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Appendix 1

Table A1. Designed primers, target organism, primer sequence, size of amplified fragments from the 18S rDNA gene and optimized annealing temperature to detect the nematodes *Acrobeloides buetschlii*, *Panagrellus redivivus* and *Plectus* spp. (*P. minimus* and *P. velox*).

Target organism	Primer name	Sequence 5'-3'	Size [bp]	Annealing temp. [°C]
Acrobeloides buetschlii	Acro-F-197	CGG CTT CGG CTG TTT CTG GTT	287 bp	62°C
	Acro-R-484	GAT GAC CGG CCT CAT AAG AGA ACG GTC TC		
Panagrellus redivivus	Pana-F-278	CCA ACG GCA GTG TAT TGT CCT GAC G	217 bp	63°C
	Pana-R-494	TAG GAA GGT TGT AAA TTC		
Plectus spp. (*P. minimus* and *P. velox*)	Plec-F-644	CTG RGA TCC AAG GCT TAT ACT GC	156 bp	62°C
	Plec-R-799	TAG ARC CGT GGT CTT ATT CT		

Table A2. List of the 108 non-target-species (including the respective target nematode species) used for cross-reaction tests with the specific primers for *Acrobeloides buetschlii*, *Panagrellus redivivus* and *Plectus* spp. (*P. minimus* and *P. velox*).

– no band occurred; + band occurred; (+) not all species of the genus were tested positive / no detection in predator's gut.

	Species	Taxonomic group	*A. buetschlii*	*P. redivivus*	*Plectus* spp.
Acari					
	Dinychus perforatus Kramer, 1882	Gamasida	-	-	-
	Eviphis ostrinus (C.L. Koch, 1838)	Gamasida	-	-	-
	Geholaspis aeneus Krauss, 1970	Gamasida	-	-	-
	Lysigamasus sp.	Gamasida	-	-	-
	Parasitus lunulatus (J. Müller, 1859)	Gamasida	-	-	-
	Pergamasus septentrionalis (Oudemans, 1902)	Gamasida	-	-	-
	Veigaia nemorensis (C.L. Koch, 1836)	Gamasida	-	-	-
	Zercon sp.	Gamasida	-	-	-
	Zerconopsis remiger (Kramer, 1876)	Gamasida	-	-	-
	Achipteria coleoptrata (Linné, 1758)	Oribatida	-	-	-
	Belbidae	Oribatida	-	-	-
	Carabodes femoralis (Nicolet, 1855)	Oribatida	-	-	-
	Chamobates subglobulus (Oudemans, 1900)	Oribatida	-	-	-
	Eupelops spp.	Oribatida	-	-	(+)
	Euzetes globulus (Nicolet, 1855)	Oribatida	-	-	-
	Galumna spp.	Oribatida	-	-	-
	Hermannia gibba (C.L. Koch, 1836)	Oribatida	-	-	-
	Hypochthonius rufulus C.L. Koch, 1835	Oribatida	-	-	-
	Liacarus xylariae (Schrank, 1803)	Oribatida	-	-	+
	Nothrus palustris (C.L. Koch, 1839)	Oribatida	-	-	-
	Nothrus silvestris Nicolet, 1855	Oribatida	-	-	-
	Oribatella calcarata (C.L. Koch, 1836)	Oribatida	-	-	-
	Oribatella quadricornuta (Michael, 1880)	Oribatida	-	-	-
	Platynothrus peltifer (C.L. Koch, 1839)	Oribatida	-	-	-

	Steganacarus magnus (Nicolet, 1855)	Oribatida	-	-	-
	Tritegeus bisulcatus Grandjean, 1953	Oribatida	-	-	-
	Xenillus tegeocranus (Hermann, 1804)	Oribatida	-	-	-
	Trachytes aegrota (C.L. Koch, 1841)	Uropodida	-	-	-
	Urodiaspis tecta (Kramer, 1876)	Uropodida	-	-	-
	Uropoda cassidea (Hermann, 1804)	Uropodida	-	-	-
	Uroseius cylindricus (Berlese, 1916)	Uropodida	-	-	-
Araneae					
	Coelotes inermis (L. Koch, 1855)	Amaurobiidae	-	-	-
	Clubiona terrestris Westring, 1851	Clubionidae	-	+	-
	Harpactea lepida (C.L. Koch, 1838)	Dysderidae	-	-	-
	Micrargus herbigradus (Blackwall, 1854)	Linyphiidae	-	-	-
	Microneta viaria (Blackwall, 1841)	Linyphiidae	-	+	-
	Tapinocyba insecta (L. Koch, 1869)	Linyphiidae	-	-	-
	Walckenaeria cucullata (C.L. Koch, 1836)	Linyphiidae	-	-	-
	Walckenaeria obtusa Blackwall, 1836	Linyphiidae	-	-	-
	Robertus lividus (Blackwall, 1836)	Theridiidae	-	-	-
Chilopoda					
	Strigamia acuminata (Leach, 1815)	Geophilomorpha	-	+	-
	Lithobius lapidicola Meinert, 1872	Lithobiidae	-	-	+
	Lithobius mutabilis L. Koch, 1862	Lithobiidae	-	-	-
	Lithobius muticus (C.L. Koch, 1847)	Lithobiidae	-	-	-
	Lithoibius nodupilipes Latzel, 1881	Lithobiidae	-	+	-
	Lithobius crassipes L. Koch, 1862	Lithobiidae	-	-	-
Coleoptera					
	Abax parallelipipedus (Piller & Mitterbacher, 1783)	Carabidae	-	+	-
	Pterostichus burmeisteri Heer**,** 1841	Carabidae	-	-	-
	Pterostichus oblongopunctatus (Fabricius, 1787)	Carabidae	-	-	-
	Trechus nigrinus Putzeys, 1847	Carabidae	-	-	-

Tropiphorus sp.	Curculionidae	-	-	-
Athous haemorrhoidalis (Fabricius, 1801)	Elateridae	-	-	-
Athous subfuscus (Müller, 1764)	Elateridae	-	-	-
Lamprohiza splendidula (Linnaeus, 1767)	Lampyridae	-	-	-
Nargus anisotomoides (Spence, 1815)	Leiodidae	-	-	-
Domene scabricollis (Erichson, 1840)	Staphylinidae	-	-	-
Habrocerus capillaricornis (Gravenhorst, 1806)	Staphylinidae	-	-	-
Philonthus sp.	Staphylinidae	-	-	-
Stilicus rufipes (Germar, 1836)	Staphylinidae	-	-	-
Xantholinus laevihatus Jacobsen, 1849	Staphylinidae	-	-	-
Xantholinus tricolor (Fabricius 1787)	Staphylinidae	-	-	-
Collembola				
Entomobrya muscorum (Nicolet, 1841)	Entomobryidae	-	-	-
Heteromurus nitidus (Templeton, 1835)	Entomobryidae	-	-	-
Lepidocyrtus cyaneus Tullberg, 1871	Entomobryidae	-	-	-
Sinella coeca (Schott, 1896)	Entomobryidae	-	-	-
Sinella curviseta Brook, 1882	Entomobryidae	-	-	-
Orchesella villosa (Geoffroy, 1764)	Entomobryidae	-	-	-
Ceratophysella cf. denticulata (Bagnall, 1941)	Hypogastruridae	-	-	-
Hypogastrura burkilli (Bagnall, 1940)	Hypogastruridae	-	+	+
Folsomia candida Willem, 1902	Isotomidae	-	-	-
Isotoma viridis Bourlet, 1839	Isotomidae	-	-	-
Proisotoma minuta (Tullberg 1871)	Isotomidae	-	-	-
Protaphorura armata (Tullberg, 1869)	Onychiuridae	-	-	-
Tomocerus minor (Lubbock, 1862)	Tomoceridae	-	-	-
Dermaptera				
Chelidurella sp.	Dermaptera	-	-	-
Diplopoda				
Haploporatia eremita (Verhoeff, 1909)	Diplopoda	-	+	-

	Polydesmus complanatus (Linnaeus, 1761)	Diplopoda	-	-	-
	Glomeris sp.	Glomeridae	-	-	-
Diplura					
	Campodea sp.	Campodeidae	-	-	-
Diptera					
	Drosophila melanogaster Meigen, 1830	Drosophilidae	-	-	-
	Musca domestica Linnaeus, 1758	Muscidae	-	+	-
Isopoda					
	Ligidium cf. *hypnorum* (Cuvier, 1792)	Isopoda	-	+	-
	Porcellio sp.	Isopoda	-	+	-
	Trichoniscus pusillus Brandt, 1833	Isopoda	-	+	-
	Trichorhina tomentosa (Budde-Lund, 1893)	Platyarthridae	-	-	+
Lepidoptera					
	Galleria sp.	Pyralidae	-	+	+
Mollusca					
	Deroceras sp.	Gastropoda	-	-	-
Myriapoda					
	Symphyla	Myriapoda	-	-	-
Nematoda					
	Acrobeloides buetschlii (de Man**,** 1884)	Cephalobidae	+	-	-
	Heterorhabditis megidis Poinar, Jackson & Klein, 1987	Heterorhabditidae	-	-	-
	Panagrellus redivivus Goodey, 1945	Panagrolaimidae	-	+	-
	Turbatrix aceti (Müller**,** 1783)	Panagrolaimidae	-	-	-

Plectus minimus Cobb, 1893	Plectidae	-	-	+
Plectus velox Bastian, 1865	Plectidae	-	-	+
Pratylenchus zeae Graham, 1951	Pratylenchidae	-	-	(+)
Caenorhabditis elegans (Maupas, 1900)	Rhabditidae	-	-	-
Phasmarhabditis hermaphrodita (Schneider, 1859)	Rhabditidae	-	-	-
Steinernema feltiae (Filipjev, 1934)	Steinernematidae	-	+	-
Oligochaeta				
Enchytraeidae	Enchytraeidae	-	-	-
Aporrectodea caliginosa (Savigny, 1826)	Lumbricidae	-	+	-
Dendrobaena octaedra (Savigny, 1826)	Lumbricidae	-	-	+
Lumbrius terrestris Linnaeus, 1758	Lumbricidae	-	+	+
Octolasion cyaneum (Savigny 1826)	Lumbricidae	+	+	-
Opiliones				
Lophopilio palpinalis (Herbst, 1799)	Phalangiidae	-	-	+
Anelasmocephalus cambridgei (Westwood, 1874)	Trogulidae	-	-	-
Trogulus nepaeformis (Scopoli, 1763)	Trogulidae	-	-	-
Pseudoscorpione				
Neobisium carcinoides (Hermann, 1804)	Pseudoscorpione	-	-	-

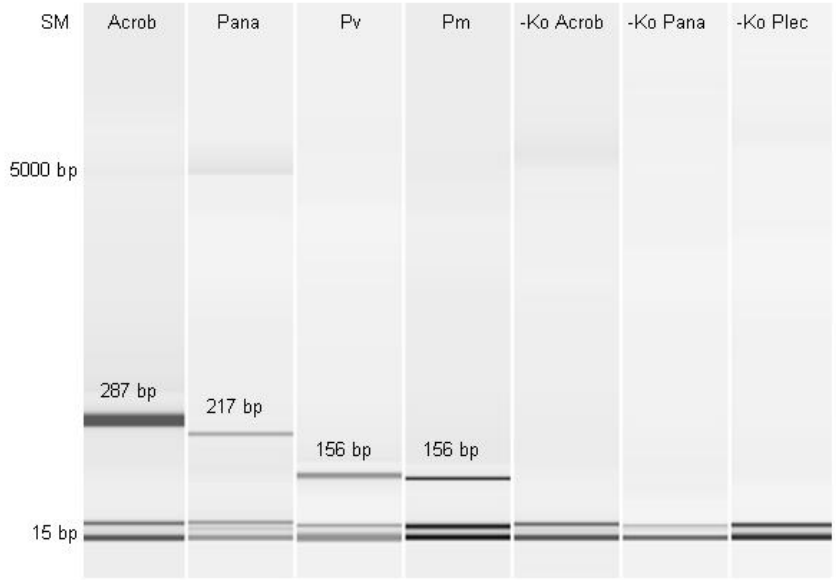

Figure A1. Visualisation of amplified 18S rDNA fragments of *Acrobeloides buetschlii, Panagrellus redivivus*, *Plectus velox* and *Plectus minimus* using specific primer sets in the QIAxcel system (with the QX Alignment Marker 15bp/5kb). Lane 1 Acrob: *A. buetschlii* (Acrob-F-247 + Acrob-R-554); Lane 2 Pana: *P. redivivus* (Pana-F-379 + Pana-R-611); Lane 3 Pv and Lane 4 Pm: *P. velox* and *P. minimus* (Plec-F-789 + Plec-R-961); Lane 5 – 7: Negative control using H_2O instead of DNA tested with the respective primer pairs. SM: with QIAxcel, an internal marker (15 and 5000 bp) is used (QX Alignment Marker 15 bp/ 5kb; Qiagen, Hilden, Germany).

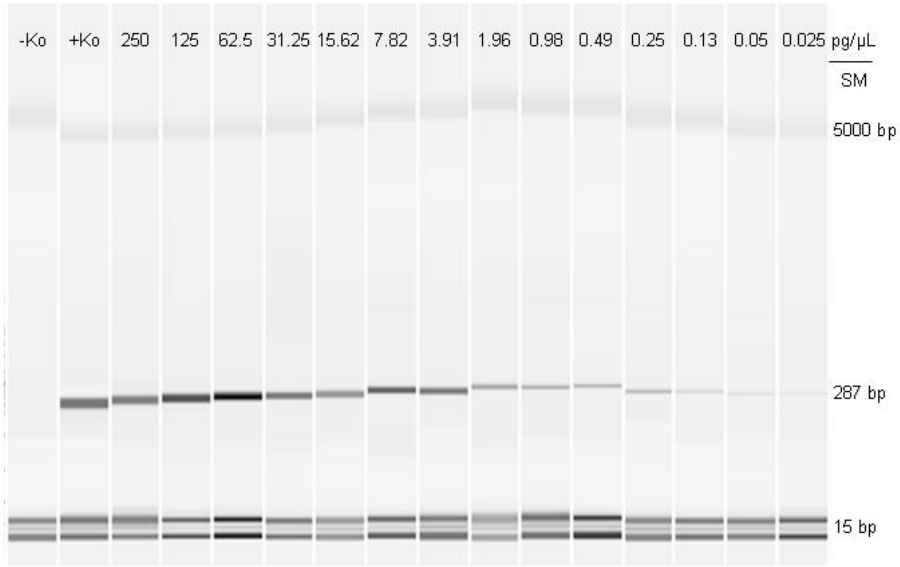

Figure A2. Visualisation of primer sensitivity in the QIAxcel system (with the QX Alignment Marker 15 bp/5 kb) using two-fold serial dilution of DNA from *Acrobeloides buetschlii* as template in a PCR with specific primer sets. Lane 1 –Ko: Negative control using H_2O instead of DNA tested with the primer pair for *A. buetschlii* (Acrob-F-247 + Acrob-R-554); Lane 2 +Ko: Positive control; Lane 3-16: different concentrations of template DNA (pg μl^{-1}) in the PCR reaction in presence of 200 pg μl^{-1} DNA of *Steganacarus magnus*. SM: QX Alignment Marker 15bp/5kb.

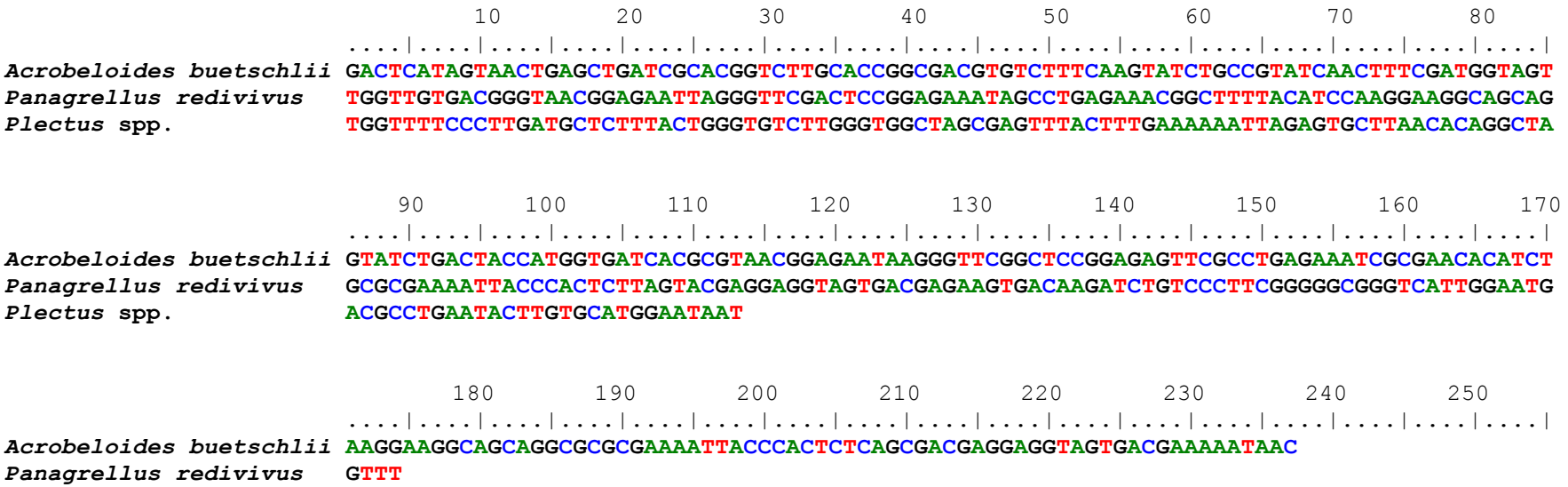

Figure A3. Sequence of the 18S rDNA fragments (without primer region) amplified with specific primers for *Acrobeloides buetschlii*, *Panagrellus redivivus* and *Plectus* spp.