

**Supplemental Table S2. Assignment of ASAP COI lineages to the respective 28S rDNA haplotypes.** Sequences of 28S and COI are from the same individual and were available for one Oribatida species (*Oppiella nova*) and two Collembola species (*Ceratophysella denticulata*, *Folsomia quadrioculata*)

***Oppiella nova***

28S haplotype	Sequences belonging to haplotype 28S	ASAP lineage (COI)
1	Oppiella_nova_Ger_HA_F_1_KF293514_1	lineage_1
	Oppiella_nova_Ger_HA_F_2_KF293515_1	lineage_1
	Oppiella_nova_Ger_HA_F_3_KF293516_1	lineage_1
	Oppiella_nova_Ger_HA_F_4_KF293517_1	lineage_1
	Oppiella_nova_Ger_KW_MG_2_KF293546_1	lineage_2
	Oppiella_nova_Ger_KW_IFG_2_KF293549_1	lineage_3
	Oppiella_nova_Ger_KW_IFG_3_KF293550_1	lineage_2
	Oppiella_nova_Ger_KW_MG_8_KF293575_1	lineage_2
	Oppiella_nova_Ger_KW_MG_12_KF293579_1	lineage_2
	Oppiella_nova_Ger_KW_MG_14_KF293581_1	lineage_2
	Oppiella_nova_Ger_KW_MG_15_KF293582_1	lineages_6
	Oppiella_nova_Ger_KW_MG_17_KF293584_1	lineage_2
	Oppiella_nova_Ger_KW_MG_18_KF293585_1	lineage_2
	Oppiella_nova_Ger_KW_MG_20_KF293587_1	missing
	Oppiella_nova_Ger_KW_MG_21_KF293588_1	missing
	Oppiella_nova_Ger_KW_MG_22_KF293589_1	missing
	Oppiella_nova_Ger_KW_MG_23_KF293590_1	missing
	Oppiella_nova_Ger_SO_F_6_KF293596_1	lineage_1
	Oppiella_nova_Ger_SO_MG_2_KF293600_1	lineage_1
2	Oppiella_nova_Ger_HA_IFG_1_KF293518_1	lineage_2
	Oppiella_nova_Ger_HA_IFG_2_KF293519_1	lineage_2
	Oppiella_nova_Ger_HA_IFG_3_KF293520_1	lineage_2
	Oppiella_nova_Ger_HA_IFG_4_KF293521_1	lineage_2
	Oppiella_nova_Ger_HA_IFG_5_KF293522_1	lineage_2
	Oppiella_nova_Ger_HA_IFG_6_KF293523_1	lineage_2
	Oppiella_nova_Ger_HA_IFG_7_KF293524_1	lineage_2
	Oppiella_nova_Ger_HA_IFG_8_KF293525_1	lineage_2
	Oppiella_nova_Ger_HA_IFG_9_KF293526_1	lineage_2
	Oppiella_nova_Ger_HA_IFG_10_KF293527_1	missing
	Oppiella_nova_Ger_HA_IFG_11_KF293528_1	missing
	Oppiella_nova_Ger_KW_G_1_KF293530_1	lineage_5
	Oppiella_nova_Ger_KW_G_2_KF293543_1	lineage_2
	Oppiella_nova_Ger_KW_G_3_KF293544_1	lineage_7
	Oppiella_nova_Ger_KW_G_5_KF293556_1	lineage_2
	Oppiella_nova_Ger_KW_G_6_KF293557_1	lineage_7
	Oppiella_nova_Ger_KW_G_10_KF293561_1	lineage_7
	Oppiella_nova_Ger_KW_G_11_KF293562_1	lineage_2
	Oppiella_nova_Ger_KW_G_12_KF293563_1	lineage_7
	Oppiella_nova_Ger_KW_G_14_KF293565_1	lineage_5
	Oppiella_nova_Ger_KW_G_15_KF293566_1	lineage_7
	Oppiella_nova_Ger_KW_G_18_KF293569_1	lineage_7
	Oppiella_nova_Ger_KW_G_20_KF293571_1	missing

	Oppiella_nova_Ger_KW_MG_6_KF293573_1	lineage_2
	Oppiella_nova_Ger_KW_MG_7_KF293574_1	lineage_2
	Oppiella_nova_Ger_KW_MG_9_KF293576_1	lineages_6
	Oppiella_nova_Ger_KW_MG_10_KF293577_1	lineages_6
	Oppiella_nova_Ger_KW_MG_16_KF293583_1	lineage_2
	Oppiella_nova_Ger_SO_MG_5_KF293603_1	missing
	Oppiella_nova_Ger_SO_MG_6_KF293604_1	missing
	Oppiella_nova_Ger_UE_G_1_KF293610_1	lineage_2
	Oppiella_nova_Ger_UE_G_2_KF293611_1	lineage_2
	Oppiella_nova_Ger_UE_MG_1_KF293613_1	lineage_2
	Oppiella_nova_Ger_UE_MG_2_KF293614_1	lineage_2
	Oppiella_nova_Ger_UE_MG_3_KF293615_1	lineage_2
	Oppiella_nova_Ger_UE_MG_4_KF293616_1	missing
	Oppiella_nova_Ger_UE_MG_5_KF293617_1	missing
	Oppiella_nova_Ger_UE_MG_7_KF293619_1	missing
3	Oppiella_nova_Ger_KW_F_1_KF293529_1	lineage_3
4	Oppiella_nova_Ger_KW_IFG_1_KF293532_1	lineage_2
	Oppiella_nova_Ger_KW_F_6_KF293537_1	lineage_1
	Oppiella_nova_Ger_KW_F_10_KF293541_1	lineage_1
	Oppiella_nova_Ger_KW_MG_11_KF293578_1	lineage_2
	Oppiella_nova_Ger_UE_IFG_9_KF293628_1	lineage_1
5	Oppiella_nova_Ger_KW_F_2_KF293533_1	lineage_3
6	Oppiella_nova_Ger_KW_F_3_KF293534_1	lineage_3
7	Oppiella_nova_Ger_KW_F_4_KF293535_1	lineage_1
	Oppiella_nova_Ger_KW_F_14_KF293554_1	missing
	Oppiella_nova_Ger_KW_MG_13_KF293580_1	lineage_2
	Oppiella_nova_Ger_KW_MG_19_KF293586_1	lineage_2
	Oppiella_nova_Ger_TW_F_1_KF293608_1	lineage_8
8	Oppiella_nova_Ger_KW_F_5_KF293536_1	lineage_4
9	Oppiella_nova_Ger_KW_F_7_KF293538_1	lineage_3
10	Oppiella_nova_Ger_KW_F_8_KF293539_1	lineage_4
11	Oppiella_nova_Ger_KW_F_9_KF293540_1	lineage_4
	Oppiella_nova_Ger_KW_F_13_KF293553_1	missing
	Oppiella_nova_Ger_TW_F_2_KF293606_1	lineage_3
	Oppiella_nova_Ger_UE_IFG_3_KF293622_1	lineage_1
	Oppiella_nova_Ger_UE_IFG_13_KF293632_1	lineage_3
12	Oppiella_nova_Ger_KW_MG_1_KF293545_1	lineage_2
	Oppiella_nova_Ger_KW_MG_3_KF293547_1	lineage_6
	Oppiella_nova_Ger_KW_MG_4_KF293548_1	lineage_2
13	Oppiella_nova_Ger_KW_F_11_KF293551_1	lineage_3
14	Oppiella_nova_Ger_KW_F_12_KF293552_1	lineage_1
15	Oppiella_nova_Ger_KW_G_4_KF293555_1	lineage_2
	Oppiella_nova_Ger_KW_G_8_KF293559_1	lineage_7
	Oppiella_nova_Ger_KW_G_9_KF293560_1	lineage_7
	Oppiella_nova_Ger_KW_G_13_KF293564_1	lineage_2
	Oppiella_nova_Ger_KW_G_16_KF293567_1	lineage_7
	Oppiella_nova_Ger_KW_G_17_KF293568_1	lineage_2

	Oppiella_nova_Ger_KW_G_7_KF293558_1	lineage_7
16	Oppiella_nova_Ger_KW_MG_5_KF293572_1	lineage_6
	Oppiella_nova_Ger_SO_F_8_KF293598_1	missing
	Oppiella_nova_Ger_UE_G_3_KF293612_1	lineage_6
	Oppiella_nova_Ger_UE_MG_6_KF293618_1	missing
17	Oppiella_nova_Ger_KW_G_19_KF293570_1	lineage_7
18	Oppiella_nova_Ger_SO_F_1_KF293591_1	lineage_3
19	Oppiella_nova_Ger_SO_F_2_KF293592_1	lineage_1
	Oppiella_nova_Ger_SO_F_3_KF293593_1	lineage_3
	Oppiella_nova_Ger_SO_F_4_KF293594_1	lineage_1
	Oppiella_nova_Ger_UE_IFG_19_KF293638_1	lineage_1
20	Oppiella_nova_Ger_SO_F_5_KF293595_1	lineage_1
21	Oppiella_nova_Ger_SO_F_7_KF293597_1	lineage_1
	Oppiella_nova_Ger_UE_IFG_4_KF293623_1	lineage_1
	Oppiella_nova_Ger_UE_IFG_15_KF293634_1	lineage_1
22	Oppiella_nova_Ger_SO_MG_1_KF293599_1	lineage_2
	Oppiella_nova_Ger_SO_MG_4_KF293602_1	lineage_2
23	Oppiella_nova_Ger_SO_MG_3_KF293601_1	lineage_1
24	Oppiella_nova_Ger_TW_F_1_KF293605_1	lineage_8
25	Oppiella_nova_Ger_TW_F_3_KF293607_1	lineage_8
26	Oppiella_nova_Ger_TW_IFG_1_KF293609_1	missing
27	Oppiella_nova_Ger_UE_IFG_1_KF293620_1	lineage_3
28	Oppiella_nova_Ger_UE_IFG_2_KF293621_1	lineage_1
	Oppiella_nova_Ger_UE_IFG_11_KF293630_1	lineage_1
29	Oppiella_nova_Ger_UE_IFG_5_KF293624_1	lineage_1
	Oppiella_nova_Ger_UE_IFG_6_KF293625_1	lineage_1
	Oppiella_nova_Ger_UE_IFG_8_KF293627_1	lineage_3
	Oppiella_nova_Ger_UE_IFG_10_KF293629_1	lineage_3
	Oppiella_nova_Ger_UE_IFG_12_KF293631_1	lineage_1
	Oppiella_nova_Ger_UE_IFG_14_KF293633_1	lineage_1
	Oppiella_nova_Ger_UE_IFG_16_KF293635_1	lineage_3
	Oppiella_nova_Ger_UE_IFG_17_KF293636_1	lineage_1
	Oppiella_nova_Ger_UE_IFG_20_KF293639_1	lineage_1
30	Oppiella_nova_Ger_UE_IFG_18_KF293637_1	lineage_1

### *Ceratophysella denticulata*

28S haplotype	Sequences belonging to haplotype 28S	ASAP lineage (COI)
1	Ceratophysella_denticulata_Aus_1_KF684375	lineage_19
	Ceratophysella_denticulata_Aus_2_KF684374	lineage_19
	Ceratophysella_denticulata_Aus_3_KF684373	lineage_19
	Ceratophysella_denticulata_Aus_4_KF684372	lineage_19
	Ceratophysella_denticulata_Aus_5_KF684371	missing
	Ceratophysella_denticulata_Fra_1_KF684383	lineage_19
	Ceratophysella_denticulata_Fra_2_KF684382	lineage_19
	Ceratophysella_denticulata_Fra_3_KF684381	lineage_19
	Ceratophysella_denticulata_Fra_4_KF684380	lineage_19
	Ceratophysella_denticulata_Fra_5_KF684379	lineage_19

	Ceratophysella_denticulata_Cro_1_KF684378	missing
	Ceratophysella_denticulata_Cro_2_KF684377	missing
	Ceratophysella_denticulata_Cro_3_KF684376	missing
	Ceratophysella_denticulata_Ger_1_KF684388	lineage_18
	Ceratophysella_denticulata_Ger_2_KF684387	lineage_18
	Ceratophysella_denticulata_Ger_3_KF684386	lineage_18
	Ceratophysella_denticulata_Ger_4_KF684385	lineage_18
	Ceratophysella_denticulata_Ger_5_KF684384	lineage_18
2	Ceratophysella_denticulata_Nor_1_KF684406	lineage_18
	Ceratophysella_denticulata_Nor_2_KF684405	lineage_18
	Ceratophysella_denticulata_Nor_3_KF684404	lineage_18
	Ceratophysella_denticulata_Nor_4_KF684403	lineage_18
	Ceratophysella_denticulata_Nor_5_KF684402	lineage_18
	Ceratophysella_denticulata_Pol_1_KF684410	lineage_18
	Ceratophysella_denticulata_Pol_2_KF684409	lineage_18
	Ceratophysella_denticulata_Pol_3_KF684408	lineage_18
	Ceratophysella_denticulata_Pol_4_KF684407	lineage_18
3	Ceratophysella_denticulata_Gre_1_KF684393	lineage_13
	Ceratophysella_denticulata_Gre_2_KF684392	lineage_13
	Ceratophysella_denticulata_Gre_3_KF684391	lineage_13
	Ceratophysella_denticulata_Gre_4_KF684390	lineage_13
	Ceratophysella_denticulata_Gre_5_KF684389	lineage_13
4	Ceratophysella_denticulata_Ita_1_KF684396	lineage_20
	Ceratophysella_denticulata_Ita_2_KF684395	lineage_20
	Ceratophysella_denticulata_Ita_3_KF684394	lineage_20
5	Ceratophysella_denticulata_Mon_1_KF684401	lineage_17
	Ceratophysella_denticulata_Mon_2_KF684400	lineage_17
	Ceratophysella_denticulata_Mon_3_KF684399	lineage_17
	Ceratophysella_denticulata_Mon_4_KF684398	lineage_17
	Ceratophysella_denticulata_Mon_5_KF684397	lineage_17
6	Ceratophysella_denticulata_Rus_1_KF684415	lineage_21
	Ceratophysella_denticulata_Rus_2_KF684414	lineage_21
	Ceratophysella_denticulata_Rus_3_KF684413	lineage_21
	Ceratophysella_denticulata_Rus_4_KF684412	lineage_21
	Ceratophysella_denticulata_Rus_5_KF684411	lineage_21
	Ceratophysella_denticulata_Ser_1_KF684420	lineage_21
	Ceratophysella_denticulata_Ser_2_KF684419	lineage_21
	Ceratophysella_denticulata_Ser_3_KF684418	lineage_21
	Ceratophysella_denticulata_Ser_4_KF684417	lineage_21
	Ceratophysella_denticulata_Ser_5_KF684416	lineage_21
7	Ceratophysella_denticulata_Spa_1_KF684424	lineage_9
	Ceratophysella_denticulata_Spa_3_KF684422	lineage_9
	Ceratophysella_denticulata_Spa_4_KF684421	lineage_9
8	Ceratophysella_denticulata_Spa_2_KF684423	lineage_9

*Folsomia quadrioculata*

28S haplotype Sequences belonging to haplotype 28S

ASAP lineage (COI)

1	Folsomia_quadrioculata_Gre_1_KF684447_2	lineage_33
	Folsomia_quadrioculata_Gre_2_KF684448_2	lineage_33
	Folsomia_quadrioculata_Gre_3_KF684449_2	lineage_34
	Folsomia_quadrioculata_Gre_4_KF684450_2	lineage_34
	Folsomia_quadrioculata_Gre_5_KF684451_2	lineage_34
	Folsomia_quadrioculata_Mon_1_KF684457_2	lineage_37
	Folsomia_quadrioculata_Mon_2_KF684458_2	lineage_37
	Folsomia_quadrioculata_Mon_3_KF684459_2	lineage_37
	Folsomia_quadrioculata_Mon_4_KF684460_2	lineage_37
	Folsomia_quadrioculata_Mon_5_KF684461_2	lineage_37
2	Folsomia_quadrioculata_Nor_1_KF684462_4	lineage_29
	Folsomia_quadrioculata_Nor_2_KF684463_4	lineage_29
	Folsomia_quadrioculata_Nor_3_KF684464_4	lineage_29
	Folsomia_quadrioculata_Nor_4_KF684465_4	lineage_29
	Folsomia_quadrioculata_Nor_5_KF684466_4	lineage_29
3	Folsomia_quadrioculata_Aus_1_KF684425_3	lineage_18
	Folsomia_quadrioculata_Aus_2_KF684426_3	lineage_18
	Folsomia_quadrioculata_Aus_3_KF684427_3	lineage_18
	Folsomia_quadrioculata_Cro_1_KF684428_3	lineage_19
	Folsomia_quadrioculata_Cro_2_KF684429_3	lineage_19
	Folsomia_quadrioculata_Cro_3_KF684430_3	lineage_19
	Folsomia_quadrioculata_Cro_4_KF684431_3	lineage_20
	Folsomia_quadrioculata_Est_1_KF684432_3	lineage_23
	Folsomia_quadrioculata_Est_2_KF684433_3	lineage_23
	Folsomia_quadrioculata_Est_3_KF684434_3	lineage_23
	Folsomia_quadrioculata_Est_4_KF684435_3	lineage_23
	Folsomia_quadrioculata_Est_5_KF684436_3	lineage_23
	Folsomia_quadrioculata_Fra_1_KF684437_3	lineage_25
	Folsomia_quadrioculata_Fra_2_KF684438_3	lineage_25
	Folsomia_quadrioculata_Fra_3_KF684439_3	lineage_25
	Folsomia_quadrioculata_Fra_4_KF684440_3	lineage_25
	Folsomia_quadrioculata_Fra_5_KF684441_3	lineage_25
	Folsomia_quadrioculata_Ger_1_KF684442_3	lineage_18
	Folsomia_quadrioculata_Ger_2_KF684443_3	lineage_18
	Folsomia_quadrioculata_Ger_3_KF684444_3	lineage_18
	Folsomia_quadrioculata_Ger_4_KF684445_3	lineage_18
	Folsomia_quadrioculata_Ger_5_KF684446_3	lineage_18
	Folsomia_quadrioculata_Ita_1_KF684452_3	lineage_36
	Folsomia_quadrioculata_Ita_2_KF684453_3	lineage_36
	Folsomia_quadrioculata_Ita_3_KF684454_3	lineage_36
	Folsomia_quadrioculata_Ita_4_KF684455_3	lineage_36
	Folsomia_quadrioculata_Ita_5_KF684456_3	lineage_36
	Folsomia_quadrioculata_Rus_1_KF684467_3	lineage_31
	Folsomia_quadrioculata_Rus_2_KF684468_3	lineage_31
	Folsomia_quadrioculata_Rus_3_KF684469_3	lineage_31
	Folsomia_quadrioculata_Rus_4_KF684470_3	lineage_31
	Folsomia_quadrioculata_Ser_1_KF684471_3	lineage_38
	Folsomia_quadrioculata_Ser_2_KF684472_3	lineage_38

Folsomia_quadrioculata_Ser_3_KF684473_3	lineage_38
Folsomia_quadrioculata_Ser_4_KF684474_3	lineage_38
Folsomia_quadrioculata_Ser_5_KF684475_3	lineage_38
Folsomia_quadrioculata_Spa_1_KF684476_3	lineage_41
Folsomia_quadrioculata_Spa_2_KF684477_3	lineage_41
Folsomia_quadrioculata_Spa_3_KF684478_3	lineage_41
Folsomia_quadrioculata_Spa_4_KF684479_3	lineage_41
Folsomia_quadrioculata_Spa_5_KF684480_3	lineage_41