

**Annotated List of the Invertebrates in the Caves of Racha Region
(Western Georgia)**

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Abstract. Annotated list of the invertebrates in the caves of Racha region (Western Georgia) is made based on proper and literature data. 73 species of the invertebrates are recorded in the karst caves, 29 species of which belong to the oribatid mites, 12 species - to collembolans, 8 species - to spiders and insects, 5 species - to myriapods, 4 species - to mollusks, 3 species - to crustaceans, 2 species - to pseudoscorpiones and 1 species - to leech and harvestman. Above mentioned invertebrates are sampled in 11 caves. Maximum species number - 24 species is registered in Tsakhi (Gogoleti) Cave, while only single species is recorded from Shareula II Cave. Myriapodgenus *Ratcheuma* Golovatch, 1985 is registered only in Racha region, Georgia. The following species and subspecies: crustaceans - *Caucasoligidium cavernicola gogoleticum* and *Bryocamptus birsteini*; insects - *Bryaxis hypocritus*, *Inotrechusinjaevae*, *Troglocimmerites djanaschvilii*, leech - *Dina ratschaensis*; myriapod - *Ratcheuma excorne* and harvestman - *Nemaspela femorecurvata* are local endemics of Racha region, Georgia.

Introduction

Eleven karst caves of Racha region, Georgia are investigated biospeleologically. Investigated invertebrates belong to 3 phyla, 9 classes, 21 orders, 46 families and 57 genera. Seventy three species of the invertebrates are recorded in the caves, 29 species, of which belong to the oribatid mites, 12 species - to collembolans, 8 species - to spiders and insects, 5 species - to myriapods, 4 species - to mollusks, 3 species - to crustaceans, 2 species - to pseudoscorpiones and 1 species - to leech and harvestman. Maximum species number - 24 species are registered in Tsakhi (Gogoleti) Cave, while only single species is recorded from Shareula II Cave. Myriapod genus *Ratcheuma* Golovatch, 1985 is registered only in Racha region, Georgia. The following species and subspecies: crustaceans - *Caucasoligidium cavernicola gogoleticum* and *Bryocamptus birsteini*; insects - *Bryaxis hypocritus*, *Inotrechusinjaevae*, *Troglocimmerites djanaschvilii*, leech - *Dina ratschaensis*; myriapod - *Ratcheuma excorne* and harvestman - *Nemaspela femorecurvata* and are local endemics of Racha region, Georgia.

Annotated list of the invertebrates

Remark. In the list only these species are given, which were determined to the genus or species level.

Phylum - Annelida Lamarck, 1809

Class - Clitellata Michaelsen, 1928

Order - Arhynchobellida Blanchard, 1894

Family - Erpobdellidae Blanchard, 1894

Genus - *Dina* Blanchard, 1892

Species - *D. ratschaensis* Kobakhidze 1958

Distribution: Sakishore and Tsivtskala caves.

Literature: Kobakhidze, 1958.

Phylum – Mollusca Linnaeus, 1758

Class –Gastropoda Cuvier, 1795

Order –Stylommatophora A. Schmidt, 1855

Family – Oxychilidae Hesse, 1927 (1879)

Genus – *Oxychilus* Fitzinger, 1833

Species –*O. koutaisianus* (Mousson, 1863)

Material examined: Kakhidze Cave, Twilight zone, 24.09.2013, 1 specimen, leg. Sh. Barjadze, det. L. Mumladze.

Species –*Oxychilus* sp.

Material examined: Tsivtskala Cave, Entrance zone, 23.09.2013, 1 specimen, leg. Sh. Barjadze, det. L. Mumladze.

Genus –*Schistophallus* Wagner, 1914

Species – *S. sucinacius* (Boettger, 1883)

Material examined: Sakishore Cave, Dark zone, 17.10.2014, 1 specimen, leg. Sh. Barjadze, det. L. Mumladze.

Family – Limacidae Lamarck, 1801

Genus – *Eumilax* Boettger, 1881

Species – *E. cf. brandti* (Martens, 1880)

Material examined: Sakishore Cave, Dark zone, 17.10.2014, 1 specimen, leg. Sh. Barjadze, det. L. Mumladze.

Phylum – Athropoda von Siebold, 1848

Class – Malacostraca Latreille, 1802

Order – Isopoda Latreille, 1817

Family – Ligiidae Leach, 1814

Genus – *Caucasoligidium* Borutzky, 1950

Subspecies –*C. cavernicola gogoleticum* Borutzkii, 1950

Distribution: Tsakhi (Gogoleti) Cave.

Literature: Borutzkii, 1950.

Class – Maxillopoda Dahl, 1956

Order – Harpacticoida Sars, 1903

Family – Canthocamptidae Sars, 1906

Genus – *Bryocamptus* Chappuis, 1929

Species – *B. birsteini* Borutsky, 1940

Distribution: Tsakhi (Gogoleti) Cave.

Literature: Borutsky, 1940.

Species –*B. innominatus* Borutsky, 1940

Distribution: Tsakhi (Gogoleti) Cave.

Literature: Borutsky, 1940.

Class – Diplopoda De Blainville in Gervais, 1844

Order – Julida Brandt, 1833

Family – Julidae Leach, 1814

Genus – *Leucogeorgia* Verhoeff, 1930

Species – *Leucogeorgia* sp. ?

Distribution: Tsakhi (Gogoleti) Cave.

Literature: Birstein & Lopashov, 1940

Order – Glomerida Brandt, 1833
 Family – Glomeridae Leach, 1815
 Genus – *Trachysphaera* Heller, 1858

Species – *T. minuta* Golovatch, 1976
 Distribution: Shareula (Shareula I) Cave.
 Literature: Golovatch, 1990.
 Species – *T. orientalis* Golovatch, 1976
 Distribution: Tsakhi (Gogoleti) Cave.
 Literature: Golovatch, 1990.

Order – Chordeumatida Pocock, 1894
 Family – Anthroleucosomatidae Verhoeff, 1899
 Genus – *Ratcheuma* Golovatch, 1985

Species – *R. excorne* Golovatch, 1985
 Distribution: Meliis (Nikortsminda) Cave.
 Literature: Golovatch, 1985.

Class – Chilopoda Latreille, 1817
 Order – Lithobiomorpha Pocock, 1895
 Family – Lithobiidae Newport, 1844
 Genus – *Lithobius* Leach, 1814

Species – *Lithobius* sp.
 Distribution: Tsakhi (Gogoleti) Cave.
 Literature: Birstein, 1950.

Class – Arachnida Lamarck, 1801
 Order – Opiliones Sundevall, 1833
 Family – Nemastomatidae Simon, 1872
 Genus – *Nemaspela* Šilhavý, 1966

Species – *N. femorecurvata* Martens, 2006
 Distribution: Sakishore Cave.
 Literature: Martens, 2006.

Order – Pseudoscorpionida Haeckel, 1866
 Family – Neobisiidae Chamberlin, 1930
 Genus – *Neobisium* Chamberlin, 1930

Species – *N. verae* (Lapschoff, 1940)
 Distribution: Tsakhi (Gogoleti) Cave.
 Literature: Lapschoff, 1940.

Species – *Neobisium* sp.
 Material examined: Dolabistavi Cave, Dark zone, 13.10.2014, 3 specimens, leg. Sh. Barjadze, det. J. Zaragoza.
 Order – Araneae Clerck, 1757

Family – Amaurobiidae Thorell, 1870
 Genus – *Amaurobius* Koch, 1837

Species – *A. fenestralis* Strom, 1768
 Material examined: Tsakhi (Gogoleti) Cave, Entrance zone, 24.09.2013, 1 specimen, leg. T. Arabuli, det. V. Pkhakadze.

Family – Pisauridae Simon, 1890
 Genus – *Pisaura* Simon, 1885

Species – *P. mirabilis* Clerck, 1757

Material examined: Tsakhi (Gogoleti) Cave, Entrance zone, 24.09.2013, 2 specimens, leg. T. Arabuli, det. V. Pkhakadze.

Family – Lycosidae Sundevall, 1833

Genus – *Pirata* Sundevall, 1832

Species – *Pirata* sp.

Material examined: Tsakhi (Gogoleti) Cave, Twilight zone, 24.09.2013, 1 specimen, leg. T. Arabuli, det. V. Pkhakadze.

Genus – *Pardosa* Koch, 1847

Species – *P. monticola* (Clerck, 1757)

Material examined: Tsakhi (Gogoleti) Cave, Twilight zone, 24.09.2013, 2 specimens, leg. T. Arabuli, det. V. Pkhakadze.

Species – *P. hortensis* Thorell, 1872

Material examined: Kakhidze Cave, Entrance zone, 24.09.2013, 1 species, leg. T. Arabuli, det. V. Pkhakadze.

Family – Theridiidae Sundevall, 1833

Genus – *Theridion* Walckenaer, 1805

Species – *Th. impressum* Koch, 1881

Material examined: Tsakhi (Gogoleti) Cave, 24.09.2013, Entrance zone, 2 specimens, leg. T. Arabuli, det. V. Pkhakadze.

Species – *Th. Melanorium* Hahn., 1831

Material examined: Tsakhi (Gogoleti) Cave, 24.09.2013, Entrance zone, 1 specimen, leg. T. Arabuli, det. V. Pkhakadze.

Species – *Theridion* sp.

Material examined: Tivtkhala Cave, Entrance zone, 23.09.2013, 1 specimen, leg. T. Arabuli, det. V. Pkhakadze.

Order – Sarcoptiformes Reuter, 1909

Suborder – Oribatida van der Hammen, 1968

Family – Phthiracaridae Perty, 1841

Genus – *Hoplophthiracarus* Jacot, 1933

Species – *H. illinoisensis* (Ewing, 1909)

Distribution: Sakinule (Nikortsinda) Cave, Entrance zone.

Literature: Murvanidze, 2014.

Genus – *Steganacarus* Ewing, 1917

Species – *S. striculus* (Koch, 1835)

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Species – *S. spinosus* (Sellnick, 1920)

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Species – *S. patruelis* Niedbala, 1983

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family – Damaeidae Berlese, 1896

Genus – *Epidamaeus* Bulanova-Zakhvatkina, 1957

Species – *E. pinguis* (Kulijev, 1967)

Distribution: Kidobana Cave, Entrance zone; Shareula (Shareula I) Cave, Entrance zone.

Literature: Murvanidze, 2014.

Genus – *Metabelba* Grandjean, 1936

Species – *M. flagelliseta* Bulanova-Zakhvatkina, 1965

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Species – *M. papillipes* (Nicolet, 1855)

Distribution: Tsivtskala Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family – Microzetidae Grandjean, 1936

Genus – *Miracarus* Kunst, 1959

Species – *M. hurkai* Kunst, 1959

Distribution: Tsivtskala Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family – Zetorchestidae Michael, 1898

Genus – *Zetorchestes* Berlese, 1888

Species – *Z. falzonii* (Coggi, 1898)

Distribution: Kakhidze Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family – Astegistidae Balogh, 1961

Genus – *Ceratoppia* Berlese, 1908

Species – *C. quadridentata* (Haller, 1880)

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family – Liacaridae Sellnick, 1928

Genus – *Dorycranosus* Woolley, 1969

Species – *D. splendens* (Coggi, 1908)

Distribution: Sakinule (Nikortsminda) Cave, Dark zone.

Literature: Murvanidze, 2014.

Family – Oppiidae Grandjean, 1951

Genus – *Oxyoppioides* Subias & Mingues, 1985

Species – *O. decipiens* (Paoli, 1908)

Distribution: Sakinule (Nikortsminda) Cave, Twilight zone; Tsakhi (Gogoleti) Cave, Twilight zone.

Literature: Murvanidze, 2014.

Genus – *Ramusella* Hammer, 1962

Species – *R. clavipectinata* (Michael, 1885)

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Species – *R. insculpta* (Paoli, 1908)

Distribution: Tsakhi (Gogoleti) Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family – Autognetidae Grandjean, 1960

Genus – *Autogneta* HHull, 1916

Species – *A. longilamellata* Michael, 1885

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Genus – *Conchogneta* Grandjean, 1963

Species – *C. dalecarlica* (Forsslund, 1947)

Distribution: Tsakhi (Gogoleti) Cave, Dark zone.

Literature: Murvanidze, 2014.

Family – Tectocepheidae Oudemans, 1900

Genus – *Tectocepheus* Berlese, 1913

Species – *T. velatusvelatus* (Michael, 1880)

Distribution: Tsvitskala Cave, Entrance zone; Kakhidze Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family–Phenopelopidae Petrunkevich, 1955

Genus –*Eupelops* Ewing, 1917

Species – *E. acromios* (Hermann, 1804)

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Species – *E. torulosus* (Koch, 1836)

Distribution: Kakhidze Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family – Achipteriidae Thor, 1929

Genus –*Parachipteria* Hammen, 1952

Species – *P.fanzagoi* (Jacot, 1929)

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family–Oribatulidae Thor, 1929

Genus –*Phauloppia*Berlese, 1908

Species – *P.lucorum* (Koch, 1841)

Distribution: Sakinule (Nikortsminda) Cave, Dark zone.

Literature: Murvanidze, 2014.

Genus –*Zygoribatula*Berlese, 1917

Species – *Z.frisiae* (Oudemans, 1900)

Distribution: Kidobana Cave, Entrance zone; Sakinule (Nikortsminda)Cave, Twilight zone.

Literature: Murvanidze, 2014.

Family–Zetomotrichidae Grandjean, 1934

Genus –*Ghilarovus*Krivolutsky, 1966

Species – *Gh.kvavadzei* Murvanidze, 2014

Distribution: Tsakhi (Gogoleti) Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family–Ceratozetidae Thor, 1929

Genus –*Ceratozetes* Berlese, 1908

Species – *C. gracilis* (Michael, 1884)

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Genus – *Sphaerozetes* Berlese, 1885

Species – *S. tricuspidatus* Willmann, 1923

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family–Chamobatidae Grandjean, 1954

Genus –*Chamobates*Hull, 1916

Species – *Ch. cuspidatus* (Michael, 1884)

Distribution: Kidobana Cave, Entrance zone; Tsakhi (Gogoleti) Cave, Dark zone.

Literature: Murvanidze, 2014.

Species – *Ch. voigtsi* (Oudemans, 1902)

Distribution: Kidobana Cave, Entrance zone; Tsakhi (Gogoleti) Cave, Entrance zone; Shareula (Shareula I) Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family– Mycobatidae Grandjean, 1954

Genus –*Minunthozetes* Hull, 1916

Species – *M.pseudofusiger* (Schweizer, 1922)

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Family–Galumnidae Jacot, 1925

Genus –*Pilogalumna* Grandjean, 1956

Species – *P. tenuiclava* (Berlese, 1908)

Distribution: Kidobana Cave, Entrance zone.

Literature: Murvanidze, 2014.

Class –Collembola Lubbock, 1870

Order –Poduromorpha Börner, 1913, sensu D’Haese, 2002

Family – Hypogastruridae Börner, 1906

Genus – *Ceratophysella* Börner in Brohmer, 1932

Species –*C. cavicola* (Börner, 1901)

Distribution: Meliis (Nikortsminda) Cave.

Literature: Barjadze & Djanashvili, 2008.

Family – Neanuridae Börner, 1901, sensu Deharveng, 2004

Genus – *Neanura* MacGillivray, 1893

Species –*N. muscorum* (Templeton, 1835)

Distribution: Meliis (Nikortsminda) Cave.

Literature: Barjadze & Djanashvili, 2008.

Order – Entomobryomorpha Börner, 1913, sensu D’Haese, 2002

Family – Entomobryidae Tömösvary, 1882

Genus – *Pseudosinella* Schaffer, 1897

Species –*P. alba* (Packard, 1873)

Material examined: Kakhidze Cave, Entrance zone, 24.09.2013, 1 specimen, leg. Sh. Barjadze, det. Sh. Barjadze.

Family – Tomoceridae Schäffer, 1896

Genus –*Tomocerus* Nicolet, [1842]

Species – *T. vulgaris* (Tullberg, 1871)

Material examined: Kidobana Cave, Entrance zone, 24.09.2013, 5 specimens, leg. Sh. Barjadze, det. Sh. Barjadze.

Genus–*Plutomurus* Yosii, 1956

Species – *P. birsteini* Djanashvili & Barjadze, 2011

Material examined: Tsakhi (Gogoleti) Cave, Twilight zone, 24.09.2013, 1 specimen, leg. Sh. Barjadze, det. Sh. Barjadze.

Distribution: Sakishore Cave, Tsakhi (Gogoleti) Cave, Shareula II Cave, Meliis (Nikortsminda) Cave.

Literature: Djanashvili & Barjadze, 2011.

Family – Isotomidae Schäffer, 1896

Genus – *Folsomia* Willem, 1902

Species – *F. candida* Willem, 1902

Distribution: Meliis (Nikortsminda) Cave.

Literature: Barjadze & Djanashvili, 2008.

Species – *F. ksnemani* Stach, 1947

Material examined: Kakhidze Cave, Entrance zone, 24.09.2013, 2 specimens, leg. Sh. Barjadze, det. Sh. Barjadze.

Species – *F. inoculata* Stach, 1946

Distribution: Meliis (Nikortsminda) Cave.

Literature: Barjadze & Djanashvili, 2008.

Species – *F. spinosa* Kseneman, 1936

[*Folsomia montigena* Stach, 1946]

Distribution: Meliis (Nikortsminda) Cave.

Literature: Barjadze & Djanashvili, 2008.

Genus – *Tetracanthella* Schött, 1891

Species – *T. caucasica* (Stach, 1947)

Material examined: Tsivtskala Cave, 23.09.13, Entrance zone, 23.09.2013, 14 specimens, leg. Sh. Barjadze, det. Sh. Barjadze.

Order – Symphypleona Börner, 1901, sensu Massoud, 1971

Family – Arrhopalitidae Richards, 1968, sensu Bretfeld, 1999

Genus – *Arrhopalites* Börner, 1906

Species – *A. principalis* Stach, 1945

Distribution: Meliis (Nikortsminda) Cave; Tsakhi (Gogoleti) Cave.

Literature: Barjadze & Djanashvili, 2008.

Order – Neelipleona Massoud, 1971

Family – Neelidae Folsom, 1896

Genus – *Megalothorax* Willem, 1900

Species – *Megalothorax* sp.

Distribution: Tsakhi (Gogoleti) Cave.

Literature: Barjadze & Djanashvili, 2008.

Class – Insecta Linnaeus, 1758

Order – Coleoptera Linnaeus, 1758

Family – Carabidae Latreille, 1802

Genus – *Troglocimmerites* Ljovuschkin, 1970

Species – *T. djanaschvilii* Ljovuschkin, 1970

Distribution: Meliis (Nikortsminda) Cave.

Literature: Ljovuschkin, 1970.

Genus – *Inotrechus* Dolzhanski et Ljovuschkin, 1989

Species – *I. injaevae* Dolzhanski et Ljovuschkin, 1989

Distribution: Sakishore Cave.

Literature: Dolzhanski & Ljovuschkin, 1989.

Family – Staphylinidae Lameere, 1900

Genus – *Bryaxis* Kugelann, 1794

Species – *B. hypocritus* Plavilshchikov, 1940

Distribution: Tsakhi (Gogoleti) Cave.

Literature: Plavilshchikov, 1940

Order – Hymenoptera Linnaeus, 1758
 Family – Formicidae Latreille, 1809
 Genus – *Lasius* Fabricius, 1804

Species – *L. fuliginosus* Latreille, 1798

Material examined: Usholta Cave, Twilight zone, 12.10.2014, 3 specimens, leg. Sh. Barjadze, det. N. Gratiashvili.

Order – Lepidoptera Linnaeus, 1758
 Family – Geometridae Leach, 1815
 Genus – *Triphosa* Stephens, 1829

Species - *T. dubitata* (Linnaeus, 1758)

Material examined: Sakishore Cave, Dark zone, 11.10.2014, 3 specimens, leg. Sh. Barjadze, det. T. Chunashvili; Usholta Cave, Dark zone, 12.10.2014, 5 specimens, leg. Sh. Barjadze, det. T. Chunashvili; Dolabistavi Cave, Twilight and dark zones, 13.10.2014, 6 specimens, leg. Sh. Barjadze, det. T. Chunashvili.

Family – Noctuidae Latreille, 1809
 Genus – *Scoliopteryx* Germar, 1810

Species – *S. libatrix* (Linnaeus, 1758)

Material examined: Sakishore Cave, Dark zone, 11.10.2014, 2 specimens, leg. Sh. Barjadze, det. T. Chunashvili; Dolabistavi Cave, Twilight and dark zones, 13.10.2014, 3 specimens, leg. Sh. Barjadze, det. T. Chunashvili.

Order – Orthoptera Latreille, 1793
 Family – Rhaphidophoridae Walker, 1871
 Genus – *Dolichopoda* Bolívar, 1880

Species – *D. euxina* Semenov, 1901

Material examined: Tsivtskala Cave, Entrance zone, 23.09.2013, 1 male adult, leg. T. Arabuli, det. M. Rampini.

Distribution: Tsakhi (Gogoleti) Cave.

Literature: Birstein & Lopashov, 1940.

Order Diptera Linnaeus, 1758
 Family – Chironomidae
 Genus – *Orthocladius* van der Wulp, 1874

Species – *Orthocladius* sp.

Distribution: Tsakhi (Gogoleti) Cave.

Literature: Birstein & Lopashov, 1940.

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რაჭის რეგიონის (დასავლეთ საქართველო) მღვიმეების უხერხემლო ცხოველების ანოტირებული სია

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რეზიუმე

რაჭის რეგიონის (დასავლეთ საქართველო) მღვიმეების უხერხემლო ცხოველების ანოტირებული სია შედგენილია საკუთარ და ლიტერატურულ მონაცემებზე დაყრდნობით. უხერხემლო ცხოველთა 73 სახეობა არის რეგისტრირებული კარსტული მღვიმეებიდან, რომელთაგან 29 სახეობა მიეკუთვნება ჯავშნიან ტკიპებს, 12 სახეობა - კუდფეხიანებს, 8-8 სახეობა - ობობებსა და მწერებს, 5 სახეობა - მრავალფეხებს, 4 სახეობა - მოლუსკებს, 3 სახეობა - კიბოსნაირებსა, 2 სახეობა ცრუმორიელებს და 1-1 სახეობა - წურბელასა და მთიბავს. ზემოთ აღნიშნული უხერხემლოები მოპოვებულია 11 მღვიმეში. სახეობათა მაქსიმალური რაოდენობა - 24 სახეობა არის რეგისტრირებული ცახის (გოგოლეთის) მღვიმეში, მაშინ როდესაც მხოლოდ 1 სახეობაა რეგისტრირებული შარეულა II-ის მღვიმეში. მრავალფეხების გვარი *Ratcheuma* Golovatch, 1985 გვხვდება მხოლოდ რაჭაში. შემდეგი სახეობები და ქვესახეობები: კიბოსნაირები - *Caucasolidium cavernicola gogoleticum*, და *Bryocamptus birsteini*; მწერები - *Bryaxis hypocritus*, *Inotrechusinjaevae*, *Troglocimmerites djanaschvilii*, წურბელა - *Dina ratschaensis*; მრავალფეხიანი - *Ratcheuma excorne* და მთიბავი - *Nemaspela femorecurvata* არიან რაჭის რეგიონის ლოკალური ენდემები.