** (Akatova 1950; Aripov 1966 1972; Ginatullina 2010; Turemuratova and Kuzmetov 2016; Turemuratova et al. 2018 2024; Aladin et al. 2019 2021; Abdinazarov and Madumarov 2022; Ginatullina 2022; Mirzambetov and Mirabdullayev 2022; Turemuratova and Kosymbetova 2024); **Khorezm Province**: rice fields in Khiva and Gurlan Districts (Aripov 1972); **Namangan Province**: Lake Mingbulak, Uchkurgan, Namangan (Mukhamediev 1986; Abdinazarov 2018; Abdinazarov et al. 2019b); **Samarkand Province** (Mustafaeva and Mirzayev 2018a); **Surkhandarya Province**: Degrez Reservoir, rice fields in Djarkurgan District, Shurchi, Termez (Mukhamediev and Mukhitdinov 1967; Mukhitdinov 1967); **Syrdarya Province** (Keiser 1925; Mirabdullayev 1998); **Tashkent Province**: Lake Kargaly, Akkurgan fishery (Keiser 1925; Lyakhnovich et al. 1972); **Uzbekistan without an exact locality** (Manuilova 1964; Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

Remarks. This cosmopolitan species group (Korovchinsky et al. 2021) is very common in Uzbekistan and occurs in various habitats, including large and small lakes, reservoirs, fishponds, and rice fields. In our study, *Moina micrura s. lat.* was observed in Lake Sudochoye, Karakalpakstan (locs. 72, 73), in a rice field near Bakhmal, Syrdarya Province (loc. 88), and in a fishpond near Navbakhor, Namangan Province (loc. 99).

547

548 ****Moina salina* Daday, 1888 s. lat.**

549 *Moina mongolica* Daday, 1901

550 *Moina microphthalma* Sars, 1903

551 **Previous observations.** **Djizak Province**: the Aydar-Arnasay lake system (Ginatullina et al. 2006a; Mustafaeva et al. 2021a 2021b 2022); **Karakalpakstan** (Akatova 1950; Andreev 1989; Plotnikov 2013; Turemuratova and Kuzmetov 2016; Turemuratova et al. 2018 2024; Aladin et al. 2019 2021; Ginatullina 2010 2022; Ginatullina et al. 2022); **Khorezm Province** (Crotoft et al. 2015); **Uzbekistan without an exact locality** (Kuzmetov 1998; Rakhmatullaeva 2007; Shao et al. 2021) **Remarks.** The species is widely distributed in the South Palearctic (Korovchinsky et al. 2021). In our study, *Moina salina s. lat.* was recorded in numerous localities in Bukhara, Djizak, Syrdarya, Namangan, Fergana and Andijan Provinces (locs. 79–82, 87, 90, 94, 101, 103–106, 108). In Uzbekistan, *Moina salina* is rather common, being abundant in pelagic zone of saline and brackish lakes.

561

562 ***Moina weismanni* Ishikawa, 1896**

563 **Previous observations.** **Andijan Province**: Andijan fishery (Abdinazarov et al. 2019b); **Fergana Province**: fishponds in Beshariq District (Abdinazarov 2018); **Karakalpakstan** (Turemuratova et al. 2018 2024; Mirzambetov and Mirabdullayev 2022; Turemuratova and Kosymbetova 2024); **Namangan Province**: Namangan fishery (Abdinazarov 2018; Abdinazarov et al. 2019b); **Surkhandarya Province** (Mirabdullayev 1993); **Uzbekistan without an exact locality** (Kuzmetov 1998; Rakhmatullaeva 2007)

570 **Remarks.** The species occurs in the South and East Palearctic, with the northern border of
571 the range in Central Asia (Korovchinsky et al. 2021). In Uzbekistan, *Moina weismanni* was
572 reported from several lakes and fishponds.

573

574 **Family Acantholeberidae Smirnov, 1976**

575 *Acantholeberis curvirostris* (O.F. Müller, 1776)

576 *Acantholeberis curvicornis* in Mukhamediev
577 1986

578 **Previous observations.** **Fergana Province:** Lake Karashar, Lake Kalgandarya, Kokon
579 (Mukhamediev 1986); **Namangan Province:** Lake Mingbulak (Mukhamediev 1986);
580 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

581 **Remarks.** *Acantholeberis curvirostris* is widespread in the West Palearctic, being more
582 common in its northern regions (Korovchinsky et al. 2021). In Uzbekistan, the species seems
583 to be rare and was reported from littoral zone of several lakes, fishponds, and temporary pools
584 (Mukhamediev 1986).

585

586 **Family Macrothricidae Norman et Brady, 1867 emend. Smirnov, 1976**

587 *Lathonura rectirostris* (O.F. Müller, 1776)

588 **Previous observations.** **Karakalpakstan:** Lake Dovutkul (Akatova 1950)

589 **Remarks.** *Lathonura rectirostris* is a widespread Holarctic species (Korovchinsky et al.
590 2021). In Uzbekistan, the only record of *L. rectirostris* was from littoral zone of Lake
591 Dovutkul, Karakalpakstan (Akatova 1950). Thus, presence of this species in Uzbekistan
592 requires further confirmation.

593

594 *Macrothrix hirsuticornis* Norman et Brady, 1867

595 *Drepanomacrothrix stschelkanowzewi* Werestschagin, 1913

596 **Previous observations.** **Andijan Province:** Andijan fishery (Abdinazarov et al. 2019b);
597 **Fergana Province:** Lake Karashar, fishponds in Beshariq District (Mukhamediev 1986;
598 Abdinazarov 2018); **Karakalpakstan:** Lake Akchakul, Lake Saikul (Turemuratova et al.
599 2018 2024); **Namangan Province:** Lake Mingbulak (Mukhamediev 1967 1986);
600 **Surkhandarya Province:** Degrez Reservoir, Uchqizil Reservoir, Southern-Surkhan
601 Reservoir (Mukhitdinov 1967; Afanasyeva et al. 1972; Sibirtseva et al. 1972); **Uzbekistan**
602 **without an exact locality** (Rakhmatullaeva 2007)

603 **Remarks.** The species is widely distributed in the Holarctic (Korovchinsky et al. 2021). In
604 Uzbekistan, *Macrothrix hirsuticornis* is rare, being observed in the littoral and bottomhole
605 zones of lakes and reservoirs.

606

607

608 *Macrothrix laticornis* (Jurine, 1820)

609 **Previous observations.** **Djizak Province** (Ulyanin 1875); **Karakalpakstan:** the Sudochoye
610 lake system (Akatova; Ginatullina et al. 2017); **Syrdarya Province:** Lake Kalgansyr
611 (Keiser 1925); **Tashkent Province:** Lake Kargaly, Akkurgan fishery (Keiser 1925;
612 Lyakhnovich et al. 1972); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

613 **Remarks.** *Macrothrix laticornis* is widespread in the Holarctic (Korovchinsky et al. 2021).
614 In Uzbekistan, the species was observed in the littoral zone of few lakes.

615

616 ****Macrothrix odiosa* Gurney, 1916**

617 **Previous observations.** **Andijan Province:** Andijan, Uchkurgan, rice fields in Khodjaobod and
618 Asaka Districts (Stepanova and Ledyeva 1957; Mukhamediev 1986); **Fergana Province:**
619 Fergana, Kokon, Margilan, Karkidon Reservoir (Mukhamediev 1967 1986; Abdinazarov 2018;
620 Mukhamediev and Bekchonova 2023); **Karakalpakstan:** Lake Saikul, rice fields in Chimbay,
621 Shumanai and Kungrad Districts (Aripov 1972; Turemuratova and Kosymbetova 2024);
622 **Khorezm Province:** rice fields in Khiva and Gurlan Districts (Aripov 1972); **Namangan**
623 **Province:** Namangan (Mukhamediev 1986); **Samarkand Province:** Samarkand, Jambay
624 (Behning 1938; Mukhamediev 1986); **Surkhandarya Province:** Uchqizil Reservoir, rice fields
625 and ponds in Kumkurgan, Termez districts, Denou (Mukhamediev and Mukhitdinov 1967;
626 Afanasyeva et al. 1972); **Tashkent Province:** Akkurgan fishery (Lyakhnovich et al. 1972);
627 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007; Kuzmetov and Abdinazarov
628 2016)

629 **Remarks.** *Macrothrix odiosa* occurs in tropics and subtropics of the Eurasia and Africa
630 (Korovchinsky et al. 2021). In our study, the species was observed in a puddle with
631 decomposing organic matter in Samarkand Province (loc. 61). *Macrothrix odiosa* is rather
632 common in Uzbekistan, where it inhabits littoral zone of freshwater lakes, reservoirs, rice
633 fields, fishponds, and temporary pools.

634

635 ****Macrothrix rosea* (Liévin, 1848)**

636 **Previous observations.** **Andijan Province** (Mukhamediev 1986); **Fergana Province:**
637 Margilan (Mukhamediev 1986); **Uzbekistan without an exact locality** (Rakhmatullaeva
638 2007)

639 **Remarks.** *Macrothrix rosea* is widespread in the North Eurasia (Korovchinsky et al. 2021). In
640 our study, *M. rosea* was recorded in the vegetated littoral of Lake Fozilmon, Navoiy Province
641 (loc. 47), in Tuyabuguz Reservoir and its drainage, Tashkent Province (locs. 65, 68, 69), and in
642 a rice field, Syrdarya Province (loc. 88). In Uzbekistan, the species is rare and was recorded in
643 several rice fields and fishponds (Mukhamediev 1986).

644

645 ****Macrothrix spinosa* King, 1853**

646 **Previous observations.** **Andijan Province** (Stepanova and Ledyeva 1957; Mukhamediev
647 1986; Abdinazarov et al. 2019b); **Bukhara Province:** Devkhona Reservoir (Khodjayeva and
648 Shamsiyev 2020); **Fergana Province:** Lake Karashar, Margilan, Fergana, Kokon, fishponds in
649 Beshariq District (Mukhamediev 1986; Abdinazarov 2018); **Karakalpakstan:** Lake Saikul,
650 rice fields in Chimbay, Shumanai and Kungrad Districts (Aripov 1972; Turemuratova and
651 Kosymbetova 2024); **Khorezm Province:** rice fields in Khiva and Gurlan Districts (Aripov

652 1972); **Namangan Province**: Lake Mingbulak (Mukhamediev 1967); **Samarkand Province**:
653 Jambay (Behning 1938); **Surkhandarya Province**: Degrez Reservoir, Uchqizil Reservoir,
654 Southern-Surkhan Reservoir, rice fields and ponds in Djarkurgan, Kumkurgan districts
655 (Mukhamediev and Mukhitdinov 1967; Mukhitdinov 1967; Afanasyeva et al. 1972; Sibirtseva
656 et al. 1972); **Uzbekistan without an exact locality** (Manuilova 1964; Kuzmetov 1998;
657 Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

658 **Remarks.** This is a cosmopolitan species observed in tropics and subtropics of all continents
659 (Korovchinsky et al. 2021). In our study, the species was recorded in Arnasay lake system,
660 Djizak Province (loc. 10), two lakes and a temporary pool in Samarkand Province (locs. 58,
661 61, 62), and in two ponds in Tashkent Province (locs. 66, 67). In Uzbekistan, *Macrothrix*
662 *spinosa* is relatively widespread but not abundant (Mukhamediev 1986) and occurs in the
663 vegetated littoral of small lakes, reservoirs, fishponds, rice fields, and temporary pools.

664

665 ***Macrothrix triserialis* Brady, 1886**

666 *Macrothrix chevreuxi* Richard, 1913

667 *Macrothrix shadini* Mukhamediev, 1963

668 *Echinisca triserialis* (Brady, 1886)

669 **Previous observations.** **Andijan Province**: Andijan, Butakara (Mukhamediev 1986);
670 **Fergana Province**: Fergana, Kokon, Margilan (Mukhamediev 1967); **Karakalpakstan**:
671 Lake Akchakul, Lake Saikul, rice fields in Chimbay and Shumanai Districts (Aripov 1972;
672 Turemuratova et al. 2018 2024); **Khorezm Province**: rice fields in Khiva and Gurlan Districts
673 (Aripov 1972); **Namangan Province**: Namangan (Mukhamediev 1986); **Uzbekistan**
674 **without an exact locality** (Manuilova 1964)

675 **Remarks.** The species inhabits tropics and subtropics of all continents (Korovchinsky et al.
676 2021). In Uzbekistan, *Macrothrix triserialis* is rather rare and occurs mostly in small
677 vegetated waterbodies, including rice fields, fishponds, and temporary pools.

678

679 **Family Ilyocryptidae Smirnov, 1992**

680 ****Ilyocryptus agilis* Kurz, 1878**

681 **Previous observations.** **Andijan Province**: Butakara (Mukhamediev 1986); **Fergana**
682 **Province**: Margilan (Mukhamediev 1986); **Karakalpakstan**: the Sudochoye lake system, the
683 Aral Sea (Ginatullina et al. 2017; Aladin et al. 2021); **Uzbekistan without an exact locality**
684 (Rakhmatullaeva 2007)

685 **Remarks.** The species is common in North Eurasia, except for the most eastern regions, and
686 is typical of muddy sediments (Korovchinsky et al. 2021). In our study, few individuals of *I.*
687 *agilis* were recorded in benthic samples collected in two lakes and a channel within Arnasay
688 lake system, Djizak Province (locs. 5, 7, 10), and in Tuyabuguz Reservoir, Tashkent Province
689 (loc. 69). In Uzbekistan, *Ilyocryptus agilis* is relatively rare, being observed in small lakes,
690 rice fields, fishponds, and temporary pools.

691

692 ***Ilyocryptus sordidus* (Liévin, 1848)**

693 **Previous observations. Andijan Province:** Andijan (Mukhamediev 1986; Abdinazarov et al.
694 2019b); **Djizak Province:** the Aydar-Arnasay lake system (Mustafaeva et al. 2022;
695 Ginatullina et al. 2023a); **Fergana Province:** Lake Karashar, Lake Kalgandarya, Margilan,
696 fishponds in Beshariq District (Mukhamediev 1967 1986; Abdinazarov 2018);
697 **Surkhandarya Province:** Uchqizil Reservoir (Afanasyeva et al. 1972); **Syrdarya Province:**
698 Lake Kalgansyr (Keiser 1925); **Tashkent Province:** Akkurgan Reservoir (Lyakhnovich et al.
699 1972); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007; Kuzmetov and
700 Abdinazarov 2016)

701 **Remarks.** *Ilyocryptus sordidus* is a benthic species widely distributed in North Eurasia
702 (Korovchinsky et al. 2021). In Uzbekistan, *I. sordidus* is rather common and inhabits lakes of
703 various size, reservoirs, rivers, ponds, and temporary pools.

704

705 ****Ilyocryptus spinifer* Herrick, 1882 (Figs. 2C–F)**

706 **Remarks.** This is a new record for Uzbekistan. Few individuals were collected in the littoral
707 zone of the Arnasay lake system, Djizak Province (loc. 13). The species is distinguished from
708 its relatives by incomplete moulting pattern (Figs. 2C, F, black arrows), presence of spinose
709 setae on the posterior margin of the valve (Fig. 2F, black arrows), and by armature of
710 postabdomen, which bears a proximalmost lateral seta of postanal margin far removed from
711 anal opening (Fig. 2D, black arrow; Fig. 2E) and a very short ventral seta located ventrally to
712 the claw base (Fig. 2E) (Kotov and Štifter 2006; Korovchinsky et al. 2021). *I. spinifer* is very
713 common in tropical and subtropical zone on all continents. In Eurasia, this species penetrates
714 far north from its typical range (Korovchinsky et al. 2021), see also Kotov and Štifter (2006)
715 for a complete morphological description.

716

717 **Family Bosminidae Baird, 1845 emend. Sars, 1865**

718 ****Bosmina (Bosmina) longirostris* (O.F. Müller, 1776) s. lat.**

719 *Bosmina (Bosmina) longirostris* var. *cornuta* (Jurine, 1820)

720 **Previous observations. Andijan Province** (Abdinazarov et al. 2019b); **Bukhara Province**
721 (Mukhamediev 1986; Mustafaeva and Mirzayev 2018b); **Djizak Province:** the Aydar-
722 Arnasay lake system (Mystafayeva et al., 2022; Ginatullina et al. 2006a; 2023; Ginatullina
723 2023); **Fergana Province** (Mukhamediev 1986; Abdinazarov 2018; Abdinazarov et al.
724 2019a; Abdinazarov and Madumarov 2022); **Karakalpakstan** (Nikolsky and Pankratova
725 1934; Akatova 1950; Aripov 1972; Kazakhbaev 1988; Ginatullina et al. 2006b; Aladin et al.
726 2019 2021; Turemuratova and Nagmetov 2021; Turemuratova and Kosymbetova 2024);
727 **Khorezm Province:** Lake Bogatli, rice fields in Khiva and Gurlan Districts (Aripov 1972;
728 Ginatullina 2010); **Namangan Province:** Lake Mingbulak, Varziq Reservoir, Rizaq
729 Reservoir, Lake Tudakul (Mukhamediev 1967; Abdinazarov 2018); **Samarkand Province**
730 (Mustafaeva and Mirzayev 2018a); **Surkhandarya Province:** Degrez Reservoir, Uchqizil
731 Reservoir, Southern-Surkhan Reservoir (Mukhitdinov 1967; Afanasyeva et al. 1972;
732 Sibirtseva et al. 1972); **Syrdarya Province:** Lake Kalgansyr (Keiser 1925); **Tashkent**
733 **Province:** Tuyabuguz Reservoir, Akkurgan fishery (Lyakhnovich et al. 1972; Ginatullina et
734 al. 2023c); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007; Kuzmetov and
735 Abdinazarov 2016)

736 **Remarks.** This cosmopolitan species is distributed worldwide (Korovchinsky et al. 2021). In
737 our study, the species was recorded in several water bodies in Bukhara, Djizak, Syrdarya,
738 Tashkent, Namangan and Andijan Provinces (locs. 5, 65, 68, 70, 78, 82, 86, 88, 92, 93, 103,
739 107). In Uzbekistan, *Bosmina longirostris* is one of the most common pelagic cladocerans
740 and occurs in all types of permanent waterbodies.

741

742 *Bosmina (Eubosmina) coregoni* (Baird, 1857)

743 **Previous observations.** **Tashkent Province:** Akkurgan fishery (Lyakhnovich et al. 1972)

744 **Remarks.** The species widely occurs in West Eurasia and probably in North America, but the
745 latter should be revised (Korovchinsky et al. 2021). In Uzbekistan, the species was found in
746 a single locality in Tashkent Province (Lyakhnovich et al. 1972), which might be a
747 misidentification of *B. (B.) longirostris*. Thus, presence of the species in Uzbekistan should
748 be re-checked.

749

750 **Family Chydoridae Dybowski et Grochowski, 1894**

751 **Subfamily Aloninae Dybowski et Grochowski, 1894**

752 *Acroperus harpae* (Baird, 1834)

753 **Previous observations.** **Fergana Province:** Lake Karashar, Lake Kalgandarya, Aydinbulak
754 (Mukhamediev 1967 1986); **Karakalpakstan:** Lake Sudochoye, Lake Karateren (Nikolsky and
755 Pankratova 1934; Akatova 1950; Ginatullina 2022); **Namangan Province:** Lake Mingbulak
756 (Mukhamediev 1967 1986); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

757 **Remarks.** The species is widespread in North Eurasia (Korovchinsky et al. 2021). In
758 Uzbekistan, *Acroperus harpae* is rather rare and occurs mostly in the littoral zone of lakes.

759

760 *Acroperus angustatus* Sars, 1862

761 **Previous observations.** **Karakalpakstan:** Lake Khodjakul (Ginatullina 2010); **Uzbekistan**
762 **without an exact locality** (Rakhmatullaeva 2007)

763 **Remarks.** The species occurs in North Eurasia, but its range is still unclear (Korovchinsky et
764 al. 2021). The Uzbek records of *Acroperus angustatus* should be revised, as this species could
765 be easily confused with more common *A. harpae*. To date, the only population of *A.*
766 *angustatus* in Uzbekistan was found in Lake Khodjakul, Karakalpakstan (Ginatullina 2010).

767

768 *Alona quadrangularis* (O.F. Müller, 1785)

769 **Previous observations.** **Andijan Province:** Andijan (Mukhamediev 1986); **Fergana**
770 **Province:** Lake Karashar, Lake Kalgandarya, Aydinbulak, Fergana (Mukhamediev 1967);
771 **Karakalpakstan:** Lake Sudochoye (Akatova 1950); **Namangan Province:** Lake Mingbulak,
772 Namangan (Mukhamediev 1967 1986); **Surkhandarya Province:** Degrez Reservoir,
773 Uchqizil Reservoir, Southern-Surkhan Reservoir (Mukhitdinov 1967; Afanasyeva et al. 1972;
774 Sibirtseva et al. 1972); **Tashkent Province:** Akkurgan fishery (Lyakhnovich et al. 1972);
775 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

776 **Remarks.** *Alona quadrangularis* occurs in West Eurasia but the eastern borders of its range
777 remain unknown (Korovchinsky et al. 2021). In Uzbekistan, the species was observed in the
778 littoral zone of lakes, ponds, and in springs of North Uzbekistan (Mukhamediev 1986).

779

780 ****Biapertura affinis* (Leydig, 1860) (Figs. 2G–I)**

781 **Previous observations.** **Karakalpakstan:** Lake Khodjakul (Ginatullina 2010)

782 **Remarks.** *Biapertura affinis* is a very common Palearctic species (Korovchinsky et al. 2021).
783 However, *B. affinis* is obviously rare in Uzbekistan, being observed only in the littoral of lake
784 Khodjakul, Karakalpakstan (Ginatullina 2010). The species is distinct from other alonines by
785 an elongate body shape (Fig. 2G), presence of two head pores and a large subrectangular
786 postabdomen with dorsal margin evenly concave, bearing thick teeth (Fig. 2H); absence of
787 denticles at posteroventral angle of valve (Fig. 2I) allows to distinguish *B. affinis* from its
788 relative, *B. sibirica* Sinev, Karabanov et Kotov, 2020. In our study, two parthenogenetic
789 females of *B. affinis* were found in the drainage of Tuyabuguz Reservoir, Tashkent Province
790 (loc. 65).

791

792 ***Camptocercus rectirostris* Schödler, 1862**

793 **Previous observations.** **Fergana Province:** Lake Karashar, Lake Kalgandarya, Aydinbulak
794 (Mukhamediev 1967 1986); **Karakalpakstan:** Lake Saloi (Akatova 1950); **Namangan**
795 **Province:** Lake Mingbulak (Mukhamediev 1986); **Surkhandarya Province:** Uchqizil
796 Reservoir (Afanasyeva et al. 1972); **Uzbekistan without an exact locality** (Rakhmatullaeva
797 2007)

798 **Remarks.** *Camptocercus rectirostris* occurs in the West Palearctic, reaching the West Siberia
799 (Korovchinsky et al. 2021). The species was observed mostly in the littoral zone of lakes in
800 North Uzbekistan (Mukhamediev 1986). The status of these records should be re-checked, as
801 *C. rectirostris* might be a misidentification of newly recorded *C. uncinatus*.

802

803 ****Camptocercus uncinatus* Smirnov, 1971 (Figs. 3A–D)**

804 **Remarks.** This is a new record for Uzbekistan. One parthenogenetic female was collected in
805 the vegetated littoral zone of Tuyabuguz Reservoir, Tashkent Province (loc. 68).
806 *Camptocercus uncinatus* is distinguished from its relatives by absence of teeth on the
807 posteroventral angle of the valve (Fig. 3A), acute rostrum (Fig. 3B, black arrow), the
808 relatively short basal spine on the postabdominal claw, which narrows distally (Fig. 3C, black
809 arrow), and wide serrate postanal teeth (Fig. 3D, black arrows) (Korovchinsky et al. 2021).
810 The species occurs in southern temperate, subtropical, and tropical regions of Eurasia and in
811 northern Africa (Korovchinsky et al. 2021).

812

813 ****Coronatella (Coronatella) rectangula* (Sars, 1861)**

814 *Alona rectangula* Sars, 1861

815 **Previous observations.** **Andijan Province:** Andijan, rice fields in Khodjaobod and Asaka
816 Districts (Stepanova and Ledyeva 1957; Mukhamediev 1986; Abdinazarov et al. 2019b);
817 **Bukhara Province:** Lake Dengizkul, Lake Shurkul (Mustafaeva and Mirzayev 2018b); **Djizak**

818 **Province:** the AydarArnasay lake system (Mustafaeva et al. 2021a 2021b 2022; Ginatullina et
819 al. 2006a 2023; Ginatullina 2023); **Fergana Province** (Stepanova and Ledyeva 1957;
820 Mukhamediev 1967 1986; Abdinazarov 2018; Abdinazarov et al. 2019a); **Karakalpakstan**
821 (Meisner 1906; Nikolsky and Pankratova 1934; Aripov 1972; Andreev 1989; Ginatullina 2010;
822 Ginatullina et al. 2006b; 2017; Plotnikov 2013; Mirabdullayev et al. 2016; Turemuratova and
823 Kuzmetov 2016; Turemuratova et al. 2018; Aladin et al. 2019 2021; Turemuratova and
824 Nagmetov 2021; Abdinazarov and Madumarov 2022; Mirzambetov and Mirabdullayev 2022);
825 **Namangan Province:** Lake Mingbulak, Namangan fishery (Mukhamediev 1967 1986;
826 Abdinazarov 2018); **Samarkand Province** (Mustafaeva and Mirzayev 2018a);
827 **Surkhandarya Province:** Degrez Reservoir, Uchqizil Reservoir, Southern-Surkhan Reservoir
828 (Mukhitdinov 1967; Afanasyeva et al. 1972; Sibirtseva et al. 1972); **Tashkent Province:**
829 Tuyabuguz Reservoir, ponds in Yangiyol District, Okhangaron River basin, Akkurgan fishery
830 (Pazhitnova 1929; Lyakhnovich et al. 1972; Ginatullina and Temirova 2018; Kuzmetov 2019;
831 Abdullaeva et al. 2021; Atamuratova 2021); **Uzbekistan without an exact locality**
832 (Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

833 **Remarks.** The species is widespread in Eurasia (Korovchinsky et al. 2021). In our study,
834 *Coronatella. rectangula* was observed in multiple localities in Bukhara, Djizak, Fergana,
835 Karakalpakstan, Khorezm, Navoi, Samarkand, Syrdarya and Tashkent Provinces (1, 5, 7, 14,
836 23, 26, 27, 32, 33, 43, 44, 47, 49, 53, 54, 58, 65, 68–70, 74, 76, 82–84, 89, 92–94). In
837 Uzbekistan, *C. rectangula* is one of the most common littoral species, abundant in permanent
838 and temporary waterbodies of any type.

839

840 *Coronatella (Ephemeralona) anemae* (Van Damme et Dumont, 2008)

841 **Previous observations.** **Karakalpakstan:** Mayalo (Van Damme and Dumont 2008);
842 **Uzbekistan without an exact locality** (Korovchinsky et al. 2021)

843 **Remarks.** The species occurs in temporary waterbodies of arid northern Africa, Arabian
844 Peninsula, Socotra Island and Karakalpakstan (Korovchinsky et al. 2021). As record of Van
845 Damme and Dumont (2008) is the only occurrence of this species in Central Asia, the species
846 presence in Uzbekistan is to be confirmed.

847

848 *Flavalona costata* (Sars, 1862)

849 *Alona costata* Sars, 1862

850 **Previous observations.** **Djizak Province:** Lake Arnasay (Ginatullina et al. 2006a;
851 Mustafaeva et al. 2021a 2021b); **Fergana Province:** Aydinbulak (Mukhamediev 1967 1986);
852 **Karakalpakstan:** Aral Sea, Nukus, Lake Akchakul, Lake Khodjakul (Meisner 1906;
853 Ginatullina 2010; Turemuratova and Kuzmetov 2016; Turemuratova et al. 2018); **Namangan**
854 **Province:** Lake Mingbulak (Mukhamediev 1967 1986); **Tashkent Province:** Akkurgan
855 fishery (Lyakhnovich et al. 1972); **Uzbekistan without an exact locality** (Rakhmatullaeva
856 2007)

857 **Remarks.** The species is widespread in North Eurasia and Southeast Asia (Korovchinsky et
858 al. 2021). In our study, the species was observed in the littoral zone of several lakes within
859 the Arnasay lake system, Djizak Province (locs. 6, 7, 10), in an irrigation channel, Samarkand
860 Province (loc. 60), and in Tuyabuguz Reservoir and its drainage, Tashkent Province (locs. 65,

861 70). In Uzbekistan, *Flavalona costata* is found in the littoral zone of lakes and fishponds, and
862 in springs (Mukhamediev 1986).

863

864 **Graptoleberis testudinaria* (Fischer, 1851) *s. lat.*

865 *Graptoleberis testudinaria* var. *pannonica* Daday, 1903

866 **Previous observations.** **Fergana Province:** Aydinbulak (Mukhamediev 1967 1986);
867 **Karakalpakstan:** Lake Sudochoye, lower reach of Amu-Darya (Meisner 1906; Nikolsky and
868 Pankratova 1934; Akatova 1950); **Namangan Province:** Lake Mingbulak (Mukhamediev
869 1967 1986); **Surkhandarya Province:** Uchqizil Reservoir, Southern-Surkhan Reservoir
870 (Afanasyeva et al. 1972; Sibirtseva et al. 1972); **Uzbekistan without an exact locality**
871 (Rakhmatullaeva 2007)

872 **Remarks.** The species has a cosmopolitan distribution (Korovchinsky et al. 2021). In our study,
873 a single parthenogenetic female was collected in Lake Fozilmon, Navoiy Province (loc. 47). In
874 Uzbekistan, *Graptoleberis testudinaria* occurs in few lakes and springs, but is never abundant
875 (Mukhamediev 1986).

876

877 *Karualona* sp.

878 *Alonella karua* King, 1853

879 **Previous observations.** **Andijan Province:** Andijan (Mukhamediev 1986); **Fergana**
880 **Province:** Fergana, Margilan, Kokon (Mukhamediev 1967 1986); **Karakalpakstan:** rice
881 fields in Chimbay, Shumanai and Kungrad Districts (Aripov 1972); **Khorezm Province:** rice
882 fields in Khiva and Gurlan Districts (Aripov 1972); **Samarkand Province:** Samarkand,
883 Jambay (Behning 1938); **Surkhandarya Province:** rice field in Denou District
884 (Mukhamediev and Mukhitdinov 1967); **Uzbekistan without an exact locality** (Manuilova
885 1964)

886 **Remarks.** In Uzbekistan, the taxon was observed mostly in rice fields and temporary pools
887 (Mukhamediev 1986). To date, *Karualona* records from Uzbekistan need a revision, as they
888 have never been thoroughly studied. The illustrations of '*Alonella karua*' provided by
889 Behning (1938: fig. 4) and Mukhamediev (1986: fig. 26: 3–7) do not clearly display required
890 diagnostic features, such as structure of second antenna and postabdomen. The Uzbek
891 populations of *Karualona* might belong to *K. iberica* (King, 1853), which occurs in the
892 Mediterranean, Transcaucasia and Central Asia, with an unclear distribution in the rest of Asia
893 (Korovchinsky et al. 2021), or to *K. karua* King 1853 *s. lat.* The status of Uzbek populations
894 of *K. iberica* should be re-checked.

895

896 *Kurzia latissima* (Kurz, 1875)

897 *Kurzia* sp.

898 **Previous observations.** **Fergana Province:** Lake Karashar, Lake Kalgandarya (Mukhamediev
899 1967 1986); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

900 **Remarks.** *Kurzia latissima* occurs in southern regions of the Palearctic, including Central Asia,
901 South Siberia and Far East of Russia, Korean Peninsula, and China (Korovchinsky et al. 2021).

902 In Uzbekistan, the species seems to be rare, as it was observed in the vegetated littoral zone of
903 only two lakes in Fergana Province (Mukhamediev 1986).

904

905 *Leberis* sp.

906 *Alona davidi* Richard 1895

907 **Previous observations.** **Andijan Province:** Butakara (Mukhamediev 1986); **Fergana**
908 **Province:** Fergana (Mukhamediev 1967 1986); **Karakalpakstan:** rice fields in Chimbay
909 District (Aripov 1972); **Khorezm Province:** rice fields in Khiva and Gurlan Districts (Aripov
910 1972); **Namangan Province:** Namangan, Uchkurgan (Mukhamediev 1986); **Samarkand**
911 **Province:** Samarkand (Behning 1938; Mukhamediev 1986); **Uzbekistan without an exact**
912 **locality** (Rakhmatullaeva 2007)

913 **Remarks.** *Leberis* is a subtropical and tropical genus occurring in Mediterranean, Southeast
914 Asia, China, Korean Peninsula, and Australia (Korovchinsky et al. 2021). The populations
915 referred to as *Leberis* were observed in few rice fields and temporary pools in East Uzbekistan
916 (Mukhamediev 1986). However, the illustrations provided by Mukhamediev (1986: fig. 25: 3–
917 7) are insufficient for identification of the depicted specimen. Thus, the status of *Leberis*
918 populations from Central Asia should be clarified.

919

920 *Leydigia (Leydigia) leydigi* (Schödler, 1863)

921 **Previous observations.** **Andijan Province:** Butakara (Mukhamediev 1986); **Fergana**
922 **Province:** Kokon (Mukhamediev 1986); **Karakalpakstan:** Sydochye lake system (Ginatullina
923 et al. 2017); **Namangan Province:** Uychi, Uchkurgan (Mukhamediev 1986); **Surkhandarya**
924 **Province:** Uchqizil Reservoir, Southern-Surkhan Reservoir (Afanasyeva et al. 1972; Sibirtseva
925 et al. 1972); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007; Kuzmetov and
926 Abdinazarov 2016)

927 **Remarks.** This benthic species has a Holarctic range (Korovchinsky et al. 2021). In
928 Uzbekistan, *Leydigia leydigi* was observed in littoral zone of lakes with muddy sediment and
929 in rice fields.

930

931 **Leydigia (Neoleydigia) acanthocercoides* (Fischer, 1854)

932 **Previous observations.** **Andijan Province:** rice fields in Andijan (Mukhamediev 1986);
933 **Karakalpakstan:** rice fields in Chimbay, Shumanai and Kungrad Districts (Aripov 1972);
934 **Khorezm Province:** rice fields in Khiva and Gurlan Districts (Aripov 1972); **Namangan**
935 **Province:** Uchkurgan (Mukhamediev 1986); **Uzbekistan without an exact locality**
936 (Kuzmetov 1998; Rakhmatullaeva 2007)

937 **Remarks.** *Leydigia acanthocercoides* is widely distributed in the Holarctic (Korovchinsky et
938 al. 2021). In our study, gamogenetic stages of *L. acanthocercoides* were observed in a small
939 stream in the vicinity of Qaratash, Djizak Province (locs. 32, 33), in Sentab Reservoir, Navoiy
940 Province (loc. 42); also, few parthenogenetic females were found in a puddle near Djizak
941 Reservoir Dam, Djizak Province (loc. 64). In Uzbekistan, the species is rare and occurs in rice
942 fields and temporary pools (Mukhamediev 1986).

943

944 *Monospilus dispar* Sars, 1862

945 **Previous observations.** **Surkhandarya Province:** Uchqizil Reservoir (Afanasyeva et al.
946 1972); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

947 **Remarks.** The species is widespread in North Eurasia and Africa (Korovchinsky et al. 2021).
948 In Uzbekistan, *Monospilus dispar* seems to be very rare, being observed only by Afanasyeva
949 et al. (1972). As this record is quite old, presence of the species in Uzbekistan should be
950 confirmed.

951

952 ****Ovalona cambouei* (Guerne et Richard, 1893)**

953 *Alona cambouei* Guerne et Richard, 1893

954 *Alona archeri* Sars, 1888

955 **Previous observations.** **Andijan Province:** Andijan (Mukhamediev 1986; Abdinazarov et al.
956 2019b); **Fergana Province** (Mukhamediev 1967 1986; Abdinazarov 2018; Mukhamediev and
957 Bekchonova 2023); **Karakalpakstan:** rice fields in Chimbay, Shumanai and Kungrad Districts
958 (Aripov 1966 1972); **Khorezm Province:** rice field in Khiva and Gurlan Districts (Aripov 1966
959 1972); **Namangan Province:** Namangan, Lake Mingbulak, Uychi (Mukhamediev 1986);
960 **Surkhandarya Province:** Shurchi, Denou, Tallimaron (Mukhamediev and Mukhitdinov
961 1967); **Tashkent Province:** Akkurgan fishery (Lyakhnovich et al. 1972; Sinev 2001);
962 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

963 **Remarks.** *Ovalona cambouei* is a littoral species inhabiting tropical and subtropical regions of
964 Asia, Africa, and the Mediterranean (Korovchinsky et al. 2021). In our study, *Ovalona*
965 *cambouei* was recorded in water bodies of the Arnasay lake system, Djizak Province (locs. 7,
966 12), in Tuyabuguz Reservoir and in a small pond, Tashkent Province (loc. 66, 93). The records
967 of its relative, *O. archeri* Sars, 1888, from Central Asia are doubtful and probably refer to *O.*
968 *cambouei*, as *O. archeri* is an Australian taxon (Sinev 2015; Sinev et al. 2024). General view
969 and postabdomen of *O. archeri* from Fergana Valley depicted by Mukhamediev (1986: fig. 26:
970 1–2) are similar to that of *O. cambouei*. In Uzbekistan, *Ovalona cambouei* is common and
971 occurs in a variety of waterbodies (rice fields, temporary pools and littoral zone of reservoirs).

972

973 ****Oxyurella tenuicaudis* (Sars, 1862)**

974 **Previous observations.** **Djizak Province:** the Aydar-Arnasay lake system (Ginatullina et al.
975 2006a; Ginatullina 2023); **Karakalpakstan** (Ginatullina et al. 2006b; 2017); **Tashkent**
976 **Province:** ponds in Yangiyol District (Ginatullina and Temirova 2018); **Uzbekistan without**
977 **an exact locality** (Rakhmatullaeva 2007)

978 **Remarks.** The species is widespread in the Palearctic (Korovchinsky et al. 2021). In our
979 study, the species was found in the vegetated littoral of large lake within the Arnasay lake
980 system, Djizak Province (loc. 6), and in a fishpond near Sarvaksay River, Namangan Province
981 (loc. 97). In Uzbekistan, *O. tenuicaudis* was recorded in the littoral zone of lakes and
982 fishponds.

983

984 ****Prendalona guttata* (Sars, 1862)**

985 *Alona guttata* Sars, 1862

986 **Previous observations.** **Fergana Province:** Fergana, Margilan (Mukhamediev 1986);
987 **Karakalpakstan** (Meisner 1906; Akatova 1950); **Samarkand Province:** Chumchuqli
988 (Pazhitnova 1935); **Surkhandarya Province:** Uchqizil Reservoir (Mukhitdinov 1967);
989 **Syrdarya Province:** Lake Kalgansyr (Keiser 1925); **Tashkent Province:** Tashkent,
990 Akkurgan fishery (Pazhitnova 1929; Lyakhnovich et al. 1972); **Uzbekistan without an exact**
991 **locality** (Rakhmatullaeva 2007)

992 **Remarks.** *Prendalona guttata* is a cosmopolitan species widespread in Eurasia
993 (Korovchinsky et al. 2021). In our study, few individuals of *P. guttata* were recorded in the
994 littoral zone of the Arnasay lake system major basin, Djizak Province (loc. 13), and in
995 Tuyabuguz Reservoir, Tashkent Province (locs. 69, 70). In Uzbekistan, the species is rare and
996 occurs mostly in rice fields and vegetated fishponds (Mukhamediev 1986).

997

998 **Subfamily Chydorinae Dybowski et Grochowski, 1894**

999 ***Alonella excisa* (Fischer, 1854)**

1000 *Alona excisa* in Ginatullina 2010

1001 **Previous observations.** **Karakalpakstan:** Lake Khodjakul (Ginatullina 2010); **Uzbekistan**
1002 **without an exact locality** (Rakhmatullaeva 2007)

1003 **Remarks.** This cosmopolitan species or species complex is widespread in Eurasia
1004 (Korovchinsky et al. 2021). In Uzbekistan, the taxon was undoubtedly observed only in Lake
1005 Khodjakul (Ginatullina 2010).

1006

1007 ***Alonella exigua* (Lilljeborg, 1853)**

1008 **Previous observations.** **Namangan Province:** Lake Mingbulak (Mukhamediev 1967 1986);
1009 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1010 **Remarks.** This is a widespread species occurring in the Holarctic and Africa (Korovchinsky et
1011 al. 2021). In Uzbekistan, the species was observed only in the littoral zone of Lake Mingbulak
1012 (Mukhamediev 1986).

1013

1014 ***Alonella nana* (Baird, 1850)**

1015 **Previous observations.** **Karakalpakstan:** Lake Sudochoye (Meisner 1906; Nikolsky and
1016 Pankratova 1934); **Namangan Province:** Lake Mingbulak (Mukhamediev 1967 1986);
1017 **Syrdarya Province:** Lake Kalgansyr (Keiser 1925); **Uzbekistan without an exact locality**
1018 (Rakhmatullaeva 2007)

1019 **Remarks.** This is a common Holarctic species (Korovchinsky et al. 2021). In Uzbekistan,
1020 *Alonella nana* was observed in the littoral zone of several lakes.

1021

1022 ***Anchistropus emarginatus* (Sars, 1862)**

1023 **Previous observations.** **Karakalpakstan:** Lake Dovutkul (Akatova 1950)

1024 **Remarks.** This rare phytophilous Palearctic species occurs in the presence of its prey, *Hydra*
1025 L., 1758. The only record of this taxon in Lake Dovutkul, Karakalpakstan requires further
1026 confirmation.

1027

1028 *Chydorus gibbus* Sars, 1890

1029 **Previous observations.** **Fergana Province:** Fergana, Margilansai (Mukhamediev 1967);
1030 **Namangan Province:** Lake Mingbulak (Mukhamediev 1967); **Uzbekistan without an exact**
1031 **locality** (Rakhmatullaeva 2007)

1032 **Remarks.** The species is widespread in the Palearctic (Korovchinsky et al. 2021). In
1033 Uzbekistan, *Chydorus gibbus* was observed in a few lakes and fishponds. However, the
1034 previous records of this species should be verified, as they could refer to more common *C.*
1035 *sphaericus* (O.F. Müller, 1776) *s. lat.*

1036

1037 **Chydorus sphaericus* (O.F. Müller, 1776) *s. lat.*

1038 *Chydorus latus* Sars, 1862

1039 *Chydorus rylovi* Mukhamediev 1986

1040 **Previous observations.** **Andijan Province:** Lake Shamshikul, Sufikishlak, Andijan fishery,
1041 rice fields in Khodjaobod and Asaka Districts (Stepanova and Ledyeva 1957; Mukhamediev
1042 1967 1986; Abdinazarov et al. 2019b); **Bukhara Province:** Devkhona Reservoir
1043 (Khodjayeva and Shamsiyev 2020); **Djizak Province:** the Aydar-Arnasay lake system
1044 (Mustafaeva et al. 2006; 2021a; 2021b; 2022; Ginatullina 2023; Ginatullina et al. 2023a);
1045 **Fergana Province** (Stepanova and Ledyeva 1957; Mukhamediev 1967 1986; Abdinazarov
1046 2018; Abdinazarov et al. 2019a; Abdinazarov and Madumarov 2022); **Karakalpakstan**
1047 (Akatova 1950; Aripov 1972; Ginatullina 2010; Ginatullina et al. 2006b; 2017; Mirabdullayev
1048 et al. 2016; Turemuratova and Kuzmetov 2016; Turemuratova et al. 2018 2024; Aladin et al.
1049 2019 2021; Turemuratova and Nagmetov 2021; Ginatullina 2022; Temirbekov et al., 2023);
1050 **Khorezm Province:** rice fields in Khiva and Gurlan Districts (Aripov 1972); **Namangan**
1051 **Province:** Lake Mingbulak, Lake Tudakul, Namangan fishery (Mukhamediev 1986;
1052 Abdinazarov 2018); **Samarkand Province:** Chumchuqli, Samarkand vicinity (Pazhitnova
1053 1935; Keiser 1937); **Surkhandarya Province:** Degrez Reservoir, Uchqizil Reservoir,
1054 Southern-Surkhan Reservoir (Mukhitdinov 1967; Afanasyeva et al. 1972; Sibirtseva et al.
1055 1972); **Syrdarya Province:** Lake Kalgansyr (Keiser 1925); Yuzhno-Golodnostepskii
1056 Channel (Ginatullina et al. 2023b); **Tashkent Province:** Tuyabuguz Reservoir, Okhangaron
1057 River basin, ponds in Yangiyol District, Akkurgan fishery (Keiser 1937; Lyakhnovich et al.
1058 1972; Ginatullina and Temirova 2018; Kuzmetov 2019; Abdullaeva et al. 2021; Atamuratova
1059 2021; Ginatullina et al. 2023c); **Uzbekistan without an exact locality** (Kuzmetov 1998;
1060 Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

1061 **Remarks.** This cosmopolitan species complex has a wide range in Eurasia (Belyaeva and
1062 Taylor 2009). In our study, *Chydorus sphaericus* was found in numerous localities in Djizak,
1063 Fergana, Karakalpakstan, Khorezm, Namangan, Navoi, Samarkand, Syrdarya and Tashkent
1064 Provinces (locs. 1, 4, 6, 7, 13, 17, 23, 26, 27, 30, 33–36, 47, 48, 56, 59, 60, 64–66, 67, 69, 70,
1065 73, 76, 77, 83, 84, 86, 89, 94, 96–98). *Chydorus sphaericus* is one of the most common
1066 morphospecies in Uzbekistan observed in permanent and temporary water bodies of any type,
1067 sometimes recorded in brackish environments (Ginatullina 2010). The cryptic species within

1068 the *sphaericus*-complex can be distinguished either by morphology of gamogenetic stages or
1069 by molecular methods (Belyaeva and Taylor 2009), thus Uzbek populations of *C. sphaericus*
1070 require particular research. The record of *Chydorus ovalis* Kurz, 1875 in Uzbekistan
1071 (Rakhmatullaeva 2007) very likely refers to *C. sphaericus*, as *C. ovalis* prefers acidic and
1072 oligotrophic water bodies absent in lowland Uzbekistan.

1073

1074 ****Disparalona rostrata* (Koch, 1841) (Figs. 3E, F)**

1075 *Rhynchotalona rostrata* (Koch, 1841)

1076 **Previous observations. Surkhandarya Province:** Uchqizil Reservoir (Mukhitdinov 1967);
1077 **Syrdarya Province:** Lake Kalgansyr (Keiser 1925); **Tashkent Province:** Lake Kargaly
1078 (Keiser 1925); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1079 **Remarks.** The species is widespread in North Eurasia (Korovchinsky et al. 2021). In our
1080 study, a single individual was collected in the drainage of Tuyabuguz Reservoir (loc. 65).
1081 *Disparalona rostrata* can be distinguished from its relatives by the long spine on basal
1082 exopodite segment, exceeding the length of the next segment (Fig. 3E, black arrow), by the
1083 progressively narrowing postabdomen (Figs. 3E, F), and by the short basal spine of the
1084 postabdominal claw (Fig. 3F, black arrow) (Korovchinsky et al. 2021). In Uzbekistan, *D.*
1085 *rostrata* was recorded in the littoral zone of lakes and reservoirs (Keiser 1925; Mukhitdinov
1086 1967), but the taxon seems to be very rare.

1087

1088 ****Dunhevedia crassa* King, 1853**

1089 **Previous observations. Andijan Province:** Andijan (Mukhamediev 1986); **Fergana**
1090 **Province:** Aydinbulak, Kokon, Margilan (Mukhamediev 1967 1986); **Karakalpakstan:** rice
1091 fields in Chimbay, Shumanai and Kungrad Districts (Aripov 1972); **Khorezm Province:** rice
1092 fields in Khiva and Gurlan Districts (Aripov 1972); **Namangan Province:** Lake Mingbulak
1093 (Mukhamediev 1967); **Samarkand Province:** Chumchuqli, Samarkand vicinity (Pazhitnova
1094 1935; Keiser 1937); **Tashkent Province:** Tashkent (Pazhitnova 1929; Keiser 1937);
1095 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1096 **Remarks.** *Dunhevedia crassa* occurs in the tropical and subtropical regions of all continents
1097 (Korovchinsky et al. 2021). In our study, *D. crassa* was collected in Lake Fozilmon, Navoiy
1098 Province (loc. 47), an irrigation channel and a puddle in Samarkand Province (locs. 56, 61),
1099 and in the littoral zone of Tuyabuguz Reservoir, Tashkent Province (locs. 68, 70). In
1100 Uzbekistan, the species was observed in ponds, rice fields, springs, and temporary pools.

1101

1102 ***Ephemeroporus barroisi* (Richard, 1894) s. lat.**

1103 *Chydorus barroisi* (Richard, 1894)

1104 **Previous observations. Andijan Province:** Andijan (Mukhamediev 1986); **Fergana**
1105 **Province:** Kokon (Mukhamediev 1986); **Karakalpakstan:** rice fields in Chimbay, Shumanai
1106 and Kungrad Districts (Aripov 1972); **Khorezm Province:** rice fields in Khiva District
1107 (Aripov 1972); **Namangan Province:** Uchkurgan, Namangan (Mukhamediev 1986);
1108 **Samarkand Province:** Samarkand, Jambay (Keiser 1937; Behning 1938; Mukhamediev
1109 1986); **Surkhandarya Province:** Denou, Shurchi, Southern-Surkhan Reservoir
1110 (Mukhamediev and Mukhitdinov 1967; Sibirtseva et al. 1972); **Tashkent Province:** Tashkent,

1111 Akkurgan fishery (Pazhitnova 1929; Keiser 1937; Lyakhnovich et al. 1972; Mukhamediev
1112 1986); **Uzbekistan without an exact locality** (Manuilova 1964; Rakhmatullaeva 2007)

1113 **Remarks.** *Ephemeroporus barroisi* is widespread in the tropics and subtropics of the Old
1114 World, including Australia and requires an integrative revision (Korovchinsky et al. 2021).
1115 The species was observed in rice fields of eastern Uzbekistan (Mukhamediev 1986).

1116

1117 ***Pleuroxus aduncus (Jurine, 1820)**

1118 **Previous observations.** **Andijan Province:** Lake Shamshikul, Andijan fishery
1119 (Mukhamediev 1967 1986; Abdinazarov et al. 2019b); **Djizak Province:** Lake Aydarkul
1120 (Ginatullina 2010 2023); **Fergana Province** (Mukhamediev 1967 1986; Abdinazarov 2018;
1121 Abdinazarov et al. 2019a; Abdinazarov and Madumarov 2022); **Karakalpakstan:** Sydochye
1122 lake system, rice fields in Chimbay, Shumanai and Kungrad Districts (Akatova 1950; Aripov
1123 1972; Ginatullina et al. 2017); **Khorezm Province** (Aripov 1972; Ginatullina 2010);
1124 **Namangan Province:** Lake Mingbulak, Namangan (Mukhamediev 1967 1986); **Navoiy**
1125 **Province:** Lake Aydarkul (Ginatullina 2010); **Surkhandarya Province:** Uchqizil Reservoir
1126 (Mukhitdinov 1967); **Tashkent Province:** ponds in Yangiyol District, Akkurgan fishery
1127 (Lyakhnovich et al. 1972; Ginatullina and Temirova 2018); **Uzbekistan without an exact**
1128 **locality** (Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

1129 **Remarks.** The species is widespread in northern Eurasia (Korovchinsky et al. 2021). In our
1130 study, the species was recorded exclusively in water bodies with slow current, including three
1131 localities in Djizak Province (locs. 30, 33, 36), and the two in Samarkand Province (locs. 56,
1132 60). In Uzbekistan, *Pleuroxus aduncus* seems to be common, being observed in a variety of
1133 water bodies including lakes, fishponds, rice fields, and temporary pools (Mukhamediev
1134 1986).

1135

1136 **Pleuroxus laevis (Sars, 1862)**

1137 *Picripleuroxus laevis* (Sars, 1862)

1138 **Previous observations.** **Fergana Province:** Lake Karashar (Mukhamediev 1967 1986);
1139 **Karakalpakstan:** lakes Karateren, Saloi, Koxsu (Akatova 1950; Ginatullina 2022);
1140 **Namangan Province:** Lake Mingbulak (Mukhamediev 1967 1986); **Uzbekistan without an**
1141 **exact locality** (Rakhmatullaeva 2007)

1142 **Remarks.** The reliable range of the species includes northern Eurasia (Korovchinsky et al.
1143 2021). *Pleuroxus laevis* is relatively rare in Uzbekistan, being recorded in the littoral zone of
1144 lakes, fishponds and temporary pools (Mukhamediev 1986).

1145

1146

1147 ***Pleuroxus quasidenticulatus (Smirnov,**
1148 **1996)**

1149 *Pleuroxus similis* Vavra, 1900

1150 *Picripleuroxus similis* (Vavra, 1900)

1151 *Picripleuroxus quasidenticulatus* Smirnov, 1996

1152 **Previous observations.** **Andijan Province:** Butakara (Mukhamediev 1986); **Fergana**
1153 **Province** (Mukhamediev 1967 1986); **Karakalpakstan Province:** rice fields in Chimbay,
1154 Shumanai and Kungrad Districts (Aripov 1972); **Khorezm Province:** rice fields in Khiva and
1155 Gurlan Districts (Aripov 1972); **Namangan Province:** Lake Mingbulak (Mukhamediev 1967
1156 1986); **Surkhandarya Province:** rice fields in Kumkurgan, Djarkurgan and Shurchi districts
1157 (Mukhamediev and Mukhitdinov 1967); **Tashkent Province:** Akkurgan fishery (Lyakhnovich
1158 et al. 1972); **Uzbekistan without an exact locality** (Manuilova 1964; Rakhmatullaeva 2007)

1159 **Remarks.** The species has a wide distribution in the tropics and subtropics of Eurasia and
1160 Australia (Korovchinsky et al. 2021). In our study, *Pleuroxus quasidenticulatus* was found in
1161 a small temporary pool in Samarkand Province (loc. 58), in a puddle in the vicinity of Djizak
1162 Reservoir, Djizak Province (loc. 64), and in Lake Sudochoye, Karakalpakstan (loc. 73). In
1163 Uzbekistan, *Pleuroxus quasidenticulatus* was observed in small vegetated lakes, fishponds, and
1164 rice fields. Individuals of *Pleuroxus similis* Vavra, 1900 depicted by E.F. Manuilova
1165 (Manuilova 1964: fig. 128) and A.M. Mukhamediev (Mukhamediev 1986: fig. 23: 1–5) can
1166 also be referred to as *P. quasidenticulatus* due to characteristic form of postabdomen.

1167

1168 *Pleuroxus striatus* Shödler, 1862

1169 **Previous observations.** **Namangan Province:** Lake Mingbulak (Mukhamediev 1967);
1170 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1171 **Remarks.** The species is widespread in northern Eurasia, being more common in boreal regions
1172 (Korovchinsky et al. 2021). *Pleuroxus striatus* was only recorded in Lake Mingbulak,
1173 Namangan Province by A.M. Mukhamediev (1967) but was not included to his subsequent
1174 monograph devoted to the same region (Mukhamediev 1986). As no other authors note this
1175 species and its typical range does not include the South Palearctic, presence of *Pleuroxus*
1176 *striatus* in Uzbekistan seems doubtful unless confirmed by new records.

1177

1178 *Pleuroxus trigonellus* (O.F. Müller, 1785) s. lat.

1179 **Previous observations.** **Andijan Province:** Andijan, Lake Shamshikul (Mukhamediev
1180 1986); **Fergana Province** (Mukhamediev 1967 1986); **Karakalpakstan:** Lake Karateren
1181 (Akatova 1950); **Namangan Province:** Lake Mingbulak, Namangan (Mukhamediev 1967
1182 1986); **Tashkent Province:** Akkurgan fishery (Lyakhnovich et al. 1972); **Uzbekistan**
1183 **without an exact locality** (Rakhmatullaeva 2007)

1184 **Remarks.** *Pleuroxus trigonellus* s. lat. is a Palearctic species complex. *Pleuroxus trigonellus*
1185 s. str. occurs only in Europe, while the studied populations of the species in Yakutia and China
1186 belong to its sibling taxon, *P. yakutensis* Garibian, Neretina and Kotov, 2018 (Korovchinsky
1187 et al. 2021). Thus, to date populations of *P. trigonellus* s. lat. from Uzbekistan are of unclear
1188 status. The taxon has been observed in several lakes, rice fields, and fishponds of Northeast
1189 Uzbekistan (Mukhamediev 1986).

1190

1191 *Pleuroxus truncatus* (O.F. Müller, 1785)

1192 *Peracantha truncata* O. F. Müller, 1785

1193 **Previous observations.** **Djizak Province:** Lake Aydarkul (Mustafaeva et al. 2021a 2021b);
1194 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1195 **Remarks.** The species is widely distributed in the Palearctic, including Central Asia
1196 (Korovchinsky et al. 2021). In Uzbekistan, *Pleuroxus truncatus* was recently observed in the
1197 vegetated littoral of Lake Aydarkul, Djizak Province.

1198

1199 *Pseudochydorus globosus* (Baird, 1843)

1200 **Previous observations.** **Karakalpakstan:** Lake Saloi (Akatova 1950); **Namangan Province:**
1201 Lake Mingbulak (Mukhamediev 1967); **Uzbekistan without an exact locality**
1202 (Rakhmatullaeva 2007)

1203 **Remarks.** The species is widespread in the Holarctic (Korovchinsky et al. 2021). In
1204 Uzbekistan, *Pseudochydorus globosus* was recorded only in the vegetated littoral of Lake
1205 Mingbulak, Namangan region (Mukhamediev 1967). However, A.M. Mukhamediev did not
1206 include this species to his subsequent monograph (Mukhamediev 1986) that might indicate that
1207 the record of *P. globosus* was a mistake. The presence of this species in Uzbekistan requires
1208 confirmation.

1209

1210 **Family Euryceridae Kurz, 1875 emend. Dumont et Silva-Briano, 1998**

1211 *Eurycerus (Eurycerus) lamellatus* (O.F. Müller, 1776)

1212 **Previous observations.** **Karakalpakstan:** Lake Karateren, Lake Muynakskii Zaliv, Lake
1213 Sarybas (Akatova 1950; Ginatullina 2010 2022); **Djizak Province:** Lake Aydarkul
1214 (Mustafaeva et al. 2021b); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1215 **Remarks.** The species is widespread in the Palearctic (Korovchinsky et al. 2021). In
1216 Uzbekistan, *Eurycerus lamellatus* was observed in the vegetated littoral of lakes (Ginatullina
1217 2010); however, due to salinization, the species became extinct in some of the known localities,
1218 e.g., in Lake Karateren, Karakalpakstan (Ginatullina 2010).

1219

1220 **Order Ctenopoda Sars, 1865**

1221 **Family Sididae Baird, 1850**

1222 *Diaphanosoma brachyurum* (Liévin, 1848)

1223 *Diaphanosoma leuchtenbergianum* Fischer, 1850

1224 **Previous observations.** **Andijan Province:** Andijan Reservoir, rice fields in Khodjaobod
1225 District and Asaka District (Stepanova and Ledyeva 1957; Mukhamediev 1986); **Bukhara**
1226 **Province:** Devkhona Reservoir (Khodjayeva and Shamsiyev 2020); **Fergana Province**
1227 (Mukhamediev 1967 1986); **Karakalpakstan:** Lake Pomido, Lake Eastern Karateren, Aral
1228 Sea (Meisner 1906; Akatova 1950; Mukhamediev 1986; Kazakhbaev 1988; Korovchinsky
1229 and Mirabdullayev 2001; Aladin et al. 2019 2021; Turemuratova and Nagmetov 2021;
1230 Ginatullina 2022); **Khorezm Province:** Lake Karasu, Lake Kokkul (Korovchinsky and
1231 Mirabdullayev 2001); **Namangan Province:** Lake Mingbulak (Mukhamediev 1967);
1232 **Surkhandarya Province:** Uchqizil Reservoir, Southern-Surkhan Reservoir (Mukhitdinov
1233 1967; Afanasyeva et al. 1972; Sibirtseva et al. 1972); **Tashkent Province:** Lake Yangikul,
1234 Lake Kargaly, Akkurgan fishery (Keiser 1925; Lyakhnovich et al. 1972; Korovchinsky 1987;
1235 Korovchinsky and Mirabdullayev 2001); **Uzbekistan without an exact locality** (Kuzmetov
1236 1998; Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

1237 **Remarks.** This planktonic species is widespread in the Palearctic (Korovchinsky et al. 2021).
1238 In Uzbekistan, *Diaphanosoma brachyurum* seems to be common and occurs in the open
1239 pelagic of large lakes and reservoirs. However, at least some of these records might in fact
1240 refer to other *Diaphanosoma* species (Korovchinsky and Mirabdullayev 2001).

1241

1242 ****Diaphanosoma dubium* Manuilova, 1964**

1243 *Diaphanosoma leuchtenbergianum* Fischer, 1850

1244 **Previous observations.** **Andijan Province:** Andijan fishery (Abdinazarov et al. 2019b);
1245 **Fergana Province:** Lake Sarikamish, fishponds in Beshariq District (Abdinazarov 2018);
1246 **Karakalpakstan** (Mirzambetov and Mirabdullayev 2022); **Kashkadarya Province**
1247 (Korovchinsky and Mirabdullayev 2001); **Tashkent Province** (Korovchinsky and
1248 Mirabdullayev 2001); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1249 **Remarks.** *Diaphanosoma dubium* is widespread in the southern Palearctic, being more
1250 common in East Asia (Korovchinsky et al. 2021). In our study, *Diaphanosoma dubium* was
1251 recorded in Tuyabuguz Reservoir, Tashkent Province (loc. 93). In Uzbekistan, the species
1252 seems to be a relatively rare and occurs mostly in fishponds and temporary pools
1253 (Korovchinsky and Mirabdullayev 2001).

1254

1255 ***Diaphanosoma excisum* Sars, 1885**

1256 **Previous observations.** **Tashkent Province** (Korovchinsky and Mirabdullayev 2001;
1257 Korovchinsky et al. 2021); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1258 **Remarks.** A tropical species common in southern Eurasia (Korovchinsky et al. 2021). In
1259 Uzbekistan, *Diaphanosoma excisum* was recorded in a single fishpond in the vicinity of
1260 Tashkent (Korovchinsky and Mirabdullayev 2001).

1261

1262 ***Diaphanosoma lacustris* Kořinek, 1981**

1263 *Diaphanosoma leuchtenbergianum* Fischer, 1850

1264 **Previous observations.** **Djizak Province:** Lake Aydarkul, Djizak (Korovchinsky 1987;
1265 Korovchinsky and Mirabdullayev 2001); **Karakalpakstan:** Lake Karateren, Amy-Darya
1266 River delta (Korovchinsky 1987; Korovchinsky and Mirabdullayev 2001; Turemuratova et
1267 al., 2022); **Kashkadarya Province:** Pachkamar Reservoir, Kashkadarya (Korovchinsky and
1268 Mirabdullayev 2001); **Tashkent Province:** Lake Yangikul, Lake Solenoe, Tuyabuguz
1269 Reservoir (Korovchinsky 1987; Korovchinsky and Mirabdullayev 2001; Ginatullina et al.
1270 2023c); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007; Kuzmetov and
1271 Abdinazarov 2016)

1272 **Remarks.** *Diaphanosoma lacustris* occurs in the southern Palearctic and Africa
1273 (Korovchinsky et al. 2021). In Uzbekistan, the species is common in the pelagic of large lakes
1274 and reservoirs (Korovchinsky and Mirabdullayev 2001).

1275

1276 ****Diaphanosoma macrophthalma* Korovchinsky et Mirabdullayev 1995**

1277 **Previous observations. Fergana Province** (Abdinazarov 2018); **Karakalpakstan**
1278 (Korovchinsky and Mirabdullayev 2001; Turemuratova and Kuzmetov 2016; Turemuratova
1279 et al. 2018 2024; Mirzambetov and Mirabdullayev 2022; Temirbekov et al. 2023);
1280 **Kashkadarya Province** (Korovchinsky and Mirabdullayev 1995; Korovchinsky 2000;
1281 Korovchinsky and Mirabdullayev 2001); **Khorezm Province:** Bagat, Yangiarik
1282 (Mirabdullayev 1998); **Namangan Province:** Namangan fishery (Abdinazarov 2018;
1283 Abdinazarov et al. 2019b); **Tashkent Province** (Korovchinsky and Mirabdullayev 1995;
1284 Korovchinsky et al. 2021); **Uzbekistan without an exact locality** (Kuzmetov 1998;
1285 Rakhmatullaeva 2007)

1286 **Remarks.** The species is widespread in Central and East Asia (Korovchinsky et al. 2021). In
1287 our study, *Diaphanosoma macrophthalma* was recorded in Lake Aydarkul, Navoiy Province
1288 (loc. 85). In Uzbekistan, *D. macrophthalma* is relatively common, being mostly observed in
1289 fishponds, rice fields and temporary pools.

1290

1291 ****Diaphanosoma mongolianum* Ueno, 1938**

1292 *Diaphanosoma leuchtenbergianum* Fischer, 1850

1293 **Previous observations. Bukhara Province** (Korovchinsky and Mirabdullayev 2001;
1294 Mustafaeva and Mirzayev 2018b); **Djizak Province:** the Aydar-Arnasay lake system
1295 (Karimov 2021; Mustafaeva et al. 2006 2022; Ginatullina et al. 2006a; 2023); **Fergana**
1296 **Province:** Lake Toda, Lake Kalgandarya (Abdinazarov and Madumarov 2022);
1297 **Karakalpakstan** (Korovchinsky and Mirabdullayev 2001; Ginatullina et al. 2006b;
1298 Ginatullina 2010; Turemuratova and Nagmetov 2021); **Kashkadarya Province:** Pahkamar
1299 Reservoir, Langar Reservoir, Kamashi Reservoir, Kashkadarya (Korovchinsky, 2000;
1300 Korovchinsky and Mirabdullayev 2001); **Khorezm Province** (Crootof et al. 2015;
1301 Korovchinsky and Mirabdullayev 2001; Ginatullina 2010); **Namangan Province:** Lake
1302 Tudakul (Abdinazarov 2018); **Navoiy Province:** Tudakul Reservoir (Khakimova et al. 2021);
1303 **Samarkand Province** (Korovchinsky 1987; Korovchinsky and Mirabdullayev 2001;
1304 Mustafaeva and Mirzayev 2018a); **Surkhandarya Province:** Southern-Surkhan Reservoir
1305 (Korovchinsky and Mirabdullayev 2001); **Tashkent Province** (Korovchinsky 1987;
1306 Korovchinsky and Mirabdullayev 2001; Ginatullina and Temirova 2018); **Uzbekistan**
1307 **without an exact locality** (Rakhmatullaeva 2007; Kuzmetov and Abdinazarov 2016)

1308 **Remarks.** The species is widespread in the southern Palearctic (Korovchinsky et al. 2021).
1309 In our study, *Diaphanosoma mongolianum* was recorded in numerous localities in Andijan,
1310 Namangan, Djizak, Karakalpakstan, Khorezm, Navoi and Tashkent provinces (locs. 73, 75,
1311 83, 84, 86, 92, 93, 100, 101, 107, 108). In Uzbekistan, *D. mongolianum* is very common and
1312 occurs in the pelagic of lakes, reservoirs, rivers, and fishponds.

1313

1314 ****Diaphanosoma orghidani* Negrea, 1982**

1315 **Previous observations. Djizak Province:** Lake Aydarkul (Korovchinsky 1987; Korovchinsky
1316 and Mirabdullayev 2001); **Karakalpakstan:** Lake Muynakskii Zaliv, Lake Sarybas
1317 (Korovchinsky and Mirabdullayev 2001; Ginatullina 2010); **Tashkent Province:** Lake
1318 Yangikul (Korovchinsky and Mirabdullayev 2001); **Uzbekistan without an exact locality**
1319 (Rakhmatullaeva 2007)

1320 **Remarks.** *Diaphanosoma orghidani* occurs everywhere in Eurasia, except for polar and boreal
1321 regions (Korovchinsky et al. 2021). In our study, *Diaphanosoma orghidani* was recorded in
1322 Lake Ulugshurkul, Khorezm Province (locs. 77) and in fishpond near Baimuradabad, Syrdarya
1323 Province (loc. 90). In Uzbekistan, the species was observed mostly in the pelagic zone of large
1324 lakes.

1325

1326 ***Diaphanosoma sarsi* Richard, 1894**

1327 *Diaphanosoma sarsii* Richard, 1894

1328 **Previous observations.** **Andijan Province** (Mukhamediev 1986); **Fergana Province**
1329 (Mukhamediev 1986; Mukhamediev and Bekchonova 2023); **Karakalpakstan** (Aripov 1972;
1330 Korovchinsky and Mirabdullayev 2001; Korovchinsky et al. 2021; Turemuratova and
1331 Kosymbetova 2024); **Kashkadarya Province** (Korovchinsky, 2000; Korovchinsky and
1332 Mirabdullayev 2001); **Khorezm Province** (Aripov 1972; Korovchinsky and Mirabdullayev
1333 2001); **Namangan Province** (Mukhamediev 1986); **Surkhandarya Province:** rice fields in
1334 Kumkurgan District, Uchqizil and Southern-Surkhan reservoirs (Mukhamediev and
1335 Mukhitdinov 1967; Afanasyeva et al. 1972; Sibirtseva et al. 1972); **Syrdarya Province:**
1336 Sholikor (Mirabdullayev 1998; Korovchinsky and Mirabdullayev 2001); **Tashkent Province**
1337 (Korovchinsky and Mirabdullayev 2001); **Uzbekistan without an exact locality** (Manuilova
1338 1964; Kuzmetov 1998; Rakhmatullaeva 2007)

1339 **Remarks.** This widespread species occurs in the tropics and subtropics of the Eastern
1340 Hemisphere (Korovchinsky et al. 2021). In Uzbekistan, *Diaphanosoma sarsi* is relatively
1341 common and inhabits the pelagic of lakes, reservoirs, rice fields, rivers, and temporary pools.

1342

1343 ***Latonopsis australis* Sars, 1888 s. lat.**

1344 *Latonopsis ferganica* Mukhamediev 1960

1345 **Previous observations.** **Andijan Province:** Butakara, Andijan (Mukhamediev 1986); **Fergana**
1346 **Province:** Kokon (Mukhamediev 1967 1986); **Karakalpakstan** (Aripov 1966 1972;
1347 Korovchinsky et al. 2021); **Khorezm Province** (Aripov 1966 1972; Mirabdullayev 1998;
1348 Korovchinsky et al. 2021); **Namangan Province:** Namangan (Mukhamediev 1986);
1349 **Samarkand Province:** Jambay, Gala Kapa, Chumchuqli (Pazhitnova 1935; Keiser 1937;
1350 Behning 1938); **Surkhandarya Province:** rice fields in Kumkurgan District, Denou,
1351 Djarkurgan (Mukhamediev and Mukhitdinov 1967); **Tashkent Province:** Tashkent
1352 (Pazhitnova 1929; Keiser 1937); **Uzbekistan without an exact locality** (Manuilova 1964;
1353 Rakhmatullaeva 2007)

1354 **Remarks.** This cosmopolitan species complex occurs mostly in the tropics and subtropics
1355 (Korovchinsky et al. 2021). In Uzbekistan, *Latonopsis australis* s. lat. has a wide distribution
1356 and inhabits mostly rice fields (Mukhamediev 1986).

1357

1358 ***Sida crystallina* (O.F. Müller, 1776)**

1359 **Previous observations.** **Karakalpakstan:** Lake Sudochoye, Lake Karateren, Lake Khodjakul
1360 (Akatova 1950; Kazakhbaev 1988; Ginatullina 2010 2022); **Surkhandarya Province:**
1361 Southern-Surkhan Reservoir (Sibirtseva et al. 1972); **Tashkent Province:** Akkurgan fishery
1362 (Lyakhnovich et al. 1972); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1363 **Remarks.** A widespread Palearctic species more common in boreal regions (Korovchinsky et
1364 al. 2021). In Uzbekistan, *Sida crystallina* is rare, being observed in the vegetated littoral of
1365 several lakes and reservoirs in Karakalpakstan and Surkhandarya Province.

1366

1367

1368 **Order Onychopoda Sars, 1865**

1369 **Family Polyphemidae Baird, 1845**

1370 ***Polyphemus pediculus* (Linnaeus, 1758)**

1371 **Previous observations.** **Karakalpakstan:** Lake Sudochye, the Aral Sea (Akatova 1950;
1372 Mordukhai-Boltovskoi and Rivier 1987; Kazakhbaev 1988; Aladin et al. 2019 2021);
1373 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1374 **Remarks.** *Polyphemus pediculus* is widespread in North Eurasia and occurs in both littoral
1375 and pelagic zones (Korovchinsky et al. 2021). In Uzbekistan, the species is rare, being
1376 observed in the Aral Sea and water bodies of Amu Darya River lower reach.

1377

1378 **Family Cercopagididae Mordukhai-Boltovskoi, 1966 emend. Martin et Cash-Clark, 1995**

1379 ***Cercopagis pengoi* (Ostroumov, 1892)**

1380 **Previous observations.** **Karakalpakstan:** the Aral Sea (Mordukhai-Boltovskoi and Rivier
1381 1987; Andreev 1989; Plotnikov 2013; Aladin et al. 2019 2021)

1382 **Remarks.** This Ponto-Caspian invasive species spread to the Baltic Sea, river basins of Europe,
1383 and the North American Great Lakes (Korovchinsky et al. 2021). In Uzbekistan, *Cercopagis*
1384 *pengoi* was recorded in the Large Aral Sea only and might become extinct there. Instead of *C.*
1385 *pengoi*, another representative of the family, *Bythotrephes longimanus* Leydig, 1860 was listed
1386 for Uzbekistan by Rakhmatullaeva (2007), but with no specification of locality. However, this
1387 record is likely to be a mistake, as the species is typical of subalpic lakes of Europe
1388 (Korovchinsky et al. 2021), and no other records of *Bythotrephes* have been known from the
1389 territory of Central Asia.

1390

1391 **Family Podonidae Mordukhai-Boltovskoi, 1966**

1392 ***Evadne anonyx* Sars, 1897**

1393 **Previous observations.** **Karakalpakstan:** the Aral Sea (Mordukhai-Boltovskoi and Rivier
1394 1987; Plotnikov 2013; Aladin et al. 2019 2021)

1395 **Remarks.** The species occurs in the Azov Sea, the Caspian Sea, and the Small Aral Sea
1396 (Korovchinsky et al. 2021). In Uzbekistan, *Evadne anonyx* was observed in the Large Aral Sea,
1397 but now it became extinct there (Aladin et al. 2021).

1398

1399 ***Podonevadne angusta* (Sars, 1902)**

1400 **Previous observations.** **Karakalpakstan:** the Aral Sea (Mordukhai-Boltovskoi and Rivier
1401 1987; Plotnikov 2013; Aladin et al. 2019 2021)

1402 **Remarks.** The species inhabits the Caspian Sea and the Small Aral Sea (Korovchinsky et al.
1403 2021). In Uzbekistan, *Podonevadne angusta* was observed in the Large Aral Sea and now
1404 became extinct (Aladin et al. 2021).

1405

1406 ***Podonevadne camptonix (Sars, 1897) (Fig. 3G–I)**

1407 **Previous observations. Karakalpakstan:** Lake Sudochoye, the Aral Sea (Mordukhai-
1408 Boltovskoi and Rivier 1987; Kazakhbaev 1988; Plotnikov 2013; Aladin et al. 2019 2021);
1409 **Uzbekistan without an exact locality** (Rakhmatullaeva 2007)

1410 **Remarks.** In our study, *Podonevadne camptonix* was recorded in Lake Sarikamish,
1411 Karakalpakstan (loc. 94). The diagnostic characters for this species are: head lacking
1412 projections (Fig. 3G); short conical or rounded shell (Fig. 3G); postabdominal claws present,
1413 divergent (Fig. 3H); endopodite of thoracic appendages II–IV bearing two setae (Fig. 3I).
1414 *Podonevadne camptonix* is known to inhabit the Caspian Sea and the Small Aral Sea
1415 (Korovchinsky et al. 2021). In Uzbekistan, *P. camptonix* was recorded in the Large Aral Sea
1416 but now is likely extinct there (Aladin et al. 2021).

1417

1418 **Podonevadne trigona (Sars, 1897)**

1419 **Previous observations. Karakalpakstan:** the Aral Sea (Aladin et al. 2021)

1420 **Remarks.** The species inhabits water bodies of the Ponto-Caspian region, including the
1421 Caspian Sea, the Azov and the Northern Black Seas, and the Small Aral Sea (Korovchinsky
1422 et al. 2021). In Uzbekistan, the species was recorded in the Large Aral Sea (Aladin et al.
1423 2021), but now is likely extinct.

1424

1425

1426 **Order Haplopoda Sars, 1865**

1427 **Family Leptodoridae Lilljeborg, 1861**

1428 **Leptodora kindtii (Focke, 1844)**

1429 **Previous observations. Djizak Province:** the Aydar-Arnasay lake system (Mustafaeva et al.
1430 2022; Ginatullina et al. 2023a); **Karakalpakstan:** The Sudochoye lake system (Akatova 1950;
1431 Kazakhbaev 1988); **Uzbekistan without an exact locality** (Rakhmatullaeva 2007; Kuzmetov
1432 and Abdinazarov 2016)

1433 **Remarks.** A widespread Holarctic species (Korovchinsky et al. 2021). In Uzbekistan,
1434 *Leptodora kindtii* is relatively rare, being recorded in the open pelagic of large lakes.

1435

1436

1437 **Order Spinicaudata Linder, 1945**

1438 **Family Cyzicidae Stebbing, 1910**

1439 **Cyzicus tetracerus (Krynicky, 1830) fide Audouin, 1837**

1440 **Previous observations. Khorezm Province:** Bogot (Lebedeva and Rakhmanova 1982);
1441 **Uzbekistan without an exact locality** (Rogers 2020)

1442 **Remarks.** The species is widespread in the Palearctic and North Africa (Rogers 2020),
1443 occurring in temporary pools. In Uzbekistan, *Cyzicus tetracerus* was observed in rice fields
1444 (Lebedeva 1982). The status of the taxon requires clarification.

1445

1446 ***Eocycticus bouvieri* (Daday, 1914: 201) fide Padhye et Rabet, 2017**

1447 *Eocycticus perrieri* Daday, 1913b

1448 **Previous observations. Sukhandarya Province:** Sangardak (Daday 1914)

1449 **Remarks.** The species was recorded in temporary pools of Central Asia, including Siberia,
1450 Pakistan and Northern India (Rogers 2020). The taxon status and its presence in Uzbekistan
1451 should be revised.

1452

1453 ****Eocycticus davidi* (Simon, 1886) s. lat.**

1454 *Caenestheria consors* Daday, 1914

1455 *Eocycticus consors* (Daday, 1914)

1456 **Previous observations. Bukhara Province:** Bukhara (Daday 1914); **Uzbekistan without an**
1457 **exact locality** (Rogers 2020)

1458 **Remarks.** The taxon represents a species complex, distributed in the inner regions of East
1459 Palearctic (Rogers et al. 2017). *Eocycticus davidi* prefers temporary pools, as well as its
1460 relatives. In our study, the taxon was found in a single temporary pool in Djizak Province (loc.
1461 37); however, the taxonomic status of this record requires further studies.

1462

1463 ***Eocycticus sahlbergi* (Simon, 1886) s. lat.**

1464 *Eocycticus orientalis* Daday, 1914 sensu Dobrynina, 2004

1465 **Previous observations. Karakalpakstan:** Nukus (Daday 1914); **Uzbekistan without an**
1466 **exact locality** (Dobrynina 2004; Rogers 2020)

1467 **Remarks.** *Eocycticus sahlbergi* is a species complex occurring in the Russian Arctic, Central
1468 Asia, Mongolia and Himalayan India (Rogers 2020). Status of this taxon and its presence in
1469 Uzbekistan should be verified.

1470

1471 **Family Leptestheriidae Daday, 1913**

1472 ***Leptestheria* sp.**

1473 **Previous observations. Samarkand Province:** rice field in Chumchuqli (Pazhitnova 1935)

1474 **Remarks.** *Leptestheria* is a genus including at least 35 valid species distributed in the tropical
1475 and subtropical regions of Asia, Africa, North and South America (Rogers 2020). Presence of
1476 *Leptestheria* in Uzbekistan should be revised, as the only record of Pazhitnova (1935) has not
1477 been depicted.

1478

1479 **Family Limnadiidae Baird, 1849**

1480 *Eulimnadia* sp.

1481 *Eulimnadia behningi* Smirnov, 1949

1482 **Previous observations. Samarkand Province:** Gala Kapa (Smirnov 1949; Mukhamediev
1483 1986; Rogers 2020); **Uzbekistan without an exact locality** (Behning 1938)

1484 **Remarks.** *Eulimnadia behningi* is considered to be *nomen dubium*, as the essential diagnostic
1485 feature, egg morphology, was never described in this taxon (Rogers 2020). To date, *E. behningi*
1486 was reported only from Central Asia (Rogers 2020). In Uzbekistan, *E. behningi* was recorded
1487 in rice fields (Mukhamediev 1986).

1488