

Taxa**ARANEAE****Lycosidae**

Piratula hygrophila

BIVALVIA**Sphaeridae**

Euglesa casertana

COLEOPTERA**Chrysomelidae**

Plateumaris sericea

Dytiscidae

Acilius sulcatus

Agabus bipustulatus

Agabus guttatus

Agabus paludosus

Agabus sturmii

Colymbetes fuscus

Deronectes platynotus

Dytiscus marginatus 1

Dytiscus marginatus 1

Graphoderus austriacus

Hydroglyphus geminus

Hydroporus brancuccii

Hydroporus incognitus

Hydroporus planus

Ilybius fuliginosus

Platambus maculatus

Rhantus suturellus

Elmidae

Elmis aenea

Gyrinidae

Gyrinus substriatus

Orectochilus villosus

Haliplidae

Haliplus ruficollis

Helophoridae

Helophorus aquaticus

Helophorus griseus

Helophorus montenegrinus

Helophorus obscurus

Hydraenidae

Limnebius sp. (!L. stagnalis)

Hydrophilidae

Anacaena lutescens

Hydrobius fuscipes

Hydrochara caraboides

CRUSTACEA**Gammaridae**

Gammarus sp. (!G. balcanicus)

DIPTERA**Anisopodidae**

Sylvicola cinctus

Athericidae

Atherix ibis

Atherix marginata

Blephariceridae

Blepharicera fasciata

Blepharicera sp. (!*B. fasciata*)

Liponeura cinerascens minor (!*L. c. cinerascens*)

Liponeura sp. (! *L. cordata*)

Canthyloscielidinae

Hyperoscelis veteriosa

Ceratopogonidae

Atrichopogon oedemerarum

Atrichopogon sp. (!*A. websteri*)

Bezzia solstitialis

Culicoides obsoletus

Culicoides pallidicornis

Forcipomyia phlebotomoides

Palpomyia flavipes

Palpomyia sp. (!*Palpomyia* sp.)

Palpomyia sp. 2 (! *P. remmi*)

Chaoboridae

Chaoborus obscuripes

Mochlonyx fuliginosus

Mochlonyx velutinus

Chironomidae

Brillia bifida

Bryophaenocladus sp.(!*Bryophaenocladus* sp.)

Chaetocladus sp.(!*C. melaleucus*)

Chironomus mendax

Diamesa insignipes

Diamesa tonsa

Eukiefferiella minor

Georthocladus sp.

Gymnometriocnemus sp.

Gymnometriocnemus subnudus

Limnophyes aagaardi

Limnophyes sp. (*L. cf. asquamatus*)

Limnophyes difficilis

Limnophyes natalensis

Limnophyes sp. (!*L. natalensis*)

Limnophyes sp.(!*Limnophyes* sp.)

Micropsectra sp.

Microtendipes sp.

Orthocladus frigidus 1

Orthocladus frigidus 2

Orthocladus nitidoscutellatus

Orthocladus sp. 1 (!sp. 1 MM-2015)

Orthocladus sp. 2 (!*Orthocladus* sp.)

Paracricotopus sp.

Phaenopsectra sp. (! *P. flavipes*)

Phaenopsectra sp. (!*Ph. flavipes*)

Polypedilum convictum

Polypedilum quadriguttatum

Potthastia sp. (!*P. montium*)

Procladius sp. (*Procladius* sp. 8ES)

Prodiamesa olivacea

Psectrotanypus varius

Pseudodiamesa branickii

Smittia edwardsi

Smittia sp.

Tvetenia sp.

Culicidae

Aedes communis

Aedes pullatus

Aedes punctor

Cylindrotomidae

Cylindrotoma distinctissima

Dixidae

Dixa sp. (!*D. nebulosa*)

Dixa sp. (!*D. nubilipennis*)

Dixa submaculata

Dixa sp. (! *D. submaculata*)

Dixella aestivalis

Dixella sp. 1

Dolichopodidae

Campsicnemus curvipes

Sybistroma obscurella

Empididae

Chelifera trapezina

Platypalpus ciliaris

Platypalpus infectus

Tachydromia sp. (!*Tachydromia* sp.)

Wiedemannia sp. 1 (! *W. rhynchops*)

Wiedemannia sp. 2 (! *W. rhynchops*)

Wiedemannia sp. 3 (! *W. rhynchops*)

Wiedemannia sp. 4 (!*Wiedemannia* sp.)

Limoniidae

Antocha alpigena

Austrolimnophila unica

Dicranomyia caledonica

Dicranomyia nigristigma

Eloeophila submarmorata

Erioconopa trivialis

Erioptera lutea

Helius longirostris

Hexatoma grisea

Limnophila schranki

Lipsothrix remota

Metalimnobia bifasciata

Metalimnobia quadrinotata

Metalimnobia zetterstedti

Molophilus appendiculatus

Molophilus ater

Molophilus flavus

Molophilus propinquus

Neolimonia dumetorum

Orimarga attenuata

Ormosia lineata
Phylidorea squalens
Prionolabis hospes
Rhipidia maculata
Scleroprocta pentagonalis

Pediciidae

Dicranota auripontium 1
Dicranota auripontium 2
Dicranota auripontium 3
Dicranota bimaculata
Dicranota brevicornis
Dicranota flammatra
Dicranota sp. (! *D. flammatra*)
Dicranota gracilipes 1
Dicranota gracilipes 2
Dicranota gracilipes 3
Dicranota landrocki
Dicranota lucidipennis
Dicranota lucidipennis
Dicranota sp. (!*D. lucidipennis*)
Dicranota martynovski
Dicranota mikiana
Dicranota pallens
Dicranota pavidata
Dicranota robusta
Dicranota simulans
Dicranota sp. (! *D. pavidata*)
Dicranota sp. (!*D. gracilipes*)
Dicranota subflammatra
Pedicia apusenica
Pedicia sp. (!*P. apusenica*)
Pedicia carpianica
Pedicia sp. (!*P. carpianica*)
Pedicia sp. (!*P. carpianica*)
Pedicia carpianica
Pedicia costobocica
Pedicia fusca
Pedicia sp. (!*P. fusca*)
Pedicia lobifera
Pedicia nielseni 1
Pedicia nielseni 2
Pedicia sp. (!*P. occulta*)
Pedicia occulta
Pedicia pallens 1
Pedicia pallens 2
Pedicia pallens 3
Pedicia rivosa 1
Pedicia sp. (!*P. rivosa*)
Pedicia rivosa 2
Pedicia roxolanica 1
Pedicia roxolanica 2
Pedicia straminea 1
Pedicia straminea 2

Pedicia sp. (!*P. straminea*)

Tricyphona alticola 1

Tricyphona alticola 2

Tricyphona immaculata

Tricyphona livida 1

Tricyphona livida 2

Tricyphona unicolor

Psychodidae

Berdeniella illiesi

Berdeniella sp. (!*B. unispinosa*)

Berdeniella sp. (!*B. unispinosa*)

Pneumia trivialis

Ptychopteridae

Ptychoptera incognita/albimana

Ptychoptera sp.(!*P. paludosa*)

Scatophagidae

Cleigastra intermedia

Scathophaga furcata

Sciomyzidae

Euthycera sp. (!*E. chaerophylli*)

Hydromya dorsalis

Limnia unguicornis

Tetanocera elata

Tetanocera ferruginea

Tetanocera silvatica

Simuliidae

Prosimulium hirtipes

Prosimulium tomosvaryi

Simulium crenobium

Simulium cryophilum

Simulium lineatum

Simulium argyreatum

Simulium reptans

Simulium sp. (! *S. cryophilum*)

Sphaeroceridae

Copromyza equina

Nanna articulata

Pseudocollinella humida

Syrphidae

Eristalis picea

Eristalis tenax

Helophilus pendulus

Tabanidae

Chrysops caecutiens

Hybomitra bimaculata

Hybomitra distinguenda

Hybomitra epistates

Tabanus cordiger

Thaumaleidae

Androprosopa larvata

Thaumalea bezzi

Thaumalea testacea

Tipulidae

Tipula (A.) balcanica/latifurca
Tipula (A.) fulvipennis
Tipula (L.) lunata
Tipula (A.) luna
Tipula (E.) obscuriventris
Tipula (Pl.) luteipennis
*Tipula (Pt.) invenusta subinvenusta**
*Tipula (Sav.) alpha**
Tipula (Sav.) subnodicornis
Tipula (Gllhum.) variicornis
Tipula (T.) paludosa
Tipula (Y.) lateralis

Ameletidae

Ameletus inopinatus

Baetidae

Alainites muticus
Baetis alpinus 1
Baetis alpinus 2
Baetis melanonyx
Baetis rhodani
Cloeon dipterum

Caenidae

Caenis horaria

Ephemerellidae

Ephemerella mucronata
Serratella ignita
Torleya major

Ephemeridae

Ephemera danica

Heptageniidae

Epeorus assimilis
Ecdyonurus carpathicus
Ecdyonurus submontanus
Ecdyonurus torrentis
Ecdyonurus venosus
Rhithrogena iridina
Rhithrogena sp. (Rhithrogena sp. 4 LV-2010)
Rhithrogena sp. (Rhithrogena sp. 3 LV-2010)

Leptophlebiidae

Habroleptoides confusa 1
Habroleptoides confusa 2
Habrophlebia lauta
Paraleptoph. submarginata

Palingeniidae

Palingenia longicauda

Potamanthidae

Potamanthus luteus

Siphonuridae

Siphonurus lacustris

GASTROPODA

Ancylidae

Ancylus fluviatilis

Lymnaeidae

Radix sp. (*R. labiata*)

Vertiginidae

HETEROPTERA

Corixidae

Micronecta poweri

Sigara lateralis

Sigara nigrolineata

Geriidae

Aquarius paludum

Gerris lacustris

Gerris lateralis

Gerris sp. (*G. argentatus*)

Gerris thoracicus

Hydrometridae

Hydrometra gracilentata

Nepidae

Nepa cinerea

Ranatra linearis

Notonectidae

Notonecta glauca

Saldidae

Saldula opacula

Saldula pilosella

Veliidae

Mesovelia furcata

Microvelia reticulata

Velia caprai

HIRUDINEA

Erpobdellidae

Erpobdella vilnensis

Glossiphoniidae

Glossiphona complanata

Haemopidae

Haemopsis sanguisuga

HYDRACHNIDIA

Arrenuridae

Arrenurus refractarioulus

Arrenurus zachariae

Aturidae

Aturus crinitus

Aturus scaber

Frontipodopsis reticulatifrons

Ljania sp.

Woolastookia rotundifrons

Feltriidae

Feltria zschokkei

Hydrachnidae

Hydrachna sp.

Hydryphantidae

Protzia halberti

Protzia rugosa

Hygrobatidae

Atracides sp. (!*A. tener*)

Atracides sp. (!*A. nodipalpis*)
Atractides octoporus
Hygrobates calliger
Hygrobates foreli
Hygrobates norvegicus
Hygrobates sp. (!*H. norvegicus*)
Hygrobates sp. (!*H. norvegicus*)
Hygrobates sp. (!*H. norvegicus*)

Lebertiidae

Lebertia glabra
Lebertia porosa
Lebertia schechteli
Lebertia dubia
Lebertia sp. (*Lebertia* sp. 2MC)

Sperchontidae

Sperchon brevisrostris
Sperchon glandulosus
Sperchonopsis procera
Sperchonopsis verrucosa

Torrenticolidae

Torrenticola laskai
Torrenticola meridionalis
Torrenticola sp. (!*T. similis*)
Torrenticola sp. (!*T. laskai*)

HYMENOPTERA

Ichneumonidae

Agriotypus armatus

MEGALOPTERA

Sialidae

Sialis fuliginosa
Sialis morio

NEMATODA

Mermithidae

Mermis sp.

NEMATOMORPHA

Chordodidae

Gordionus sp.

ODONATA

Aeshnidae

Aeshna cyanea
Aeshna juncea
Aeshna subarctica

Coenagrionidae

Coenagrion ornatum
Enallagma cyathigerum
Pyrrhosoma nymphula

Libellulidae

Leucorrhinia dubia

OLIGOCHAETA

Enchytraeidae

Fridericia sp. (!*Fridericia* sp. DPEW101539)

Lumbricidae

Aporrectodea sp. (!*A. trapezoides*)

Aporrectodea sp. (!A. trapezoides)
Eisenia sp. (as GEN sp. DPEW101751)
Eiseniella tetraedra (as L2)
Eiseniella tetraedra (as L1)
Eiseniella tetraedra

Lumbriculidae

Lumbriculus variegatus 1
Lumbriculus variegatus 2
Stylodrilus sp. (!Stylodrilus sp.)
Naididae
Limnodrilus sp. (!L. udekemianus)

PLANIPENNIA

Osmylidae

Osmylus fulvicephalus

PLECOPTERA

Capniidae

Zwicknia sp. (!Zwicknia sp)

Chloroperlidae

Chloroperla kisi
Chloroperla tripunctata

Leuctridae

Leuctra albida
Leuctra carpathica
Leuctra digitata
Leuctra moselyi
Leuctra nigra
Leuctra sp. (!L. cf. prima)
Leuctra sp. (!L. cf. prima)
Leuctra quadrimaculata
Leuctra rauscheri

Nemouridae

Amphinemura sulcicollis
Nemoura cinerea
Nemoura sp. (!N. fulviceps)
Nemoura mortoni
Nemoura sp. (!N. uncinata)
Nemoura sp. (!N. avicularis)
Nemoura sp. (!N. marginata)
Nemurella pictetii
Protonemura aestiva
Protonemura hrabei
Protonemura intricata
Protonemura praecox

Perliidae

Dinocras megacephala
Perla marginata

Perlodidae

Arcynopteryx compacta
Isoperla oxylepis
Isoperla sp. (!I. grammatica)
Isoperla sp. (!I. grammatica)
Perlodes cf. intricatus (gr. form 2-GV)
Perlodes microcephalus

Taeniopterygidae

Brachyptera seticornis
Brachyptera starmachi
Taeniopteryx auberti

TRICHOPTERA**Beraeidae**

Beraea pullata

Glossosomatidae

Agapetus moselyi
Synagapetus krawanyi
Glossosoma bifidum
Glossosoma conforme

Goeridae

Silo graellsii
Silo piceus

Hydropsychidae

Hydropsyche botosaneanui
Hydropsyche fulvipes
Hydropsyche instabilis
Hydropsyche tabacarui

Leptoceridae

Adicella filicornis

Limnephilidae

Allogamus uncatus
Anabolia brevipennis
Annitella lateroproducta
Chaetopterygopsis maclachlani
Chaetopteryx bosniaca/cyssilvanica
Drusus brunneus
Drusus discolor
Drusus romanicus
Drusus tenellus
Ecclisopteryx dalecarlica
Ecclisopteryx madida
Halesus digitatus
Limnephilus auricula
Limnephilus coenosus
Limnephilus extricatus
Limnephilus griseus
Micrasema minimum
Parachiona picicornis
Potamophylax cf. latipennis
Potamophylax luctuosus
Potamophylax nigricornis
Psilopterys curvici./psorosa

Odontoceridae

Odontocerum hellenicum

Philopotamidae

Philopotamus montanus
Philopotamus variegatus
Wormaldia occipitalis

Phryganeidae

Oligotricha striata

Polycentropodidae

Plectrocnemia conspersa

Polycentropus excisus

Psychomyiidae

Tinodes kimminsi

Rhyacophilidae

Rhyacophila furcifera (!*R. denticulifera*)

Rhyacophila orghidani

Rhyacophila aquitanica/carpathica

Rhyacophila sp. (!*R. obliterata*)

Rhyacophila doehleri (!*R. motasi*)

Rhyacophila fasciata

Rhyacophila laevis

Rhyacophila mocsaryi

Rhyacophila motasi (!*R. doehleri*)

Rhyacophila nubila

Rhyacophila philopotamoides

Rhyacophila polonica

Rhyacophila sp. (!*R. torrentium*)

Rhyacophila tristis

TURBELLARIA**Dugesiidae****Planariidae**

Dugesia gonocephala

Crenobia alpina

AMIG
BIN
BP max
NR
MDinBIN
DNN
PD
CO
RG
EC
HA
DS
*

Aquatic Macro Invertebrates groups according to freshwaterecology.com database

Barcoding Index Number

maximum DNA base pairs

number of individuals sequenced

Maximum divergence in BIN

Distance to nearest neighbor

Public data in BOLD with barcodes

Country

Region

Ecosystem

Habitat - MSB - marshy springbrook, PBG - peat bog, PON - pond, River mountainous-RIM, BRO-brook, LAK-lake, SPR-spring. A

Developmental stages: A - adult, L-larvae, P-pupae

species name under different taxa or missing from BOLD database

PAR - parasitoid