Phylogenetic tree of *Peripatoides* with columns labelled: ASAP Group (most conservative), ASAP Group (lowest score), ABGD Group, bPTP clade (ML).

CLADE A.

- AF188245.1_Peripatoides_sp._Tom_s_Creek4.1
- Ony3
- Ony65.2
- Ony54
- AF188242.1_Peripatoides_sp._Piano_Flat1.1
- Ony65.1
- AF188243.1_Peripatoides_sp._Piano_Flat1.2

Group 2: "Piano Flat"

- AF188248.1_Peripatoides_sp._Catlins1.1
- Ony62
- AF188247.1_Peripatoides_sp._Dolamore1.1
- Ony22
- AF188244.1_Peripatoides_sp._Matai_Falls1.11
- AF188252.1_Peripatoides_sp._Saddle_Hill3.1
- AF188246.1_Peripatoides_sp._Taieri_Mouth1.1

Group 3: "Catlins"

CLADE B.

- AF188260.1_Peripatoides_sp._Herbert_Forest1.1
- AF188259.1_Peripatoides_sp._Kakanui1.1
- Ony11.1
- Ony11.3
- AF188262.1_Peripatoides_sp._Gunn_s_Bush3.1
- Ony2.1
- AF188261.1_Peripatoides_sp._Peel6.1
- Ony5.4
- Ony5.5
- Ony5.2
- Ony5.1
- AF188253.1_Peripatoides_sp._Maungatua1.1
- AF188251.1_Peripatoides_sp._Outram1.2
- AF188258.1_Peripatoides_sp._Trotter_s_Gorge1.1
- AF188250.1_Peripatoides_sp._Style_s_Creek1.1
- AF188254.1_Peripatoides_sp._Dunedin_Botanical_Garden1.3
- AF188256.1_Peripatoides_sp._Whare_Flat1.1
- AF188249.1_Peripatoides_sp._Tomohawk_Lagoon1
- AF188257.1_Peripatoides_sp._Fraser_s_Gully3
- AF188255.1_Peripatoides_sp._Graham_s_Bush1.1

Group 5: "Dunedin"

CLADE C.

- AF221452.1_Peripatoides_aurobis_isolate_PB1.1

Group 7: *Peripatoides aurobis* "A"

- MCZ131343.3
- AF221454.1_Peripatoides_aurorbis_isolate_PYR1
- MCZ131421
- Ony33.2
- AF221453.1_Peripatoides_aurorbis_isolate_FS2.1
- MCZ131443
- MCZ131343.2
- Ony33.1

Group 1: *Peripatoides aurobis* "B"

- AF221459.1_Peripatoides_aurorbis_isolate_WK1.1

Group 10: *Peripatoides aurobis* "C"

- Ony48
- MCZ29207.4
- MCZ29207.2
- MCZ29207.1
- MCZ29204
- MCZ29207.3
- AF221457.1_Peripatoides_aurorbis_isolate_CP29
- AF188241.1_Peripatoides_sp._Rotoroa3.1
- Ony8.4
- AF221456.1_Peripatoides_aurorbis_isolate_PU2.2
- AF221458.1_Peripatoides_aurorbis_isolate_KI13.1
- AF221455.1_Peripatoides_aurorbis_isolate_Cob1

Group 9: *Peripatoides aurobis* "D"

CLADE D.

- AF221451.1_Peripatoides_suteri_isolate_CP28
- AF221450.1_Peripatoides_suteri_isolate_DF1.1
- AF221449.1_Peripatoides_suteri_isolate_RO1.2

Group 8: *Periptoides suteri*

CLADE E.

- Ony25.2
- AF221470.1_Peripatoides_sympatrica_isolate_SR3.2
- AF221462.1_Peripatoides_sympatrica_isolate_BC2.2
- AF221472.1_Peripatoides_sympatrica_isolate_NG2.1
- AF221466.1_Peripatoides_sympatrica_isolate_OP1.1
- AF221469.1_Peripatoides_sympatrica_isolate_PU1.1
- AF221467.1_Peripatoides_sympatrica_isolate_OP2.1
- AF221461.1_Peripatoides_sympatrica_isolate_BC9.1
- AF221463.1_Peripatoides_sympatrica_isolate_NW1.1
- AF221464.1_Peripatoides_sympatrica_isolate_FB2.1
- AF221460.1_Peripatoides_sympatrica_isolate_WO1
- AF221465.1_Peripatoides_sympatrica_isolate_TH1.1
- Ony7
- AF221474.1_Peripatoides_sympatrica_isolate_WP1.2
- AF221468.1_Peripatoides_sympatrica_isolate_RK3
- Ony1.1
- Ony1.3
- Ony23
- AF221473.1_Peripatoides_sympatrica_isolate_NG4.1
- AF221475.1_Peripatoides_sympatrica_isolate_PK1.1
- AF221471.1_Peripatoides_sympatrica_isolate_HO1.1

Group 4: *Peripatoides sympatrica / novaezealandiae / morganae*

- AF221497.1_Peripatoides_morgani_isolate_TA4
- AF221476.1_Peripatoides_kawekaensis_isolate_RA2.1
- AF221477.1_Peripatoides_kawekaensis_isolate_HU4.1
- AF221489.1_Peripatoides_morgani_isolate_NW2.1
- AF221478.1_Peripatoides_kawekaensis_isolate_BC3.2

Group 6: *Peripatoides kawekaensis / morganae*

- MCZ131342.4
- AF221479.1_Peripatoides_novaezealandiae_isolate_OT3.2
- AF221483.1_Peripatoides_novaezealandiae_isolate_BW41
- AF221486.1_Peripatoides_novaezealandiae_isolate_MI1.1
- AF221485.1_Peripatoides_novaezealandiae_isolate_PA3.2
- AF221484.1_Peripatoides_novaezealandiae_isolate_CA1.1
- AF221482.1_Peripatoides_novaezealandiae_isolate_WA1.2
- MCZ131342.1
- MCZ131342.2
- MCZ131342.3
- AF221480.1_Peripatoides_novaezealandiae_isolate_OT2.1
- AF221487.1_Peripatoides_sp._BIS3.1
- AF221481.1_Peripatoides_novaezealandiae_isolate_WA2.1
- AF221492.1_Peripatoides_morgani_isolate_BI2.1
- AF221491.1_Peripatoides_morgani_isolate_OU1.2
- AF221490.1_Peripatoides_morgani_isolate_MO1.1
- AF221488.1_Peripatoides_morgani_isolate_NW4.3
- AF221495.1_Peripatoides_morgani_isolate_MK3.2
- AF221494.1_Peripatoides_morgani_isolate_TI1
- AF221496.1_Peripatoides_morgani_isolate_MK3.3
- AF221493.1_Peripatoides_morgani_isolate_RA3.1

Group 4: *Peripatoides sympatrica / novaezealandiae / morganae*

0.03