

Table S1: Molecular protocols indicating for each gene (COI and 28S) and specimen of *Asellus ismailsezarii* sp. Nov (AS1, AS2 and AS3) the DNA extraction protocol (see text), PCR protocol (see text), primer names, sequencing institutions and sequence codes.

Mohammad Javad Malek-Hosseini, Jure Jugovic, Yaser Fatemi, Matjaž Kuntner, Rok Kostanjšek, Christophe J. Douady, Florian Malard. A new obligate groundwater species of *Asellus* (Isopoda: Asellidae) from Iran. *Subterranean Biology*

Gene	Specimen	Extraction protocol	PCR protocol	Primer name	Sequencing	Sequence code ⁽⁴⁾
COI	AS1	EZ LAB ⁽¹⁾	LEHNA	i) COILKF1 - COIHCO2198 on COILKF1-COILKR2; ii) COILCO1490-COILKR3 on COILCO1490 – COILKR1 ⁽³⁾ iii) COILKF3-COILKR1 on COILKF1-COILKR1 iv) COILKF0-COILKR3 on COILKF0-COILKR3b	BIOFIDAL	Asp_TUVEHSPR_000000_AS1_YAK512 COIHCO2198 N-YAK518 COIHCO2198 DN-YAK522 COILKF3 DN-YAK526 COILKR3 DN
COI	AS1	LEHNA ⁽²⁾	LEHNA	i) COILKF1 - COIHCO2198 on COILKF1-COILKR2 ii) COILKF3-COILKR1 on COILKF1-COILKR1 iii) COILKF0-COILKR3 on COILKF0-COILKR3b	BIOFIDAL	Asp_TUVEHSPR_201812_AS1_YAK515 COIHCO2198 N-YAK521 COIHCO2198 DN-YAK525 COILKF3 DN-YAK529 COILKR3 DN
COI	AS2	EZ LAB	LEHNA	i) COILKF1 - COIHCO2198 on COILKF1-COILKR2 ii) COILKF3-COILKR1 on COILKF1-COILKR1 iii) COILKF0-COILKR3 on COILKF0-COILKR3b	BIOFIDAL	Asp_TUVEHSPR_000000_AS2_YAK513 COIHCO2198 N-YAK519 COIHCO2198 DN-YAK523 COILKF3 DN-YAK527 COILKR3 DN
COI	AS3	EZ LAB	LEHNA	i) COILKF1 - COIHCO2198 on COILKF1-COILKR2 ii) COILKF3-COILKR1 on COILKF1-COILKR1	BIOFIDAL	Asp_TUVEHSPR_000000_AS3_YAK510 COIFolsoF1 B-YAK514 COIHCO2198 N-YAK524 COILKF3 DN
28S	AS1	EZ LAB	EZ LAB	28Slev2 - 28Sdes1	Macrogen Europe	Asp_TUVEHSPR_000000_JM6328SAS1_0 PERSCOM

28S	AS1	LEHNA	LEHNA	i) 28Slev2 - 28Sdes1 (Idem Javad) ii) 28SStenaF1a - 28SStenaR1	BIOFIDAL	Asp_TUVEHSPR_201812_AS1_YAK537 28Slev2 B-YAK539 28SStenaR1 B
28S	AS2	EZ LAB	EZ LAB	28Slev2 - 28Sdes1	Macrogen Europe	Asp_TUVEHSPR_000000_JM64AS2_0 PERSCOM
28S	AS2	EZ LAB	LEHNA	i) 28Slev2 - 28Sdes1 ii) 28SStenaF1a - 28SStenaR1	BIOFIDAL	Asp_TUVEHSPR_000000_AS2_YAK536 28Slev2 B-YAK538 28SStenaR1 B
28S	AS3	EZ LAB	EZ LAB	28Slev2 - 28Sdes1	Macrogen Europe	Asp_TUVEHSPR_000000_JM65AS3_0 PERSCOM

(1) EZ LAB, Evolutionary Zoology Laboratory, Slovenia

(2) LEHNA, University Lyon 1, CNRS, ENTPE, Villeurbanne, France

(3) This primer provided a mitochondrial paralog

(4) See Table S3.