Invertebrate Systematics 2020, **34**, 535–568
doi:10.1071/IS19056_AC

Supplementary material

Molecular and morphological systematics of *Bursatella leachii* de Blainville, 1817 and *Stylocheilus striatus* Quoy & Gaimard, 1832 reveal cryptic diversity in pantropically distributed taxa (Mollusca : Gastropoda : Heterobranchia)

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Fig. S1. Individual Bayesian consensus trees of specimens of *Bursatella*, *Stylocheilus*, *Phycophila*, and the outgroup taxa for each gene analysed individually (COI, right; 16S, top left; H3, bottom left), including posterior probabilities (above nodes) and bootstrap support values from the maximum-likelihood analysis (below nodes). (See following page.)

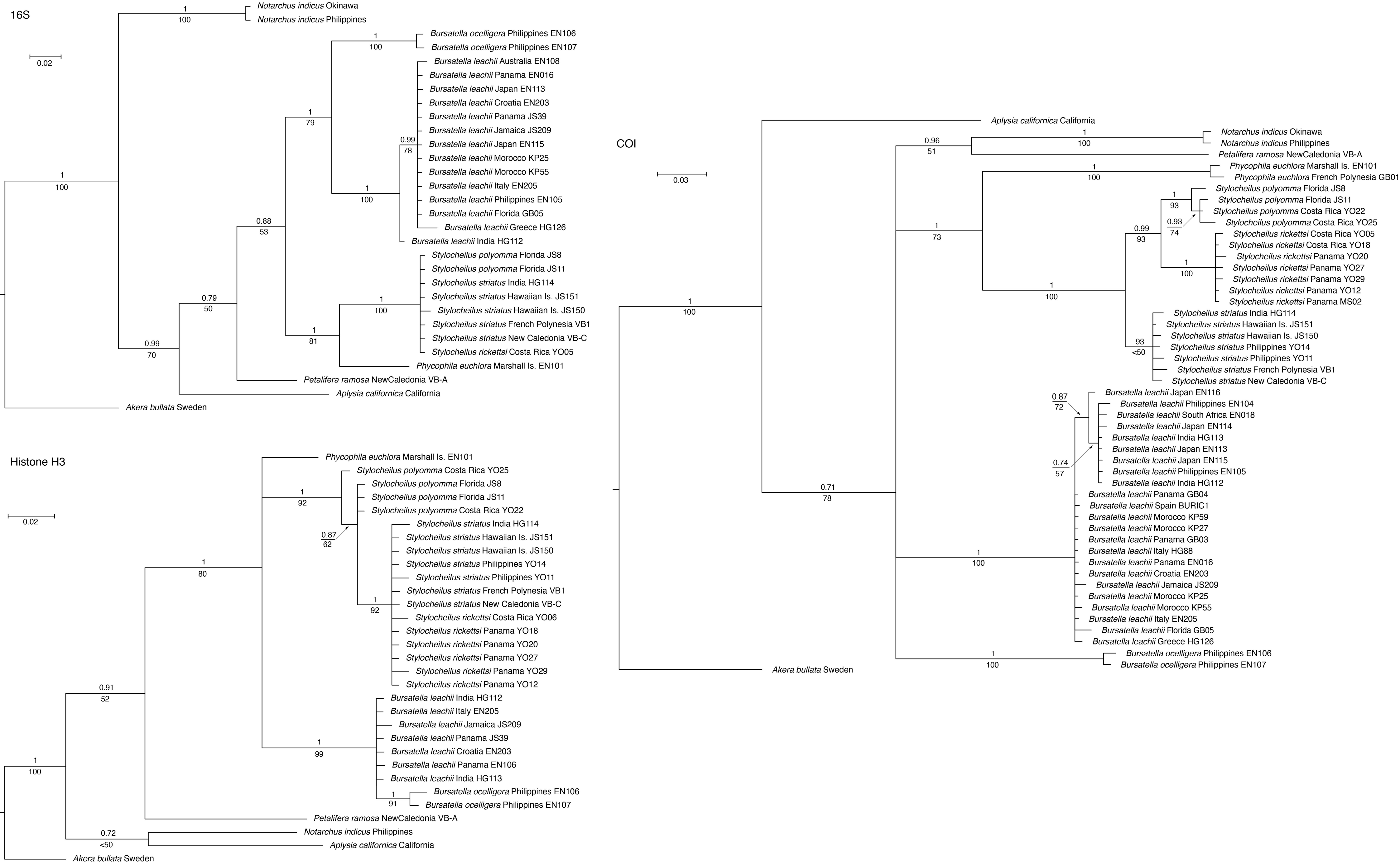

16S
1
100
Notarchus indicus Okinawa
Notarchus indicus Philippines
0.02
1
100
Bursatella ocelligera Philippines EN106
Bursatella ocelligera Philippines EN107
Bursatella leachii Australia EN108
Bursatella leachii Panama EN016
Bursatella leachii Japan EN113
Bursatella leachii Croatia EN203
1
79
Bursatella leachii Panama JS39
Bursatella leachii Jamaica JS209
0.99
78
Bursatella leachii Japan EN115
Bursatella leachii Morocco KP25
1
100
Bursatella leachii Morocco KP55
Bursatella leachii Italy EN205
Bursatella leachii Philippines EN105
Bursatella leachii Florida GB05
0.88
53
Bursatella leachii Greece HG126
Bursatella leachii India HG112
Stylocheilus polyomma Florida JS8
Stylocheilus polyomma Florida JS11
Stylocheilus striatus India HG114
0.79
50
Stylocheilus striatus Hawaiian Is. JS151
1
100
Stylocheilus striatus Hawaiian Is. JS150
Stylocheilus striatus French Polynesia VB1
1
81
Stylocheilus striatus New Caledonia VB-C
0.99
70
Stylocheilus rickettsi Costa Rica YO05
Phycophila euchlora Marshall Is. EN101
Petalifera ramosa NewCaledonia VB-A
Aplysia californica California
Akera bullata Sweden
Histone H3
Phycophila euchlora Marshall Is. EN101
Stylocheilus polyomma Costa Rica YO25
Stylocheilus polyomma Florida JS8
1
92
Stylocheilus polyomma Florida JS11
0.02
Stylocheilus polyomma Costa Rica YO22
Stylocheilus striatus India HG114
0.87
62
Stylocheilus striatus Hawaiian Is. JS151
Stylocheilus striatus Hawaiian Is. JS150
1
80
Stylocheilus striatus Philippines YO14
Stylocheilus striatus Philippines YO11
Stylocheilus striatus French Polynesia VB1
1
92
Stylocheilus striatus New Caledonia VB-C
Stylocheilus rickettsi Costa Rica YO06
Stylocheilus rickettsi Panama YO18
Stylocheilus rickettsi Panama YO20
Stylocheilus rickettsi Panama YO27
Stylocheilus rickettsi Panama YO29
0.91
52
Stylocheilus rickettsi Panama YO12
Bursatella leachii India HG112
Bursatella leachii Italy EN205
Bursatella leachii Jamaica JS209
1
99
Bursatella leachii Panama JS39
1
100
Bursatella leachii Croatia EN203
Bursatella leachii Panama EN106
Bursatella leachii India HG113
1
91
Bursatella ocelligera Philippines EN106
Bursatella ocelligera Philippines EN107
Petalifera ramosa NewCaledonia VB-A
0.72
<50
Notarchus indicus Philippines
Aplysia californica California
Akera bullata Sweden
COI
Aplysia californica California
0.96
51
1
100
Notarchus indicus Okinawa
Notarchus indicus Philippines
Petalifera ramosa NewCaledonia VB-A
0.03
1
100
Phycophila euchlora Marshall Is. EN101
Phycophila euchlora French Polynesia GB01
1
93
Stylocheilus polyomma Florida JS8
Stylocheilus polyomma Florida JS11
0.99
93
Stylocheilus polyomma Costa Rica YO22
0.93
74
Stylocheilus polyomma Costa Rica YO25
1
73
Stylocheilus rickettsi Costa Rica YO05
Stylocheilus rickettsi Costa Rica YO18
1
100
Stylocheilus rickettsi Panama YO20
Stylocheilus rickettsi Panama YO27
Stylocheilus rickettsi Panama YO29
1
100
Stylocheilus rickettsi Panama YO12
Stylocheilus rickettsi Panama MS02
1
100
Stylocheilus striatus India HG114
Stylocheilus striatus Hawaiian Is. JS151
Stylocheilus striatus Hawaiian Is. JS150
93
<50
Stylocheilus striatus Philippines YO14
Stylocheilus striatus Philippines YO11
Stylocheilus striatus French Polynesia VB1
Stylocheilus striatus New Caledonia VB-C
0.87
72
Bursatella leachii Japan EN116
Bursatella leachii Philippines EN104
Bursatella leachii South Africa EN018
Bursatella leachii Japan EN114
Bursatella leachii India HG113
Bursatella leachii Japan EN113
0.74
57
Bursatella leachii Japan EN115
Bursatella leachii Philippines EN105
0.71
78
Bursatella leachii India HG112
Bursatella leachii Panama GB04
Bursatella leachii Spain BURIC1
Bursatella leachii Morocco KP59
Bursatella leachii Morocco KP27
Bursatella leachii Panama GB03
Bursatella leachii Italy HG88
1
100
Bursatella leachii Panama EN016
Bursatella leachii Croatia EN203
Bursatella leachii Jamaica JS209
Bursatella leachii Morocco KP25
Bursatella leachii Morocco KP55
Bursatella leachii Italy EN205
Bursatella leachii Florida GB05
Bursatella leachii Greece HG126
1
100
Bursatella ocelligera Philippines EN106
Bursatella ocelligera Philippines EN107
Akera bullata Sweden

Fig. S2. Species delimitation tree generated with the Bayesian Poisson tree processes (bPTP), using the results of the phylogenetic analysis of the concatenated alignment. Branch colours indicate among-species (blue) and within-species (red) branching events. Likelihood scores are reported above the nodes. (See following page.)

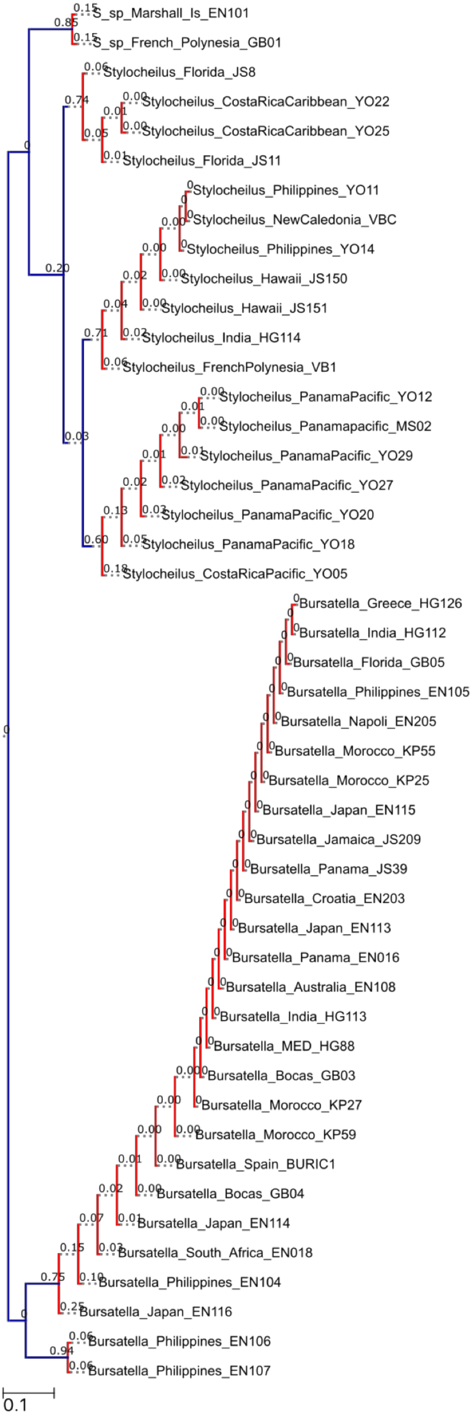
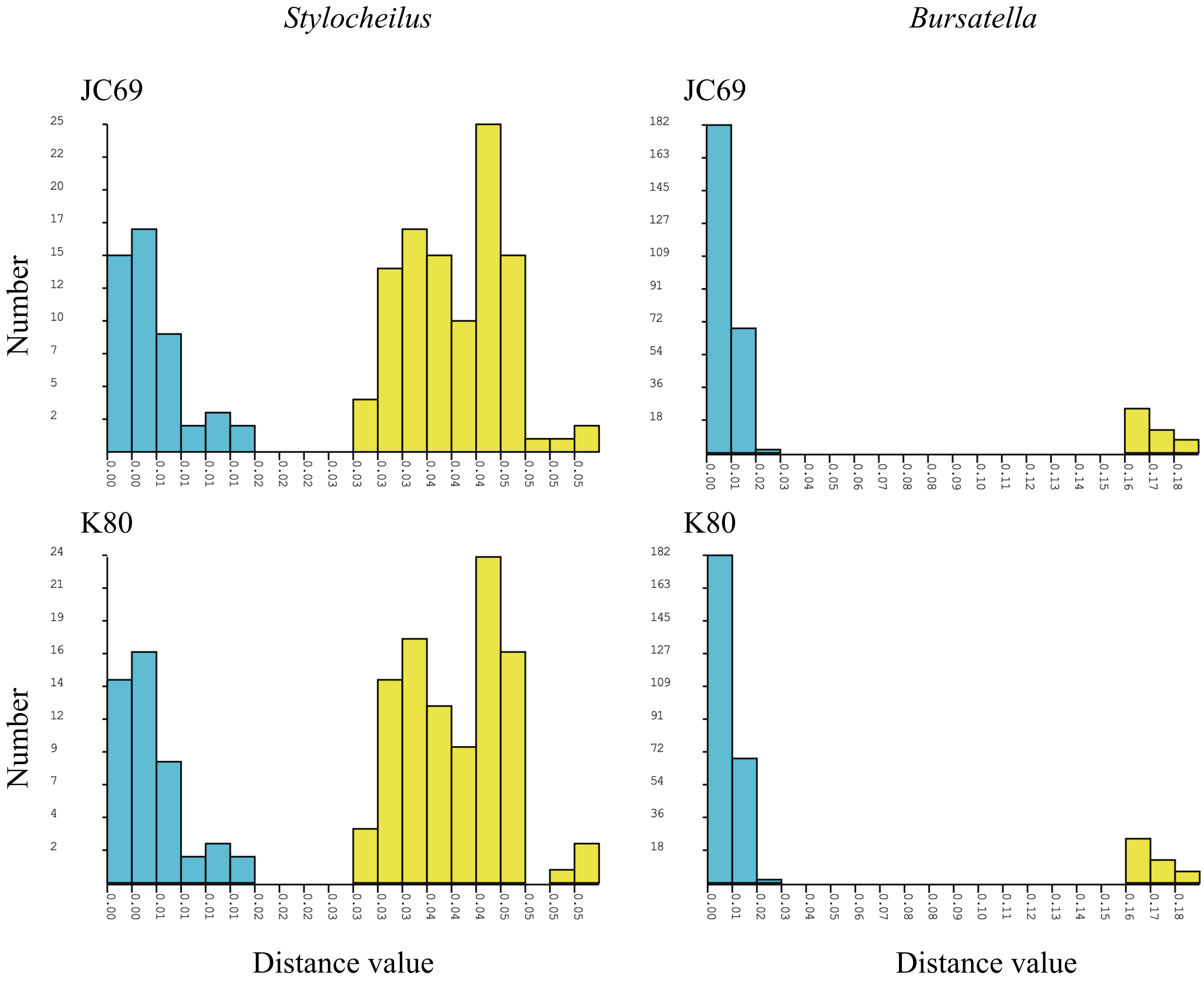

0.15
S_sp_Marshall_Is_EN101
0.85
0.15
S_sp_French_Polynesia_GB01
0.06
Stylocheilus_Florida_JS8
0.74
0.00
Stylocheilus_CostaRicaCaribbean_YO22
0.01
0.05
0.00
Stylocheilus_CostaRicaCaribbean_YO25
0
0.01
Stylocheilus_Florida_JS11
0
Stylocheilus_Philippines_YO11
0
0.00
0
Stylocheilus_NewCaledonia_VBC
0.00
0
Stylocheilus_Philippines_YO14
0.20
0.02
0.00
Stylocheilus_Hawaii_JS150
0.04
0.00
Stylocheilus_Hawaii_JS151
0.71
0.02
Stylocheilus_India_HG114
0.06
Stylocheilus_FrenchPolynesia_VB1
0.00
Stylocheilus_PanamaPacific_YO12
0.01
0.00
0.00
Stylocheilus_Panamapacific_MS02
0.03
0.01
0.01
Stylocheilus_PanamaPacific_YO29
0.02
0.02
Stylocheilus_PanamaPacific_YO27
0.13
0.03
Stylocheilus_PanamaPacific_YO20
0.60
0.05
Stylocheilus_PanamaPacific_YO18
0.18
Stylocheilus_CostaRicaPacific_YO05
0
Bursatella_Greece_HG126
0
0
Bursatella_India_HG112
0
0
Bursatella_Florida_GB05
0
0
Bursatella_Philippines_EN105
0
0
Bursatella_Napoli_EN205
0
0
Bursatella_Morocco_KP55
0
0
Bursatella_Morocco_KP25
0
0
Bursatella_Japan_EN115
0
0
Bursatella_Jamaica_JS209
0
0
Bursatella_Panama_JS39
0
0
Bursatella_Croatia_EN203
0
0
Bursatella_Japan_EN113
0
0
Bursatella_Panama_EN016
0
0
Bursatella_Australia_EN108
0
0
Bursatella_India_HG113
0
0
Bursatella_MED_HG88
0
0.00
0
Bursatella_Bocas_GB03
0.00
0
Bursatella_Morocco_KP27
0.00
0.00
Bursatella_Morocco_KP59
0.01
0.00
Bursatella_Spain_BURIC1
0.02
0.00
Bursatella_Bocas_GB04
0.07
0.01
Bursatella_Japan_EN114
0.15
0.03
Bursatella_South_Africa_EN018
0.75
0.10
Bursatella_Philippines_EN104
0
0.25
Bursatella_Japan_EN116
0.06
Bursatella_Philippines_EN106
0.94
0.06
Bursatella_Philippines_EN107
0.1

Fig. S3. Frequency histogram of intraspecific (blue) and interspecific (yellow) pair-wise genetic distances calculated with Automatic Barcode Gap Discovery (ABGD) for cytochrome *c* oxidase I (COI) sequences of *Stylocheilus* (left), and *Bursatella* (right) specimens, using the Jukes–Cantor (top) and the Kimura (bottom) models. The barcoding gap between the highest intraspecific distance values and lowest interspecific distance values is highlighted by a black dotted line. (See following page.)


Stylocheilus
Bursatella
JC69
25
22
20
17
15
12
10
7
5
2
0.00 0.00 0.01 0.01 0.01 0.01 0.02 0.02 0.02 0.03 0.03 0.03 0.03 0.04 0.04 0.04 0.05 0.05 0.05 0.05
JC69
182
163
145
127
109
91
72
54
36
18
0.00 0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08 0.08 0.09 0.10 0.11 0.12 0.13 0.14 0.15 0.16 0.17 0.18
K80
24
21
19
16
14
12
9
7
4
2
0.00 0.00 0.01 0.01 0.01 0.01 0.02 0.02 0.02 0.03 0.03 0.03 0.03 0.04 0.04 0.04 0.05 0.05 0.05 0.05
K80
182
163
145
127
109
91
72
54
36
18
0.00 0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08 0.08 0.09 0.10 0.11 0.12 0.13 0.14 0.15 0.16 0.17 0.18
Number
Number
Distance value
Distance value