

Table S1. Reported hosts of *Nectonema* species, updated from Schmidt-Rhaesa et al. (2013)

Host name	Nematomorph name	Locality	Reference
Decapoda: Dendrobranchiata			
<i>Amalopenaeus elegans</i>	"worm that appears to be related to <i>Gordius</i> "	2500 fathom, off Sierra Leone	Bate (1888) (cf. Nielsen 1969)
<i>Eusergestes arcticus</i>	<i>N. munidae</i>	Herdla near Bergen, Norway	Greve (1972)
Decapoda: Pleocyemata: Caridea			
<i>Lebbeus polaris</i>	<i>Nectonema</i> sp.	Greenland	Nouvel and Nouvel (1938)
<i>Palaemon elegans</i>	<i>Nectonema</i> sp.	Vicinity of Roscoff, France	Nouvel and Nouvel (1938)
<i>Palaemon elegans</i>	<i>Nectonema</i> sp.	Vicinity of Dinard, France	Gallien (1949)
<i>Palaemon elegans</i>	<i>Nectonema</i> sp.	Vicinity of Dinard, France	Arvy (1963)
<i>Palaemon serratus</i>	<i>Nectonema</i> sp.	Vicinity of Roscoff, France	Nouvel and Nouvel (1934)
<i>Palaemon vulgaris</i>	<i>N. agile</i>	Woods Hole, Massachusetts, USA	Born (1967)
<i>Palaemon</i> sp.	<i>N. agile</i>	?	Ward (1892)
<i>Pandalus borealis</i>	<i>Nectonema</i> sp.	Bay of Fundy, Canada	Leslie et al. (1981)
<i>Pandalus montagui</i>	<i>Nectonema</i> sp.	Bay of Fundy, Canada	Leslie et al. (1981)
<i>Pandalus montagui</i>	<i>Nectonema</i> sp.	Bay of Fundy, Canada	Skaling and MacKinnon (1988)
<i>Pontophilus norvegicus</i>	<i>N. munidae</i>	Vicinity of Bergen, Norway	Brinkmann (1930)
Decapoda: Pleocyemata: Astacidea			
<i>Homarus americanus</i>	<i>N. agile</i>	Grand Manan Island, New Brunswick, Canada	Schmidt-Rhaesa et al. (2013)
Decapoda: Pleocyemata: Anomura			
<i>Anapagurus hyndmanni</i>	<i>Nectonema</i> sp.	Vicinity of Roscoff, France	Pérez (1927a, b)
<i>Anapagurus hyndmanni</i>	<i>N. agile</i>	Vicinity of Roscoff, France	Mouchet (1931)

<i>Anapagurus hyndmanni</i>	<i>N. agile</i>	Vicinity of Roscoff, France	Pérez (1934)
<i>Anapagurus hyndmanni</i>	<i>N. agile</i>	Vicinity of Morlaix, France	Feyel (1936)
<i>Anapagurus laevis</i>	<i>N. agile</i>	Vicinity of Roscoff, France	Pérez (1934)
<i>Diogenes pugilator</i>	<i>N. agile</i>	Vicinity of Roscoff, France	Pérez (1934)
<i>Pagurus acadianus</i>	<i>Nectonema</i> sp.	Bay of Fundy, Canada	Leslie et al. (1981)
<i>Pagurus bernhardus</i>	<i>N. agile</i>	Vicinity of Roscoff, France	Mouchet (1931)
<i>Pagurus bernhardus</i>	<i>N. agile</i>	Vicinity of Roscoff, France	Pérez (1934)
<i>Pagurus brachiomastus</i>	<i>Nectonema</i> sp.	Hokkaido, Japan	Yoshida (2016)
<i>Pagurus cuanensis</i>	<i>N. munidae</i>	Vicinity of Bergen, Norway	Nielsen (1969)
<i>Pagurus pubescens</i>	<i>N. munidae</i>	Vicinity of Bergen, Norway	Brinkmann (1930)
<i>Pagurus pubescens</i>	<i>N. munidae</i>	Vicinity of Bergen, Norway	Nielsen (1969)
<i>Munida sarsi</i>	<i>N. munidae</i>	Vicinity of Bergen, Norway	Nielsen (1969)
<i>Munida tenuimana</i>	<i>N. munidae</i>	Vicinity of Bergen, Norway	Brinkmann (1930)
<i>Munida tenuimana</i>	<i>N. munidae</i>	Vicinity of Bergen, Norway	Nielsen (1969)
<i>Munida tenuimana</i>	<i>N. munidae</i>	Vicinity of Bergen, Norway	Schmidt-Rhaesa (1996)
<i>Munida</i> sp.	<i>N. munidae</i>	Korsfjorden, Bergen, Norway	Cunha et al. (2023)
Decapoda: Pleocyemata: Brachyura			
<i>Cancer borealis</i>	<i>Nectonema</i> sp.	Bay of Fundy, Canada	Leslie et al. (1981)
<i>Cancer irroratus</i>	<i>Nectonema</i> sp.	Bay of Fundy, Canada	Leslie et al. (1981)
<i>Cancer irroratus</i>	<i>Nectonema</i> sp.	Bay of Fundy (St Andrews, Grand Manan), Canada	Bratney et al. (1985)
<i>Cancer irroratus</i>	<i>Nectonema</i> sp.	Southern Gulf of St. Lawrence, Canada	Moriyasu et al. (1998)
<i>Chionoecetes bairdi</i>	<i>Nectonema</i> sp.	Hokkaido, Japan	This study
<i>Erimacrus isenbeckii</i>	<i>Nectonema</i> sp.	Hokkaido, Japan	Oku et al. (1983)

<i>Hemigrapsus sexdentatus</i>	<i>N. zealandica</i>	South Island, New Zealand	Poinar and Brockerhoff (2001)
<i>Liocarcinus navigator</i>	<i>Nectonema</i> sp.	Vicinity of Dinard, France	Gallien (1949)
<i>Liocarcinus pusillus</i>	<i>Nectonema</i> sp.	Vicinity of Roscoff, France	Pérez (1927b)
<i>Macropodia rostrata</i>	<i>N. agile</i>	Vicinity of Roscoff, France	Pérez (1934)
<i>Macropodia rostrata</i>	<i>N. agile</i>	Vicinity of Morlaix, France	Feyel (1936)
Isopoda: Cymothoidea			
<i>Natatolana japonensis</i>	<i>Nectonema</i> sp.	1425 m, Sea of Japan, Japan	Kakui et al. (2021)

References

- Arvy (1963) *Annales de Parasitologie* 38: 887–892.
- Bate (1888) Report on the Crustacea Macrura collected by H.M.S. Challenger during the Years 1873–76. *Zoology* 24.
- Born (1967) *Journal of Parasitology* 53: 793–794.
- Bratley et al. (1985) *Canadian Journal of Zoology* 63: 2224–2229.
- Brinkmann (1930) *Bergens Museum Årbok* 9: 1–15.
- Cunha et al. (2023) *Current Biology* 33: 3514–3521.
- Feyel (1936) *Archives d'Anatomie Microscopique* 32: 197–234.
- Gallien (1949) *Bulletin de la Société de Zoologie de France* 74: 179–184.
- Greve (1972) *Fauna (Oslo)* 25: 219.
- Kakui et al. (2021) *Parasitology Research* 120: 2357–2362.
- Leslie et al. (1981) *Canadian Journal of Zoology* 59: 1193–1196.
- Moriyasu et al. (1998) *Crustaceana* 71: 655–662.
- Mouchet (1931) *Annales de la Station Océanographique de Salammbô* 6: 1–203.
- Nielsen (1969) *Sarsia* 38: 91–110.

Nouvel and Nouvel (1934) *Bulletin de la Société de Zoologie de France* 59: 516–521.

Nouvel and Nouvel (1938) *Bulletin du Muséum National d'Histoire Naturelle, Paris* 10: 507–508.

Oku et al. (1983) *Japanese Journal of Veterinary Research* 31: 65–69.

Pérez (1927a) X^e Congress International de Zoology, Budapest. pp 991–994.

Pérez (1927b) *Comptes Rendus Hebdomadaires de l'Académie des Sciences* 185: 226–227.

Pérez (1934) *Bulletin de la Société de Zoologie de France* 59: 322–328.

Poinar and Brockerhoff (2001) *Systematic Parasitology* 50: 149–157.

Schmidt-Rhaesa (1996) *Acta Zoologica* 77: 267–278.

Schmidt-Rhaesa et al. (2013) *Journal of the Marine Biological Association of the United Kingdom* 93: 631–633.

Skaling and MacKinnon (1988) *Canadian Journal of Zoology* 66: 289–295.

Ward (1892) *Proceedings of the American Academy of Arts and Sciences* 19: 260–261.

Yoshida (2016) [Taxonomic study and faunal survey of parasites in large crustaceans in Akkeshi Bay]. http://akkeshi-bekanbeushi.com/josei/report/report_h27/03yoshida.pdf

Table S2. K2P distances among 18S sequences from nematode and nematomorph species (1666 positions; all positions containing gaps and missing data were eliminated).

	1	2	3	4	5	6
1. Y16914.1_Enoplus_meridionalis_18S_rRNA_gene						
2. AF421765.1_Gordionus_wolterstorffii_18S_ribosomal_RNA_gene_partial_sequence	18.9%					
3. JAUIRK010000294.1_Nectonema_munidae_voucher_MCZ:IZ:153622_contig_1844_1_whole_genome_shotgun_sequence	25.6%	20.1%				
4. AF421767.1_Nectonema_agile_18S_ribosomal_RNA_gene_partial_sequence	25.7%	20.1%	0.3%			
5. LC605988.1_Nectonema_sp._KK2021_ICHUM:6184_gene_for_18S_rRNA_partial_sequence	24.2%	19.1%	10.1%	10.5%		
6. LC605989.1_Nectonema_sp._KK2021_ICHUM:6188_gene_for_18S_rRNA_partial_sequence	24.2%	19.1%	10.1%	10.5%	0.0%	
7. LC816087	26.4%	21.3%	1.7%	2.0%	10.0%	10.0%

Sequence Set 1. Aligned 18S sequences, trimmed in MEGA7 to the shortest length among the sequences.

>Y16914.1_Enoplus_meridionalis_18S_rRNA_gene

GAATTCGTCGACAACCTGGTTGATCCTGCCAGTAGTCATATGCTTGTCTCAAAGATTAAGCCATGCATGTCTAAGTACATACTGATTAATAGTGAAGCTGTGAATGGCTC
ATTACAACAGCCGTAGTTTATTTGATTCATAGAGTTACATGGATACCTGTGGTAAC-CTAAGAGCTAATACGCGCAATTATGCCCTGACTTC--
ACAGGAAGGGCGCGGTTATTAGACCAAAACCAATCGGG-----CTTGTCCCGTTTTTTGGTGACTCTGAATAACTCTGT--
AGATCGCACGGTCTCTCGAACCGGCGACTCGTCATTCAAATGTCTGCCTTATCAACTGTCGATGGTAGTTTATGCGCCTACCATGGTTGTAACGGGTAACGGAGAATAAG
GGTTCGACTCCGGAGAGGGAGCCTGAGAAACGGCTACCACATCCAAGGAAGGCAGCAGGCACGAAATTACCCACTCCCAACACGGGGAGGTAGTGACGAAAAATA
ACGAGACGGTCTCTA--AGAGGCC-CGTCATCGGAATGGGTACAATCTAAATCCTTTAACGAGGATCTATTGGA-GGCAAGTCTGGT-
CCAGCAGCCGCGTAATTCCAGCTCCAATAGCGTACATTAAGTTGTTGCGTTTTAAAAGCTCGTAGTTGGATCTGCGCCAGGGTTAGCGGT--CCCCT--
AACGGGAGGTACTGCTTTACCCGGGTTTATCC--TCCGGTTTTCCCTTGGTGCTCTTACCGAGTGCTCTG-GGT-
GACTGGAACCTTTACTTTGAAAAAATTAGAGTGCTCAAAGCAGGCGGTTAGCCT-
GAATAGTGGTGCATGGAATAATGGAATAGGACTTCGGTTCTATTTGTTGGTTTTCGGAACTCGAGGTAATGATTAAGAGGGACAGACGGGGGCATTCGTATTGCGACG
TTAGAGGTGAAATCCTTGATCGTCGCAAGACGTACTATTGCGAAAGCATTTGCCAAGAATGTTTTATTAAATCAAGAACGAAAGTTAGAGGTTGGAAGGCGATCAGA
TACCGCCCTAGTTCTAACCGTAAACGATGCCAGCTAGCGATCCGCGGGAGTTAAAT--
ATATGACTTCGCGGGCAGCTTCCGGGAAACCAAAGCTTTTGGGTTCCGGGGGAAGTATGGTTGCAAATCTG-
AACTTAAAGGAATTGACGGAAGGGCACCACCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACGCGGGGAAACTCACCCGGCCCGGACACCGTAAGGATTGACAG
ATTGAGAGCTCTTTCTTGATTCGGTGGTTGGTGGTGCATGGCCGTTCTTAGTTGGTGGAGCGATTTGTCTGGTTAATTCGATAACGAACGAGACTCTAGCCTACTAAA
CTAG-GC-----AGTAGATTTGGAT-TGTTTACTG-----A-----ACTTCTTAGAGGGACAGAGGG----TTT-
CTAGCCCTACGAGATTGAGCAATAACAGGTCTGTGATGCCCTTAGATGTTCCGGGGCCGACGCGCGCTACACTGAAGGAATCAACGAG--
CCTGAAAACCTAGTCCGGAAGGAT----

TGGGTAACCCGTTGAAACTCCTTCGTGCTTGGGATAGGGGCTTGCAATTGTTCCCTTGAACGAGGAATCCTAGTAAATGTGGGTCATCATCTCGCGTTGATTACGTC
CCTGCCCTTTGTACACACCGCCCGTCGCTACTACCGATTGGATGGTTTAGTGAGGCCCTTGGACTGGTCCCGATAC-GGTCGCAA--GACTGCGTCGG-----
GTACCGGAAGCGGGCCTAACTTGATCATTAGAGGAAGTAAAAGTCGTAACAAGGTTTCCGTAGGTGAACCTGCAGAAGGATCAAGCTTGGATCCCGGAAGCCGA
ATTCTGCAGATATCCATC

>AF421765.1_Gordionus_wolterstorffii_18S_ribosomal_RNA_gene_partial_sequence

CGGTTGATCC--TG-----CCAG-----

TAGTCATATGCTGTCTCAAAGATTAAGCCATGCATGTCTAAGTATAAACTTACTAAAAGTGAAACCGCGAATGGCTCATTAAATCAGTTATGGTTTATTAGATCGTCCCG

ACCACATGGATAACTGTGGTAAT-TCTAGAGCTAATACATGCTGAAACGTCGAA-TCGC--GAGGTTTCGACTGCTTTTATTAGAACAAAA---ACTAA-----

CGGTTTTTGGTGACTCTGGATAACTTTGTGCCGATCGCATGGT-

CTCGTACCGGCGACGTATCTTCAAATGTCTGCCTTATCAACTGTCGATGGTAGGTTACATGCCTACCATGGTTGTAACGGGTAACGGAGAATCAGGGTTCGATTCCGG

AGAGGGAGCCTGAGAAACGGCTACCACATCCAAGGAAGGCAGCAGGCGCGCAAATTACCCACTCCCGGTTCCGGGAGGTAGTGACGATAAATAACAATGCAGGTCT

CAAT-

CGAGACCTGTAATTGGAATGAGATCACTTTAAATCCTTTAACGAGGATCTATTGGAGGGCAAGTCTGGTGCCAGCAGCCGCGTAATTCCAGCTCCAAAAGCGTATAT

TAAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATCTCGGGTAACGGGAGGAGGC--CCGCTTGATCGCGACCGTTTCCT--CGTCCGACCTATCA--

TTCGTCCTGGCTTAGATGCTCTTAACCGGGTGTCTTG-

GTTAGAACGGAACGTTTACTTTGAAAAAATTAGAGTGCTCAAAGCAGGCTCGAAGCCTCGAATATCGGTGCATGGAATAATGGAATAGGACCTCGGTTCTATTTTGTG

GTTTTCGGAATCCGAGGTAATGATTAAGAGGAACCGATGGGGCATCCGTACTGTGGCGCTAGAGGTGAAATCCTTGACCCGCGCAAGACGAACAACACTGCGAAAGC

ATTTGCCAAGAATGTTTTCATTAATCAAGAACGAAAGTCAGAGGTTGGAAGGCGATCAGATACCGCCGTAGTTCTGACCATAAACGATGCCAACCGGCGATCCGCCGC

GGTAATATTTTATTGACCCGGCGGGCAGCCTTCGGGAAACCAAAGTTTTTTGGGTTCCGGGGGAAGTATGGTTGCAAAGCTGAAACTTAAAGGAATTGACGGAAGGGC

ACCACCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGAAAACTCACCCGGCCAGGACACTGTAAGGATTGACAGATTGATAGCTCTTTCTCGATTGAGTGG

GTGGTGGTGCATGGCCGTTCTTAGTTGGTGGAGTGATTTGTCTGGTTAATCCGATAACGAACGAGACTCTAACCTACT-TACTAGAAC-----

GTCGACGGTTT-----TTCGTCGGCGAA-----GCTTCTTAGAGGGACAAGCGACGATATT-

TCAGTCGCACGAGATTGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGCGCTACACTGAAAGAATCAACGTGACTTTGTTTACCTGGTCCGA

AAGGATTTTTCTGGGCAATCCGCTGAAACTCTTTCGTGATGGGGATAGGGAATTGTAATTATTTTCTTGAACGAGGAATTCCTAGTAAAGATGAGTCATCACCTCATCT

TGTATATGCCCTGGCCTTTGTACACACCGCCCGTCGCTACTACCGATTGAATTTCTTAGCGAGGTCTCTAGACGGGCCTTGGTAC-GAT-----

GCCCTCATCGGTATCGAACAATGTGCCTGAAAATTGATCTAGCTCAGTAATTCGAGGAAGTAAAAGTCGTAACAAGGTTCCGTAGGTGAACCTGC-----
AGAA--GGATCA-----

>JAUIRK010000294.1_Nectonema_munidae_voucher_MCZ:IZ:153622_contig_1844_1_whole_genome_shotgun_sequence

TGGTTGATCC--TG-----CCAG-----

TAGTCATATGCTGTATCAAAGATTGAGCCATGCATGTGTCAGTATGAACTTTAAAAAAGTGAAACCGCGAAAGGCTCATTAATCAGTTATGGTTTATTAGATCG-

TACGTTTACATGGATATCTCTGGCATTCTCTAGAGCTAATACATGCAA--GTTTTGTG-

TTGTAAGATACAAATGCAATTATTAGAACAAAACCAATGAGATTGGATGCATTTCCGTGTGTTTGGTCTCGTTTTTTGTTGACTCTAGATAGTTTTTTGTGAATCGAA
CGGT-

CTCGTACCGTTGAAGTACCTTTCAAATGTCTGACTTATCAACTTTTCGATGGTAGGTTATATGCCTACCATGGTAGTTACGAGTAACGGGGAATCAGGGTTTCGATTCCGGA

GAAGGAGCCTGAGAAACGGCTGCTACATCCAAGGAAGGCAGCAGGCACGCAAATTACTCAATCCCAGTGCGGGGAAGTAGTGACGATAAATACTGGGCAAGTCTC

TGTTAGAGATTGTGCTATGGCAATGAGTACAGTTTAAATTGATTAACGAGTATCAATTGGAGGGCAAGTCTGGTGCCAGCAGCCGCGGTAATTCCAGCTCCAAAAGCGT

ATATTAAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATTTGGGGTAACGGTAGTAACT--TTTTCTTTTTGAAAAATGTTATT-

AGTCCGACCCAGTGTTCAGTTTTCTTCATTGCACTTTGTCTGTGTGATGTGTGTGAAGCTGAGGCGTTTACTTTGAAAAAATTAGAGTGCTTAGAGCAAGC-
GTATGCTT-

GAATATTGTTGCATGGGATAATGAAATAGGACCACGGTTCTATTTTGTGGTTTTTCGGAAACCGAGGAAATGATCGAGAGGAACAGCCGAGGGCATTTCGTATTGTGGCG

CTAGAGGTGGAATTCTTGGACCGCCGCAAGACGAACAACCGCGAAAGCATTGCGCAAGAATGTTTTTCATTGATCAAGAACGAAAGTCAGAGGTTTCGAAGGCGATTAG

ATACCGCCGTAGTTTTGACTATAAACGATGTCGACTGGTGATTTCGCTTGGTGAATTTTCGTTTGGCCAAGCGGGCAACCTTCGGGAAACCAAAGTTTTTTGGATTCCGGG

GGGAGTATGGTTGCAAAGCTGAAACTTAAAGGAATTGACGGAAGGGCACTACCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGGAAACTTACCCGAGC

CGGACACTTTAAGGATTGACAGATTGAAAGCTCTTTCTTGATAGAGTGGATGGTGGTGCATGGCCGTTACAGTTGGTGAAGTGATTTGTCTGGTTAATTCCGATAACG

AACGAGACTCTAGCCTACT-

TACTAGTGCTGTCGTGCCTTATATTCGCGTGTGTTGGTGAGTTGTAGCCGTTAAAAAGCTGCGCTTATTAATATATTGTGTGTATAAAGGGCGGCATGCTGCTGCTTCTTAG

AGGAACAAATGCCTAT-TGT-GTAGTCATATGAGAGAGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGCGCTACTCTAATCGTGTCAAGTGTG-

CTTTGT---ACTAATGCGAAAGCA-----

TGAGTTAATCATTGAAACTCGTGCCTGATAGGAATAGAGAATTGCAATTATTTCTCTTGAACGAGGAATTCCTAGTAAGTGCAGGTCATCAACTTGCCTTGATTACGTCC

CTGCCCTTTGTACACACCGCCCGTCGCTACTACCGATTGAATGACTTAGCGAGATTCTCGGACTGAAGTTAAG-T-GACTCTAACAGGTTA--TTTA-----
CTCTTCGGAAAGTTGATCTAGCTCGGTTATTTCGAGGAAGTAAAAGTCGTAACAAGGTTCCGTAGGTGAACCTGC-----GGAA--GGATCA-----

>AF421767.1_Nectonema_agile_18S_ribosomal_RNA_gene_partial_sequence

-----CC--CC-----CCGG-----

GATTGCTTGTCTCAAAGATTAAGCCATGCATGTGTCAGTATGAACTTTAAAAAAGTGAAACCGCGAAAGGCTCATTAATCAGTTATGGTTTATTAGATCG-

TACGTTTACATGGATATCTCTGGCATTCTCTAGAGCTAATACATGCAA--GTTTTGTG-

TTGTA AAAAGATACAAATGCAATTATTAGAACAAAACCAATGAGATTGGATGCATTTCCGTGTGTTTGGTCTCGTTTTTTGTTGACTCTAGATAGTTTTTTGTGAATCGAA
CGGT-

CTCGTACCGTTGAAGTACCTTTCAAATGTCTGACTTATCAACTTTTCGATGGTAGGTTATATGCCTACCATGGTAGTTACGAGTAACGGGGAATCAGGGTTCGATTCCGGA

GAAGGAGCCTGAGAAACGGCTGCTACATCCAAGGAAGGCAGCAGGCACGCAAATTACTCAATCCCAGTGCGGGGAAGTAGTGACGATAAATAACTGGGCAAGTCTC

TGTTAGAGATTGTGCTATGGCAATGAGTACAGTTTAAATTGATTAACGAGTATCAATTGGAGGGCAAGTCTGGTGCCAGCAGCCGCGGTAATTCCAGCTCCAAAAGCGT

ATATTAAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATTTGGGGTAACGGTAGTAACT--TTTTCTTTTTGAAAAATGTTATT-

AGTCCGACCCAGTGTTCAGTTTTCTTCATTGCACCTTGTCTGTGTGATGTGTGTGAAGCTGAGGCGTTTACTTTGAAAAAATTAGAGTGCTTAGAGCAAGC-
GTATGCTT-

GAATATTGTTGCATGGGATAATGAAATAGGACCACGGTCTATTTTGTGGTTTTTCGGAAACCGAGGAAATGATCGAGAGGAACAGCCGAGGGCATTTCGTATTGTGGCG

CTAGAGGTGGAATTCTTGGACCGCCGCAAGACGAACAACCGCGAAAGCATTTCGCAAGAATGTTTTTCATTGATCAAGAACGAAAGTCAGAGGTTCTGAAGGCGATTAG

ATACCGCCGTAGTTTTGACTATAAACGATGTCGACTGGTGATTTCGCTTGGTGAATTTTCGTTTTGGCCAAGCGGGCAACCTTCGGGAAACCAAAGTTTTTTGGATTCCGGG

GGGAGTATGGTTGCAAAGCTGAAACTTAAAGGAATTGACGGAAGGGCACTACCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGGAAACTTACCCGAGC

CGGACACTTTAAGGATTGACAGATTGAAAGCTCTTTCTTGATAGAGTGGATGGTGGTGCATGGCCGTTACAGTTGGTGAAGTGATTTGTCTGGTTAATTCCGATAACG

AACGAGACTCTAGCCTACT-

TACTAGTGCTGTCGTGCCTTATATTCGCGTGTGTTGGTGAGTTGTAGCCGTTAAAAAGCTGCGCTTATTAATATATTGTGTGTATAAAGGGCGGCATGCTGCTGCTTCTTAG

AGGAACAAATGCCTAT-TGTGGTAGTCATATGAGAGAGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGCGCTACTCTAATCGTGTGAGTGTG-

CTTTGT---ACTAATGCGAAAGCA-----

TGAGTTAATCATTGAAACTCGTGCGTGATAGGAATAGAGAATTGCAATTATTTCTCTTGAACGAGGAATTCCTAGTAAGTGCAGGTCATCAACTTGCCTTGATTACGTCC

CTGCCCTTTGTACACACCGCCCGTCGCTACTACCGATTGAATGACTTAGCGAGATTCTCGGACTGAAGTTAAG-T-GACTCTAACAGGTTA--TTTA-----
CNNCTTCGGAAAGTTGATCTAGCTCGGTTATTTC-----

>LC605988.1_Nectonema_sp._KK2021_ICHUM:6184_gene_for_18S_rRNA_partial_sequence

TAGTCATATGCTTGATCAAGGATTGAGCCATGCATGTATCAGTATAAACTTGATCAAGTGAAACCGCGAATGGCTCATTAATCAGTTATGGTTTATTAGATCG-
TACTTTTACATGGATACCTTTGGGATTTTCTAGAGCTAATACATGCAA-AATATCTAC-AC---CTAGTGTAGATGCTTTTATTAGAACAAAATCAACCATG-----
TACTTTCGGGT----GCATGAATTTTTGTTGACTCTGGATAACTTTGTGCGAATCGAGCGGT-
CTTGTACC GTTGAAGTACCTTCAAATGTCTGACTTATCAACTTTTCGATGGTAGGTTATATGCCTACCATGGTAGTCACGAGTAACGGGGAATCAGGGTTCGATTCCGGA
GAGGGAGCCTGAGAAACGGCTACTACATCCAAGGAAGGCAGCAGGCACGCAAATTACCCAATCCCGGTACGGGGAGGTAGTGACGATAAATAACAGAGCAAGTCTC
TTACAGAGATTGTGCTATGGGAATGAGTACACTTTAAATCGTTAACGAGGATCAATTGGAGGGCAAGTCTGGTGCCAGCAGCCGCGTAATTCCAGCTCCAAAAGCG
TATATTAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATTTGGGGTAACGGCGAAAGCTAATCATTGTAA-GATGAAAGCTCTC--
GGGCTGACCCATACCTTGCAGTATTCTCGTGTGCACTTAATTGTGTGATGCG-
GCGAAGCTGAAACGTTTACTTTGAAAAAATTAGAGTGCTCAAATCAGGCGACTTGCTT-
GAATAATGTTGCATGGGATAATGAAATAGGACCGCGTTCTATTTTGGTTTTCGATTACCGAGGTAATGATCGAGAGGAACAGTCGGGGGCATTCGTATTGTGGCGC
TAGAGGTGGAATTTCTGGACCGCTGCAAGACGAACAACCTGCGAAAGCATTGCGCAAGGATGTTTTATTGATCAAGAACGAAAGTCAGAGGTTCGAAGGCGATTAGA
TACCGCCGTAGTTTTGACTATAAACGATGTCGACTGGTGATCCGTTTGGT--
ATTTTTGCTTAGCCAAGCGGGCAACCTTCGGGAAACCAAAGTTTTTGGATTCCGGGGGGAGTATGGTTGCAAAGCTGAAACTTAAAGGAATTGACGGAAGGGCACTA
CCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGGAAACTCACCCGGGCCGGACACTTTAAGGATTGACAGGTTGAAAGCTCTTTCTTGATAAAGTGGGTG
GTGGTGCATGGCCGTTACAGTTGGTGAAGTGATTTGTCTGGTTAATTCGATAACGAACGAGACTCTAGCTACT-TACTAGCAC-----
TTGGATGCACTTT-----TGTGGTTCAA-----GTCGCTTCTTAGAGGGACAAATGGCCAT-TGT-
GTAGTCATATGAGAATGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGGCTACTCTAATCGAGTCAGTGTG-AGTTGT---
CCTTATGCGAAAGCA-----
TTTGTAATCATGCAAACCTTGTGCGTGATGGGGATAGAGAATTGCAATTATTTCTCTTGAACGAGGAATTCCTAGTAAGTGCAGGTCATCAACTTGCGTTGATTACGTCC

CTGCCCTTTGTACACACCGCCCGTCGCTACTACCGATTGAATGACTTAGTGAGGTCTTCGGACTGATGCGAAT-TAGATGATGA-AAGTCG--TCGA-AT-----
TTGTGTTGGGAAGTTGATCAAGCTCGGTTATTTTCGAGGAAGTAAAAGTCGTAACAAGGTT-----TCC-----

>LC605989.1_Nectonema_sp._KK2021_ICHUM:6188_gene_for_18S_rRNA_partial_sequence

TAGTCATATGCTTGATCAAGGATTGAGCCATGCATGTATCAGTATAAACTTGATCAAGTGAAACCGCGAATGGCTCATTAATCAGTTATGGTTTATTAGATCG-
TACTTTTACATGGATACCTTTGGGATTTTCTAGAGCTAATACATGCAA-AATATCTAC-AC---CTAGTGTAGATGCTTTTATTAGAACAAAATCAACCATG-----
TACTTTCGGGT----GCATGAATTTTTGTTGACTCTGGATAACTTTGTGCGAATCGAGCGGT-
CTTGTACC GTTGAAGTACCTTCAAATGTCTGACTTATCAACTTTTCGATGGTAGGTTATATGCCTACCATGGTAGTCACGAGTAACGGGGAATCAGGGTTCGATTCCGGA
GAGGGAGCCTGAGAAACGGCTACTACATCCAAGGAAGGCAGCAGGCACGCAAATTACCCAATCCCGGTACGGGGAGGTAGTGACGATAAATAACAGAGCAAGTCTC
TTACAGAGATTGTGCTATGGGAATGAGTACACTTTAAATCGTTAACGAGGATCAATTGGAGGGCAAGTCTGGTGCCAGCAGCCGCGTAATTCCAGCTCCAAAAGCG
TATATTAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATTTGGGGTAACGGCGAAAGCTAATCATTGTAA-GATGAAAGCTCTC--
GGGCTGACCCATACCTTGCAGTATTCTCGTGTGCACTTAATTGTGTGATGCG-
GCGAAGCTGAAACGTTTACTTTGAAAAAATTAGAGTGCTCAAATCAGGCGACTTGCTT-
GAATAATGTTGCATGGGATAATGAAATAGGACCGCGTTCTATTTTGGTTTTCGATTACCGAGGTAATGATCGAGAGGAACAGTCGGGGGCATTTCGTATTGTGGCGC
TAGAGGTGGAATTTCTGGACCGCTGCAAGACGAACAACCTGCGAAAGCATTGCGCAAGGATGTTTTATTGATCAAGAACGAAAGTCAGAGGTTCGAAGGCGATTAGA
TACCGCCGTAGTTTTGACTATAAACGATGTCGACTGGTGATCCGTTTGGT--
ATTTTTGCTTAGCCAAGCGGGCAACCTTCGGGAAACCAAAGTTTTTGGATTCCGGGGGGAGTATGGTTGCAAAGCTGAAACTTAAAGGAATTGACGGAAGGGCACTA
CCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGGAAACTCACCCGGGCCGGACACTTTAAGGATTGACAGGTTGAAAGCTCTTTCTTGATAAAGTGGGTG
GTGGTGCATGGCCGTTACAGTTGGTGAAGTGATTTGTCTGGTTAATTCGATAACGAACGAGACTCTAGCTACT-TACTAGCAC-----
TTGGATGCACTTT-----TGTGGTTCAA-----GTCGCTTCTTAGAGGGACAAATGGCCAT-TGT-
GTAGTCATATGAGAATGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGGCTACTCTAATCGAGTCAGTGTG-AGTTGT---
CCTTATGCGAAAGCA-----
TTTGTAATCATGCAAACCTTGTGCGTGATGGGGATAGAGAATTGCAATTATTTCTCTTGAACGAGGAATTCCTAGTAAGTGCAGGTCATCAACTTGCGTTGATTACGTCC

CTGCCCTTTGTACACACCGCCCGTCGCTACTACCGATTGAATGACTTAGTGAGGTCTTCGGACTGATGCGAAT-TAGATGATGA-AAGTCG--TCGA-AT-----
TTGTGTTGGGAAGTTGATCAAGCTCGGTTATTTCGAGGAAGTAAAAGTCGTAACAAGGTT-----TCC-----

>LC816087

TAGTCATATGCTTGATCAAAGATTGAGCCATGCATGTGTCAGTATGAACTTTTATGAAGTGAAACCGCGAAAGGCTCATTAATCAGTTATGGTTTATTAGATCG-
TATGTTTACATGGATATCTCTGGCATTCTCTAGAGCTAATACATGCAA--GTTTTGTG-
TTGTAAGATAACAAATGCAATTATTAGAACAAAACCTTCAAGATTTGTTTTACTTCGGTATGGCAAATCTTAA-
TTTTGTTGACTCTAGATAGTTTTTTGTGAATCGAACGGT-
CTTGTAACCGTTGAAGTACCTTTCAAATGTCTGACTTATCAACTTTTCGATGGTAGGTTATATGCCTACCATGGTAGTTACGAGTAACGGGGAATCAGGGTTCGATTCCGGA
GAAGGAGCCTGAGAAACGGCTGCTACATCCAAGGAAGGCAGCAGGCACGCAAATTACTCAATCCCAGTGCGGGGAAGTAGTGACGATAAATAACTGGGCAAGTCTC
TGTTTGAGATTGTGCTATGGCAATGAGTACAGTTTAAATTGATTAACGAGTATCAATTGGAGGGCAAGTCTGGTGCCAGCAGCCGCGGTAATTCCAGCTCCAAAAGCGT
ATATTAAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATTTGGGGTAACAGTAATAACT--TTTTCTTTATGAAAAATGTTATT--
AGTCTGACCCAGTGTTCGAGTTTTCCACGTTGCACCTTCACTGTGTGATGTGTGTGAAGCTGAGGCGTTTACTTTGAAAAAATTAGAGTGCTTAGAGCAAGC-
GTAAGCTT-
GAATATTGTTGCATGGGATAATGAAATAGGACCACGGTCTATTTTGTGGTTTTTCGGAAACCGAGGAAATGATCGAGAGGAACAGCCGAGGGCATTTCGTATTGTGGCG
CTAGAGGTGGAATTCCTGGACCGCCGCAAGACGAACAACCGCGAAAGCATTGCAAGAATGTTTTTCATTGATCAAGAACGAAAGTCAGAGGTTCTGAAGGCGATTAG
ATACCGCCGTAGTTTTGACTATAAACGATGTCGACTGGTGATTGCTTGGTGAATTTTCGTTTGGCCAAGCGGGCAACCTTCGGGAAACCAAAGTTTTTTGGATTCCGGG
GGGAGTATGGTTGCAAAGCTGAAACTTAAAGGAATTGACGGAAGGGCACTACCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGGAAACTTACCCGAGC
CGGACACTTTAAGGATTGACAGATTGAAAGCTCTTTCTTGATAGAGTGGATGGTGGTGCATGGCCGTTACAGTTGGTGAAGTGATTTGTCTGGTTAATTCCGATAACG
AACGAGACTCTAGCCTACT-TACTAGTGTGTCGTCCTTATATTCGTGTGTATTAGTGAGTTGTAGCCCTT-AAAGCTGCGCTTATTAGTGCA-
TGTGTGTATAAAGGGCGGCATGCTGCTGCTTCTTAGAGGAACAAATGCCTAT-TGT-
GTAGTCATATGAGAGAGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGCGCTACTCTAATCGTGTGTCAGTGTG-CTTTGT---
ACTAATGCGAAAGCA-----
TGAGTTAATCATTGAAACTCGTGCGTGATAGGAATAGAGAATTGCAATTATTTCTTCTTGAACGAGGAATTCCTAGTAAGTGCAGGTCATCAACTTGCCTTGATTACGTCC

CTGCCCTTTGTACACACCGCCCGTCGCTACTACCGATTGAATGACTTAGCGAGATTCTCGGACTGAAGTTAAG-T-GACTTTAATCGGTTA--CT---T-----
TTTCTTCGGAAAGTTGATCTAGCTCGGTTATTTCGAGGAAGTAAAAGTCGTAACAAGGTT-----TCC-----

Sequence Set 2. Aligned 18S sequences used for the maximum-likelihood analysis, reduced to 1740 positions by removing alignment-ambiguous sites.

>Y16914.1_Enoplus_meridionalis_18S_rRNA_gene

```
ATATGCTTGTCTCAAAGATTAAGCCATGCATGTCTAAGTACATACTGATTAATAGTGAAGCTGTGAATGGCTCATTACAACAGCCGTAGTTTATTTGATTCTAGAGTTACA
TGGATACCTGTGGTAAC-CTAAGAGCTAATACGCGCAAATGCCCTGACAGGAAGGGCGCGGTTATTAGACCAAAACCAATCGG-----
TCCCGGTTTTTTGGTGACTCTGAATAACTCTGT--
AGATCGCACGGTCTCGAACCGGCGACTCGTCATTCAAATGTCTGCCTTATCAACTGTTCGATGGTAGTTTATGCGCCTACCATGGTTGTAACGGGTAACGGAGAATAAGG
GTTTCGACTCCGGAGAGGGAGCCTGAGAAACGGCTACCACATCCAAGGAAGGCAGCAGGCACGCAAATTACCCACTCCCAACACGGGGAGGTAGTGACGAAAAATAA
CGAGACGGTTCTCTA--AGAGGCC-CGTCATCGGAATGGGTACAATCTAAATCCTTTAACGAGGATCTATTGGA-GGCAAGTCTGGT-
CCAGCAGCCGCGGTAATTCCAGCTCCAATAGCGTACATTAAGTTGTTGCGTTTAAAAAGCTCGTAGTTGGATCTGCGCCCAGGGTTAGCGGTCCCCT--
AACGGGAGGTACTGCTACCCGGGTTTATCC--TCCGGTTTTCCCTTGGTGCTCTTTACCGAGTGCTCTGGGT-
GACTGGAACTTTTACTTTGAAAAAATTAGAGTGCTCAAAGCAGGCGGTTAGCCTGAATAGTGGTGCATGGAATAATGGAATAGGACTTCGGTTCTATTTTGTGGTTTT
CGGAACTCGAGGTAATGATTAAGAGGGACAGACGGGGCATTTCGTATTGCGACGTTAGAGGTGAAATTCTTGGATCGTCGCAAGACGTACTATTGCGAAAGCATTTCG
CAAGAATGTTTTCATTAATCAAGAACGAAAGTTAGAGGTTTCGAAGGCGATCAGATACCGCCCTAGTTCTAACCGTAAACGATGCCAGCTAGCGATCCGCGGGAGTTAA
AT--ATATGACTTCGCGGGCAGCTTCCGGGAAACCAAAGCTTTTGGGTTCCGGGGAAAGTATGGTTGCAAATCTG-
AACTTAAAGGAATTGACGGAAGGGCACCACCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACGCGGGGAAACTCACCCGGCCCGGACACCGTAAGGATTGACAG
ATTGAGAGCTCTTTCTTGATTCGGTGGTTGGTGGTGCATGGCCGTTCTTAGTTGGTGGAGCGATTTGTCTGGTTAATTCCGATAACGAACGAGACTCTAGCCTACTAACT
AG-GCTAGATTTGGATTGTTTACTG-----A---ACTTCTTAGAGGGACAGAGGG----
CTAGCCCTACGAGATTGAGCAATAACAGGTCTGTGATGCCCTTAGATGTTCCGGGGCCGACGCGCGCTACACTGAAGGAATCAACGAG-
CCTGACCTAGTCCGGAAGGATGGGTAACCCGTTGAAACTCCTTCGTGCTTGGGATAGGGGCTTGCAATTGTTCCCTTGAACGAGGAATTCCTAGTAAATGTGGGTCAT
CATCTCGCGTTGATTACGTCCCTGCCCTTTGTACACACCGCCCGTCGCTACTACCGATTGGATGGTTTAGTGAGGCCCTTGGACTGGTCCCGATGGTCGCAA-GACT-
GTACCGGGAAGCGGGCCTAACTTGATCATTTA
```

>AF421765.1_Gordionus_wolterstorffii_18S_ribosomal_RNA_gene_partial_sequence

ATATGCTTGTCTCAAAGATTAAGCCATGCATGTCTAAGTATAAACTTACTAAAAGTGAAACCGCGAATGGCTCATTAAATCAGTTATGGTTTATTAGATCGCCCCGACCAC
ATGGATAACTGTGGTAAT-TCTAGAGCTAATACATGCTGACGTCGAAGAGGTTGACTGCTTTTATTAGAACAAAA---ACTAA-----
CGGTTTTTGGTGACTCTGGATAACTTTGTGCCGATCGCATGGTCTCGTACCGGCGACGTATCTTCAAATGTCTGCCTTATCAACTGTCGATGGTAGGTTACATGCCTAC
CATGGTTGTAACGGGTAACGGAGAATCAGGGTTCGATTCCGGAGAGGGAGCCTGAGAAAACGGCTACCACATCCAAGGAAGGCAGCAGGCGCGCAAATTACCCACTC
CCGGTTCGGGGAGGTAGTGACGATAAATAACAATGCAGGTCTCAAT-
CGAGACCTGTAATTGGAATGAGATCACTTTAAATCCTTTAACGAGGATCTATTGGAGGGCAAGTCTGGTGCCAGCAGCCGCGTAATTCCAGCTCCAAAAGCGTATAT
TAAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATCTCGGGTAACGGGAGGAGGCCCGCTTGATCGCGACCGTTTCTCGTCCGACCTATCA--
TTCGTCCTGGCTTAGATGCTCTTAACCGGTGTCTTGGTTAGAACGGAACGTTTACTTTGAAAAAATTAGAGTGCTCAAAGCAGGCTCGAAGCCTGAATATCGGTGCAT
GGAATAATGGAATAGGACCTCGGTTCTATTTTGTGGTTTTTCGGAATCCGAGGTAATGATTAAGAGGAACCGATGGGGGCATCCGTACTGTGGCGCTAGAGGTGAAATT
CTTGGACCGCCGCAAGACGAACAACGCGAAAGCATTTGCCAAGAATGTTTTCATTAATCAAGAACGAAAGTCAGAGGTTTGAAGGCGATCAGATACCGCCGTAGTT
CTGACCATAAACGATGCCAACCGGCGATCCGCCGCGTAATATTTTATTGACCCGGCGGGCAGCCTTCGGGAAACCAAAGTTTTTGGGTTCCGGGGGAAGTATGGTTG
CAAAGCTGAAACTTAAAGGAATTGACGGAAGGGCACCACCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGAAAACCTACCCGGCCAGGACACTGTAAG
GATTGACAGATTGATAGCTCTTCTCGATTCAAGTGGGTGGTGGTGCATGGCCGTTCTTAGTTGGTGGAGTGATTTGTCTGGTTAATTCCGATAACGAACGAGACTCTAAC
CTACTTACTAGAAC-----GTCGACGGTTT--TTCGTCGGCGAA---
GCTTCTTAGAGGGACAAGCGACGATTCAGTCGCACGAGATTGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGCGCTACACTGAAAGAATC
AACGTGCTTTGTCTGGTCCGAAAGGATGGGCAATCCGCTGAAACTCTTTCGTGATGGGGATAGGGAATTGTAATTATTTTCTTGAACGAGGAATTCCTAGTAAAGAT
GAGTCATCACCTCATCTTGTATATGTCCCTGGCCTTTGTACACACCGCCCGTCGCTACTACCGATTGAATTTCTTAGCGAGGTCTCTAGACGGGCCTTGGTGAT-----
GCCCTGTGCTGAAAATTGATCTAGCTCAGTAATTC

>JAUIRK010000294.1_Nectonema_munidae_voucher_MCZ:IZ:153622_contig_1844_1_whole_genome_shotgun_sequence

ATATGCTTGATCAAAGATTGAGCCATGCATGTGTGTCAGTATGAACTTTAAAAAAGTGAAACCGCGAAAGGCTCATTAAATCAGTTATGGTTTATTAGATCGTACGTTTAC
ATGGATATCTCTGGCATTCTCTAGAGCTAATACATGCAAGTTTTGTGAAGATACAAATGCAATTATTAGAACAAAACCAATGAGATTTCCGTGTGTCTCGTTTTTTGTTGA
CTCTAGATAGTTTTTTGTGAATCGAACGGTCTCGTACCGTTGAAGTACCTTTCAAATGTCTGACTTATCAACTTTTCGATGGTAGGTTATATGCCTACCATGGTAGTTACGA
GTAACGGGGAATCAGGGTTCGATTCCGGAGAAGGAGCCTGAGAAAACGGCTGCTACATCCAAGGAAGGCAGCAGGCACGCAAATTACTCAATCCCAGTGCGGGGAAG
TAGTGACGATAAATAACTGGGCAAGTCTCTGTTAGAGATTGTGCTATGGCAATGAGTACAGTTTAAATTGATTAACGAGTATCAATTGGAGGGCAAGTCTGGTGCCAGC
AGCCGCGTAATTCCAGCTCCAAAAGCGTATATTAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATTTGGGGTAACGGTAGTAACTTTTTCTTTTTGAAAAATGTTAT
TAGTCCGACCCAGTGTTCAGTTTTCTTCATTGCACTTTGCTGTGTGATGTGGTGAAGCTGAGGCGTTTACTTTGAAAAATTAGAGTGCTTAGAGCAAGC-
GTATGCTTGAATATTGTTGCATGGGATAATGAAATAGGACCACGGTTCTATTTTGTGGTTTTTCGGAAACCGAGGAAATGATCGAGAGGAACAGCCGAGGGCATTTCGTA
TTGTGGCGCTAGAGGTGGAATTCCTGGACCGCCGCAAGACGAACAACCGCGAAAGCATTGCCAAGAATGTTTTTCATTGATCAAGAACGAAAGTCAGAGGTTTCGAAG
GCGATTAGATAACCGCCGTAGTTTTGACTATAAACGATGTCGACTGGTGATTTCGCTTGGTGAATTTTCGTTTGGCCAAGCGGGCAACCTTCGGGAAACCAAAGTTTTTGG
ATTCGGGGGGAGTATGGTTGCAAAGCTGAACTTAAAGGAATTGACGGAAGGGCACTACCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGGAACTTA
CCCGAGCCGGACACTTTAAGGATTGACAGATTGAAAGCTCTTCTTGATAGAGTGGATGGTGGTGCATGGCCGTTACAGTTGGTGAAGTGATTTGTCTGGTTAATTC
GATAACGAACGAGACTCTAGCCTACTACTAGTGCTATATTCGCGTTGTTGGTGAGTTGTTGCGCTTATTAAGCTGCTTCTTAGAGGAACAAATGCCTATGTAGTCATATG
AGAGAGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGCGCTACTCTAATCGTGTGTCAGTGTGCTTTGTACTAATGCGAAAGCATGAGTTAATCA
TTGAAACTCGTGCGTGATAGGAATAGAGAATTGCAATTATTTCTCTTGAACGAGGAATTCCTAGTAAGTGCAGGTCATCAACTTGCGTTGATTACGTCCCTGCCCTTTGT
ACACACCGCCGTCGCTACTACCGATTGAATGACTTAGCGAGATTCTCGGACTGAAGTTAAGGACTCTAAAGGTTCTCTTCGGAAAGTTGATCTAGCTCGGTTATTTTC

>AF421767.1_Nectonema_agile_18S_ribosomal_RNA_gene_partial_sequence

GATTGCTTGTCTCAAAGATTAAGCCATGCATGTGTCAGTATGAACTTTAAAAAAGTGAAACCGCGAAAGGCTCATTAATCAGTTATGGTTTATTAGATCGTACGTTTAC
ATGGATATCTCTGGCATTCTCTAGAGCTAATACATGCAAGTTTTGTGAAGATACAAATGCAATTATTAGAACAAAACCAATGAGATTTCCGTGTGTCTCGTTTTTTGTTGA
CTCTAGATAGTTTTTTGTGAATCGAACGGTCTCGTACCGTTGAAGTACCTTTCAAATGTCTGACTTATCAACTTTTCGATGGTAGGTTATATGCCTACCATGGTAGTTACGA
GTAACGGGGAATCAGGGTTCGATTCCGGAGAAGGAGCCTGAGAAAACGGCTGCTACATCCAAGGAAGGCAGCAGGCACGCAAATTACTCAATCCCAGTGCGGGGAAG
TAGTGACGATAAATAACTGGGCAAGTCTCTGTTAGAGATTGTGCTATGGCAATGAGTACAGTTTAAATTGATTAACGAGTATCAATTGGAGGGCAAGTCTGGTGCCAGC
AGCCGCGTAATTCCAGCTCCAAAAGCGTATATTAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATTTGGGGTAACGGTAGTAACTTTTTCTTTTTGAAAAATGTTAT
TAGTCCGACCCAGTGTTCAGTTTTCTTCATTGCACTTTGCTGTGTGATGTGGTGAAGCTGAGGCGTTTACTTTGAAAAATTAGAGTGCTTAGAGCAAGC-
GTATGCTTGAATATTGTTGCATGGGATAATGAAATAGGACCACGGTTCTATTTTGTGGTTTTTCGGAAACCGAGGAAATGATCGAGAGGAACAGCCGAGGGCATTTCGTA
TTGTGGCGCTAGAGGTGGAATTCCTGGACCGCCGCAAGACGAACAACCGCGAAAGCATTGCAAGAATGTTTTTCATTGATCAAGAACGAAAGTCAGAGGTTTCGAAG
GCGATTAGATAACCGCCGTAGTTTTGACTATAAACGATGTCGACTGGTGATTTCGCTTGGTGAATTTTCGTTTGGCCAAGCGGGCAACCTTCGGGAAACCAAAGTTTTTGG
ATTCGGGGGGAGTATGGTTGCAAAGCTGAACTTAAAGGAATTGACGGAAGGGCACTACCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGGAACTTA
CCCGAGCCGGACACTTTAAGGATTGACAGATTGAAAGCTCTTCTTGATAGAGTGGATGGTGGTGCATGGCCGTTACAGTTGGTGAAGTGATTTGTCTGGTTAATTC
GATAACGAACGAGACTCTAGCCTACTACTAGTGCTATATTCGCGTTGTTGGTGAGTTGTTGCGCTTATTAAGCTGCTTCTTAGAGGAACAAATGCCTATGTAGTCATATG
AGAGAGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGGCTACTCTAATCGTGTGTCAGTGTGCTTTGTACTAATGCGAAAGCATGAGTTAATCA
TTGAAACTCGTGCGTGATAGGAATAGAGAATTGCAATTATTTCTCTTGAACGAGGAATTCCTAGTAAGTGCAGGTCATCAACTTGCGTTGATTACGTCCCTGCCCTTTGT
ACACACCGCCGTCGCTACTACCGATTGAATGACTTAGCGAGATTCTCGGACTGAAGTTAAGGACTCTAAAGGTTNNCTTCGGAAAGTTGATCTAGCTCGGTTATTTTC

>LC605988.1_Nectonema_sp._KK2021_ICHUM:6184_gene_for_18S_rRNA_partial_sequence

ATATGCTTGTATCAAGGATTGAGCCATGCATGTATCAGTATAAACTTGTATCAAGTGAAACCGCGAATGGCTCATTAAATCAGTTATGGTTTATTAGATCGTACTTTTACAT
GGATACCTTTGGGATTTTCTAGAGCTAATACATGCAAATATCTACCTAGTGTAGATGCTTTTATTAGAACAAAATCAACCATACTTTTCGGGTGCATGAATTTTGTGACT
CTGGATAACTTTGTGCGAATCGAGCGGTCTTGTACCGTTGAAGTACCTTTCAAATGTCTGACTTATCAACTTTCGATGGTAGGTTATATGCCTACCATGGTAGTCACGAG
TAACGGGGAATCAGGGTTCGATTCCGGAGAGGGAGCCTGAGAAACGGCTACTACATCCAAGGAAGGCAGCAGGCACGCAAATTACCCAATCCCGGTACGGGGAGGT
AGTGACGATAAATAACAGAGCAAGTCTTACAGAGATTGTGCTATGGGAATGAGTACACTTTAAATCGTTTAAACGAGGATCAATTGGAGGGCAAGTCTGGTGCCAGC
AGCCCGGTAAATCCAGCTCCAAAAGCGTATATTAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATTTGGGGTAAACGGCGAAAGCTTCATTGTAA-
GATGAAAGCTCTCGGGCTGACCCATACCTTGCAGTATTCTCGTGTGCACTTAATTGTGTGATGCGGCGAAGCTGAAACGTTTACTTTGAAAAATTAGAGTGCTCAA
TCAGGCGACTTGCTTGAATAATGTTGCATGGGATAATGAAATAGGACCGCGGTTCTATTTTGTGGTTTTTCGATTACCGAGGTAATGATCGAGAGGAACAGTCGGGGGC
ATTCGTATTGTGGCGCTAGAGGTGGAATTCTTGGACCGCTGCAAGACGAACAACCTGCGAAAGCATTGCGCAAGGATGTTTTTCATTGATCAAGAACGAAAGTCAGAGGT
TCGAAGGCGATTAGATAACCGCCGTAGTTTTGACTATAAACGATGTCGACTGGTGATCCGTTTGGT-
ATTTTGTCTTAGCCAAGCGGGCAACCTTCGGGAAACCAAAGTTTTTGGATTCCGGGGGGAGTATGGTTGCAAAGCTGAAACTTAAAGGAATTGACGGAAGGGCACTA
CCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGGAACTCACCCGGGCCGGACACTTTAAGGATTGACAGGTTGAAAGCTCTTTCTTGATAAAGTGGGTG
GTGGTGCATGGCCGTTACAGTTGGTGAAGTGATTTGTCTGGTTAATTCCGATAACGAACGAGACTCTAGCCTACTTACTAGCAC-----TTGGATGCACTTT-
TGTGGTTCAAGTCGCTTCTTAGAGGGACAAATGGCCATGTAGTCATATGAGAATGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGGCTACT
CTAATCGAGTCAGTGTGAGTTGTCCTTATGCGAAAGCATTGGTAATCATGCAAACCTTGTGCGTGATGGGGATAGAGAATTGCAATTATTTCTCTTGAACGAGGAATTCC
TAGTAAAGTGCAGGTCATCAACTTGCCTTACGTCCCTGCCCTTTGTACACACCGCCCGTCTGCTACTACCGATTGAATGACTTAGTGAGGTCTTCGGACTGATGCGA
ATGATGATGAAAGTCTGTGTTGGGAAGTTGATCAAGCTCGGTTATTTTC

>LC605989.1_Nectonema_sp._KK2021_ICHUM:6188_gene_for_18S_rRNA_partial_sequence

ATATGCTTGTATCAAGGATTGAGCCATGCATGTATCAGTATAAACTTGTATCAAGTGAAACCGCGAATGGCTCATTAAATCAGTTATGGTTTATTAGATCGTACTTTTACAT
GGATACCTTTGGGATTTTCTAGAGCTAATACATGCAAATATCTACCTAGTGTAGATGCTTTTATTAGAACAAAATCAACCATACTTTTCGGGTGCATGAATTTTTGTTGACT
CTGGATAACTTTGTGCGAATCGAGCGGTCTTGTACCGTTGAAGTACCTTTCAAATGTCTGACTTATCAACTTTCGATGGTAGGTTATATGCCTACCATGGTAGTCACGAG
TAACGGGGAATCAGGGTTCGATTCCGGAGAGGGAGCCTGAGAAACGGCTACTACATCCAAGGAAGGCAGCAGGCACGCAAATTACCCAATCCCGGTACGGGGAGGT
AGTGACGATAAATAACAGAGCAAGTCTTACAGAGATTGTGCTATGGGAATGAGTACACTTTAAATCGTTTAAACGAGGATCAATTGGAGGGCAAGTCTGGTGCCAGC
AGCCCGGTAAATCCAGCTCCAAAAGCGTATATTAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATTTGGGGTAAACGGCGAAAGCTTCATTGTAA-
GATGAAAGCTCTCGGGCTGACCCATACCTTGCAGTATTCTCGTGTGCACTTAATTGTGTGATGCGGCGAAGCTGAAACGTTTACTTTGAAAAATTAGAGTGCTCAA
TCAGGCGACTTGCTTGAATAATGTTGCATGGGATAATGAAATAGGACCGCGGTTCTATTTTGTGGTTTTTCGATTACCGAGGTAATGATCGAGAGGAACAGTCGGGGGC
ATTCGTATTGTGGCGCTAGAGGTGGAATTCTTGGACCGCTGCAAGACGAACAACCTGCGAAAGCATTGCGCAAGGATGTTTTTCATTGATCAAGAACGAAAGTCAGAGGT
TCGAAGGCGATTAGATAACCGCCGTAGTTTTGACTATAAACGATGTCGACTGGTGATCCGTTTGGT-
ATTTTTGCTTAGCCAAGCGGGCAACCTTCGGGAAACCAAAGTTTTTGGATTCCGGGGGGAGTATGGTTGCAAAGCTGAAACTTAAAGGAATTGACGGAAGGGCACTA
CCAGGAGTGAGCCTGCGGCTTAATTTGACTCAACACGGGGAAACTCACCCGGGCCGGACACTTTAAGGATTGACAGGTTGAAAGCTCTTTCTTGATAAAGTGGGTG
GTGGTGCATGGCCGTTACAGTTGGTGAAGTGATTTGTCTGGTTAATTCCGATAACGAACGAGACTCTAGCCTACTTACTAGCAC-----TTGGATGCACTTT-
TGTGGTTCAAGTCGCTTCTTAGAGGGACAAATGGCCATGTAGTCATATGAGAATGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGCGCTACT
CTAATCGAGTCAGTGTGAGTTGTCCTTATGCGAAAGCATTGGTAATCATGCAAACCTTGTGCGTGATGGGGATAGAGAATTGCAATTATTTCTCTTGAACGAGGAATTCC
TAGTAAAGTGCAGGTCATCAACTTGCCTTACGTCCCTGCCCTTTGTACACACCGCCCGTCGCTACTACCGATTGAATGACTTAGTGAGGTCTTCGGACTGATGCGA
ATGATGATGAAAGTCTGTGTTGGGAAGTTGATCAAGCTCGGTTATTTTC

>LC816087

ATATGCTTGTATCAAAGATTGAGCCATGCATGTGTTCAGTATGAACTTTTATGAAGTGAAACCGCGAAAGGCTCATTAAATCAGTTATGGTTTATTAGATCGTATGTTTACA
TGGATATCTCTGGCATTCTTAGAGCTAATACATGCAAGTTTTGTGAAGATACAAATGCAATTATTAGAACAAAACCTTCAAGACTTCGGTATATCTTAA-
TTTTGTTGACTCTAGATAGTTTTTGTGAATCGAACGGTCTTGTACCGTTGAAGTACCTTTCAAATGTCTGACTTATCAACTTTCGATGGTAGGTTATATGCCTACCATGG
TAGTTACGAGTAACGGGAATCAGGGTTCGATTCCGGAGAAGGAGCCTGAGAAACGGCTGCTACATCCAAGGAAGGCAGCAGGCACGCAAATTACTCAATCCCAGTG
CGGGGAAGTAGTGACGATAAATAACTGGGCAAGTCTCTGTTTGTGATTGTGCTATGGCAATGAGTACAGTTTAAATTGATTAACGAGTATCAATTGGAGGGCAAGTCTG
GTGCCAGCAGCCGCGTAATCCAGTCCAAAAGCGTATATTAAGTTGTTGCAGTTAAAAAGCTCGTAGTTGGATTGGGGTAACAGTAATAACTTTTTCTTTATGAA
AAATGTTATTAGTCTGACCCAGTGTTCGAGTTTTCCACGTTGCACTTCACTGTGTGATGTGGTGAAGCTGAGGCCTTACTTTGAAAAAATTAGAGTGCTTAGAGCA
AGC-
GTAAGCTTGAATATTGTTGCATGGGATAATGAAATAGGACCACGGTTCTATTTTGTGGTTTTTCGGAAACCGAGGAAATGATCGAGAGGAACAGCCGAGGGCATTTCGTA
TTGTGGCGCTAGAGGTGGAATCTTGGACCGCCGAAGACGAACAACCGCGAAAGCATTGCAAGAATGTTTTTCATTGATCAAGAACGAAAGTCAGAGGTTTCGAAG
GCGATTAGATAACCGCCGTAGTTTTGACTATAAACGATGTCGACTGGTGATTTGCTTGGTGAATTTTCGTTTGGCCAAGCGGGCAACCTTCGGGAAACCAAAGTTTTTGG
ATTCCGGGGGGAGTATGGTTGCAAAGCTGAAACTTAAAGGAATTGACGGAAGGGCACTACCAGGAGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGGAAACTTA
CCCGAGCCGGACACTTTAAGGATTGACAGATTGAAAGCTCTTCTTGATAGAGTGGATGGTGGTGCATGGCCGTTACAGTTGGTGAAGTGATTTGTCTGGTTAATTC
GATAACGAACGAGACTCTAGCCTACTACTAGTGTATATTCTGTGTTATTAGTGAGTTGTTGCGCTTATTAGGCTGCTTCTTAGAGGAACAAATGCCTATGTAGTCATATG
AGAGAGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGCGCTACTCTAATCGTGTTCAGTGTGCTTTGTACTAATGCGAAAGCATGAGTTAATCA
TTGAAACTCGTGCATGATAGGAATAGAGAATTGCAATTATTTCTTGAACGAGGAATTCCTAGTAAGTGCAGGTCATCAACTTGCCTTGATTACGTCCTGCCCCTTTGT
ACACACCGCCCGTCGCTACTACCGATTGAATGACTTAGCGAGATTCTCGGACTGAAGTTAAGGACTTTAACGGTTTTCTTCGGAAAGTTGATCTAGCTCGGTTATTTT