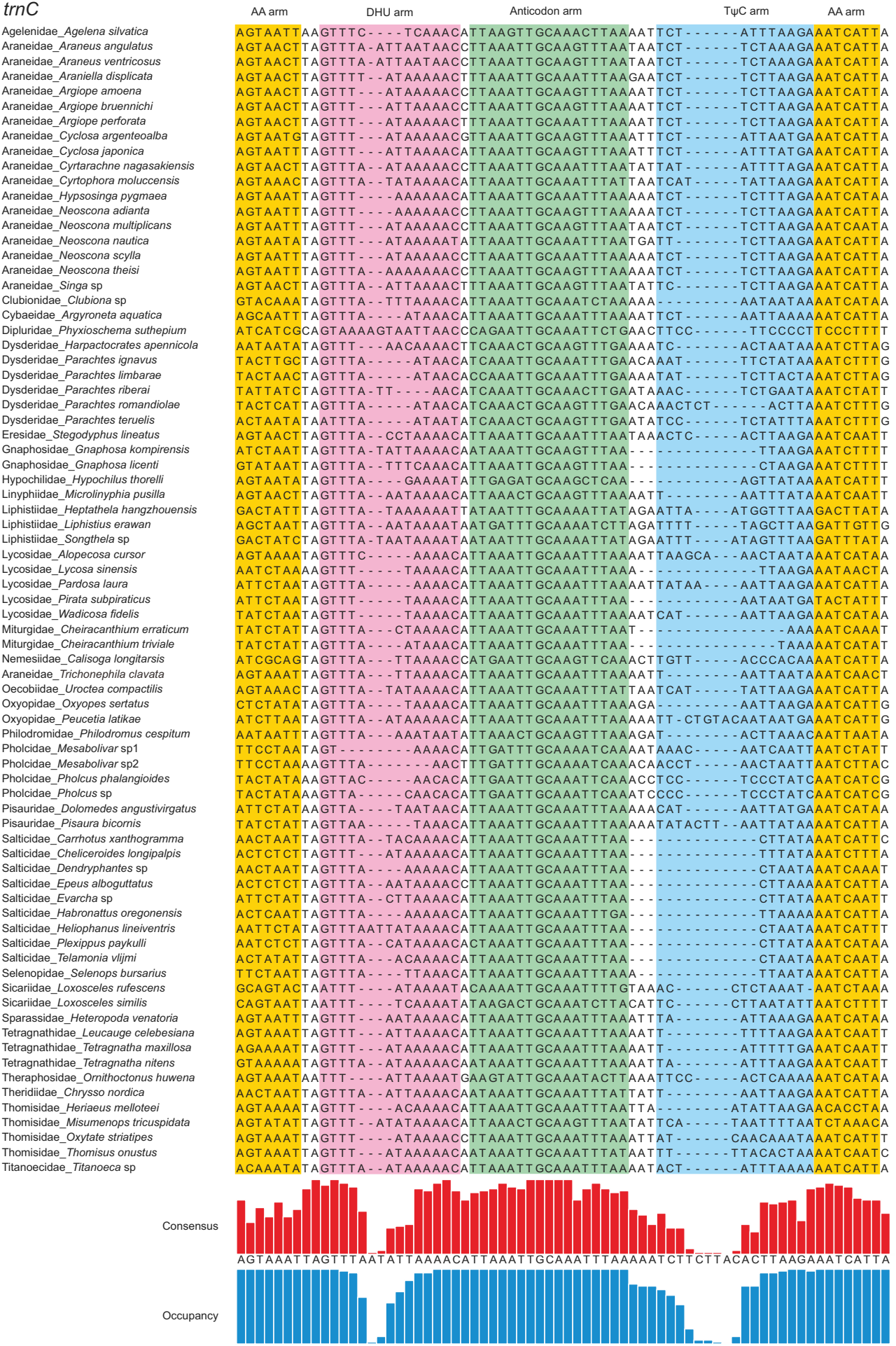


tRNA	AA arm	D loop	Anticodon arm	TψC arm	AA arm
Agelenidae_Agelena silvatica	ATGAAGT	TTATAACT	GATTTGCAATCAGT	-TAATATGTTGT- - - -ACAT	ACTTCAA
Araneidae_Araneus angulatus	TATAAAG	TTTTAACT	GATTTGCAATCAGG	-ATATATGAAAT- - - -TCAT	ACTAGAA
Araneidae_Araneus ventricosus	TTGAGAG	TTTTAAGT	TGATTTGCAATCAGC	-TAGAATGTTTA- - - -ACAT	ACTTTGA
Araneidae_Araniella displicata	TTTTAGT	TTTTAAAT	TGATTTGCAATCAAT	-TAATATGCTAG- - - -GCAT	ACTAAGT
Araneidae_Arpiope amoena	AGAAAGT	TTTTAAAT	TGATTTGCAATCAAT	-TAATATGCTCT- - - -GCAT	ACTTGGAT
Araneidae_Arpiope bruennichi	AAAAAGT	TTTTAAAT	TGATTTGCAATCAAT	-TAATATGTAAA- - - -GCAT	ACTTGAAT
Araneidae_Arpiope perforata	GAGAAGT	TTTTAAAT	TGATTTGCAATCAAT	-TAATATGTTAT- - - -ACAT	ACTTGAAT
Araneidae_Cyclosa argenteoalba	AAAAAGT	TTTTAAAT	TGATTTGCAATCAAT	-TAATATGTTAG- - - -ACAT	ACTTGAAT
Araneidae_Cyclosa japonica	AAAAAGT	TTTTAAAT	TGATTTGCAATCAAT	-TAATATGTTAA- - - -TCAT	ACTTGAT
Araneidae_Cyrtarachne nagasakiensis	TTTTAGT	TTTTAGAT	TGATTTGCAATCAAT	-TAATATGTTAT- - - -ACAT	ACTTTGT
Araneidae_Cyrtophora moluccensis	AGAAAGT	TATAAAT	TGATTTGCACTCAGT	-TAATATGTTAT- - - -ACAT	ACTTGGAA
Araneidae_Hypsosinga pygmaea	TTTTAGT	TTTTAAGT	TGATTTGCAATCAAC	-TAATATGATGT- - - -TCAT	ACTGAATA
Araneidae_Neoscona adianta	TTTTAGT	TTAAAAT	TGATTTGCAATCAAT	-TAATATGTTAA- - - -GCAT	ACTAGAA
Araneidae_Neoscona multiplicans	TTTTAGT	TTTTAAAT	TGATTTGCAATCAAT	-TGATATGTTAA- - - -GCAT	ACTAGAT
Araneidae_Neoscona nautica	TTTTAGT	TTAAAAT	TGATTTGCAATCAAT	-TAATATGTTAT- - - -TCAT	ACTAGAA
Araneidae_Neoscona scylla	TTTTAGT	TTTTAAAT	TGATTTGCAATCAAT	-TAATATGTAAG- - - -GCAT	ACTAGAA
Araneidae_Neoscona theisi	TTTTAGT	TATAAAT	TGATTTGCAATCAAT	-TAATATGTTAA- - - -GCAT	ACTAGAA
Araneidae_Singa sp	AAGAAAG	TTTTAAAT	TGATTTGCAATCAGT	-TAAAGTGTTAT- - - -ACAT	ACTTGAAT
Clubionidae_Clubiona sp	AGTTTGT	TTATAAT	TGATTTGCATTCAAT	-TGATATGATTT- - - -TTCAT	ACGAATAG
Cybaeidae_Argyroneta aquatica	AGTAAGT	TTATACT	AATTTGCAATTAAT	-TTTTATGAAAT- - - -TCAT	ACTTGAAT
Dipluridae_Phyxioschema suthepium	GAGAGAA	TTTTATCT	AATTTGCATTTAGA	-GTTAATGATTA- - - -TTCAT	ACTGGGAA
Dysderidae_Harpactocrates apennicola	TATTAAT	ATTTAACT	AATTTGCATTTAGT	-GTAGAGGTA- - - -TTTAAAGAAGC	
Dysderidae_Parachtes ignavus	AGGTTGT	ATAAAGCT	AATTTGCATTTAGT	-TAAAGAGATAG- - - -TTTTATAAAAGC	
Dysderidae_Parachtes limbarae	AGGGTGT	ACGAAGCT	AATTTGCATTTAGT	-AAAAGAGGTA- - - -TTTTATAAAAGC	
Dysderidae_Parachtes riberali	AGGTTGT	ACGAAGCT	AATTTGCATTTAGC	-TATAGAGATAG- - - -TTTTATTGAAGC	
Dysderidae_Parachtes romandiola	AGGTTGT	ACGAAGCT	AATTTGCATTTAGT	-TAAAGGATA- - - -TTTTATAAAAGC	
Dysderidae_Parachtes teruelis	AGGTTGA	ACGGAAGCT	AATTTGCATTTAGT	-TGATGAGATAG- - - -TTTTTGAAGC	
Eresidae_Stegodyphus lineatus	GAATAGT	TAAAGTT	TGATTTGCAATCAGT	-CGTAATGAAAA- - -ATTTCAT	ACGTTGGT
Gnaphosidae_Gnaphosa kompiensis	AGGTAGT	TAAAAAT	TAAATTTGCAATTAAT	-TGAAATGATTA- - - -TTCAT	ACTGAATA
Gnaphosidae_Gnaphosa licenti	AGGTAGT	TAAAAAT	TGATTTGCAATTAAT	-TGAGATGATTA- - - -TTCAT	ACTGAATA
Hypochilidae_Hypochilus thorelli	AGGGGGT	AAAAAT	TGACTTGCAATCAAT	-TAAAGAATAAG- - - -TTTTAATAAAGC	
Linyphiidae_Microlinyphia pusilla	ATAAAGT	TATTGTT	TGATTTGCAATCAAC	-TTTTATGATTA- - - -TTCAT	ACTTTGGT
Liphistiidae_Heptathela hangzhouensis	GAATTTT	AAACATTT	TGAATTTGCAATCAAT	-TTAAGCCACTC-CTAGGGCC	CCTGCCTA
Liphistiidae_Liphistius erawan	AATTAAT	TTTTAATTT	TGAATTTGCAATCAAC	ATTTTGTCTATT- - -TAGAC	CCCTTGCTA
Liphistiidae_Songthela sp	GAATTTT	TATTAATTT	TGAATTTGCAATCAAT	ATTTTGTCTA- - - -TTTGAC	CCTACCTA
Lycosidae_Alopecosa cursor	AGGAAGT	TTTTAAT	TGATTTGCAATCAAT	-TTTTATGGTA- - - -CAT	ACGATAAG
Lycosidae_Lycosa sinensis	AAGGAAG	TTTTAAT	TGATTTGCATCAAT	-TTTTATGGTA- - - -CAT	ACGTTAAG
Lycosidae_Pardosa laura	TAGGAAG	TTTTAAT	TGATTTGCAATCAGT	-TTTTATGGTA- - - -CAT	ACGTTAAG
Lycosidae_Pirata subpiraticus	TTTAGTT	TTTTGAT	TGATTTGCATCAAT	-CTTCATGAAGA- - - -TTCAT	GCTGAAAA
Lycosidae_Wadicosa fidelis	AGGAAGT	TTTTAAT	TGATTTGCAATCAGT	-TTATATGGTA- - - -CAT	ACGATAAG
Miturgidae_Cheiracanthium erraticum	AGTAAAT	TTATAAT	TGATTTGCAATCAGT	-TGAGATGGTA- - - -ACCAT	ATGAATAG
Miturgidae_Cheiracanthium triviale	ATTATAT	TTTTGATT	TAAATTTGCAATTAAT	-TGATATGGAAT- - - -TTCAT	ATATGTTA
Nemesiidae_Calisoga longitarsis	TAAAGT	GTAAAGT	TGATTTGCATCAAC	-GTTATGACGT- - -TGTCAT	GCTTTGAG
Araneidae_Trichonephila clavata	AAGGAAG	TTAAGAT	TGATTTGCAATCAAT	-TATTATGAAAT- - - -TTCAT	ACTTGAAT
Oecobiidae_Uroctea compactilis	GAGGGTT	ATTGAGT	TGATTTGCAATCAAC	-TGAAGTGTA- - - -TACAT	ACTGATTA
Oxyopidae_Oxyopes sertatus	AGGAAGT	TTTGAAT	TGATTTGCAATCAAT	-TAATATGGTA- - - -CAT	ACGGAAGG
Oxyopidae_Peucezia latikae	GTAAAGT	TAAATGATT	TGATTTGCAATTAAT	-CTTTATGGCA- - - -CAT	ACGAAAAG
Philodromidae_Philodromus cespitum	TTTTTGT	TTAATAT	TGATTTGCAATCAGT	-TAATATGGTA- - - -TCCAT	ACGATAAG
Pholcidae_Mesabolivar sp1	GGGTGAAT	TATAGTT	TAAATTTGCAATTAGC	TTTTGGTTGAAG- - - -ATGAGTTATAT	
Pholcidae_Mesabolivar sp2	AGGTGTAAT	ATGGCT	GACTTGCAATTAGT	-TTATGTGTGAT- - - -GTTT	GATGTGTT
Pholcidae_Pholcus phalangoides	AGGGTGA	AAATGATT	TAAATTTGCAATTAAT	-TTAAGAGTAT- - - -GATT	AGTTTGTG
Pholcidae_Pholcus sp	GGGTGAAT	GTGATT	TAAATTTGCAATTAAT	TTAAGGAGTATG- - - -ATTAGTTTTGT	
Pisauridae_Dolomedes angustivirgatus	AGGAAGC	TTTTAAT	TGATTTGCAATCAAT	-AAATATGGTA- - - -CAT	ACGATTAG
Pisauridae_Pisaura bicornis	AGAAAGT	TTATAAT	TGATTTGCAATTAAT	-TTTTATGGAA- - - -CAT	ACGATTAG
Salticidae_Carrhotus xanthogramma	AGATAGT	TAAAGTT	TAAATTTGCAATTAAC	-TGATATGATTA- - -AAATCAT	ACTGTTAT
Salticidae_Cheliceroides longipalpis	AGTTAGT	TTATGATT	TAAATTTGCAATTAGT	-TTAAATGGATA- - -ATCCAT	ACTATAAT
Salticidae_Dendryphantes sp	AGGTAGT	TTTTGACT	AATTTGCAATTAGT	-TTATATGTAAT- - - -ACAT	ACTATTAT
Salticidae_Epeus albo guttatus	AGGTAGT	TGAAT	ACTGATTTGCATTCAGA	-TAATATGATTAAGATCAT	ACTATTAT
Salticidae_Evarcha sp	AGGTAGT	TTATGACT	TAAATTTGCAATTAGT	-TGATATGGTA- - -AGACCAT	ACTGTGTT
Salticidae_Habronattus oregonensis	AGGTAGT	TTATAGCT	TAAATTTGCAATTAGT	-TTTCATGGTGA- - -TACCAT	ACTATTGT
Salticidae_Heliophanus lineiventris	AGGTAGT	TTTGAACT	GATTTGCAATTAGT	-TGATATGGATA- - -TCCAT	ACTATTAT
Salticidae_Plexippus paykulli	AGGTAGT	TTTTGACT	GATTTGCAATTAGT	-TTAGATGGTAT- - -TACCAT	ACTATTTA
Salticidae_Telamonia vijaykii	AGGTAGT	GTTGATT	TAACTTGCAATTAAT	-CTAAATGGATATTAGCCAT	ACTATGGA
Selenopidae_Selenops bursarius	AGGTAGT	TTATAAT	TGATTTGCAATCAAT	-TGATATGGTA- - - -TCCAT	ACTTATGA
Sciaridae_Loxosceles rufescens	TGTAAT	AGGTGCCCT	AATTTGCAATTAGG	- - -TAAAGGTTA-AGTGCTT	AGTGGCTG
Sciaridae_Loxosceles similis	AATGTGT	AAGTCTT	TAAATTTGCAATTAGG	-ATAGGGGTAA- - -TGTAAT	AGTAGCTG
Sparassidae_Heteropoda venatoria	AGTTAGT	TTATAAT	TGATTTGCAATCGAT	-TGATATGAGAA- - -TTTCAT	ACTGAATA
Tetragnathidae_Leucauge celebesiana	GTAAAGT	TTAAACT	GATTTGCAATTCAGT	-TGTAATGAAT- - -ATTCAT	ACTGAATA
Tetragnathidae_Tetragnatha maxillosa	TTTAGTT	TTTTGGAAT	GATTTGCTCTCATT	-CTTCATGAAGA- - -TTCAT	GCTGAAAA
Tetragnathidae_Tetragnatha nitens	ATTTAGT	AAATAGT	TGATTTGCATTCATC	-TTTTATGAAT- - -TTTCAT	ACTGAAAA
Theraphosidae_Ornithoctonus huwena	GGTTTTT	GATTAGATA	AATTTGCAATTTAT	-TATAATGAATG- - -TTCAT	AGAAGGGA
Therididae_Chrysso nordica	AGAAAGT	TAGAGTT	GATTTGCAATTAAC	-TAATATGATTA- - -TTTCAT	ACTGATT
Thomisidae_Heriaeus mellotei	AGGAAGT	TTATA	AACTGATTTGCAATTAGT	-TTTTATGGAAA- - - -CAT	ACGATAAG
Thomisidae_Misumenops tricuspidata	AGGGAGT	TTATA	AACTGATTTGCAATTAGT	-TTTTATGTTTA- - - -AACAT	ACGATAAG
Thomisidae_Oxytate striatipes	AGAAAGT	TTAAAAAT	TAAATTTGCAATTAAT	-TAAATGGAAA- - - -CAT	ACGATAGG
Thomisidae_Thomisus onustus	AGGAAGT	TTAAA	AACTGATTTGCAATTAGT	-TATAATGGTA- - - -CAT	ACGATAAG
Titanoecidae_Titanoeca sp	AGAGAGT	TTTT -	ACTAATTTGCAATTTAGT	-TAATATGATTA-TAGTCAT	ACTTGAAT

Consensus

AGGTAGTTTTTAATTGATTTGCAATCAATTTAATATGT+TAA+ATTTTCATACTATAAT

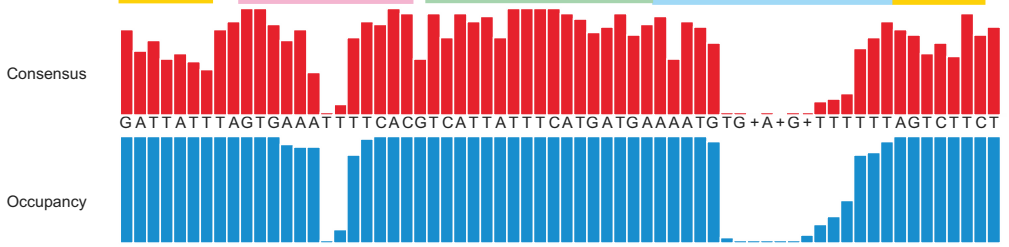
Occupancy



trnD	AA arm	DHU arm	Anticodon arm	TψC arm	AA arm				
Agelenidae_Agelena silvatica	AGTAAATT	TAGTTAAATTATAAT	TTAATTTTGTCAAGTTAAAGATAA	-GAA	TATTCCTC				
Araneidae_Araneus angulatus	ATAAAAT	TAGTTTAAAAAAATAAT	TAATTTTGTCAAGTTATAGAAA	-GAA	TATTCCTC				
Araneidae_Araneus ventricosus	AATATAT	TAGTTTAAATAAAAAT	TAGTTTGTCAAGCTAAAGATAGAATAAATTCCTC						
Araneidae_Araniella displicata	GAAAAAA	TAGTTTATTA AAAAAT	ATTAGTTTGTCAAATTAATGAAAG	-GAT	GATTCCTC				
Araneidae_Argiope amoena	GAGAAAT	TAGTTT-ATAAAAAT	TTAATTTTGTCAAATTAAGGAAAG	-GAGA	ATTTCCTC				
Araneidae_Argiope bruennichi	GAGAAAT	TAGTTTAAAAAAAT	ATTAGTTTGTCAAATTAAGGAAAG	-GAAA	ATTTCCTC				
Araneidae_Argiope perforata	GAGAAAT	TAGTTTAAATAAAAAT	ATTAGTTTGTCAAATTAAGGAAAG	-GAAT	TATTCCTC				
Araneidae_Cyclosa argenteoalba	ATAAAAT	TAGTTT-ATAAAAAT	TTAGTTTGTCAAATTAAGGAAAG	-AGA	ATTTCCTC				
Araneidae_Cyclosa japonica	ACAAAAT	TAGTTT-ATAAAAAT	ATTAGTTTGTCAAATTAAGGAAAG	-GAA	ATTTCCTC				
Araneidae_Cyrtarachne nagasakiensis	AATAAAT	TAGTTCATTTAAAAT	TTTAGTTTGTCAAACATAAGATAAAAAGAAATTCCTC						
Araneidae_Cyrtophora moluccensis	AAGAAAT	TAGTTT-ATAAAAAT	TTAGTTTGTCAAATTAAGGAAA	-GAAA	ATTTCCTC				
Araneidae_Hypsosinga pygmaea	ATAAAAT	TAGTTTATAAAAAAT	TTTAGTTTGTCAAACTAAAGATAG	-AAAA	ATACCTC				
Araneidae_Neoscona adianta	AATAAAT	TAGTTT-ATAAAAAT	ATTAGTTTGTCAAGCTAAAGAAGA	-	AAAATTCCTC				
Araneidae_Neoscona multiplicans	AATAAAT	TAGTTT-ATAAAAAT	TTAGTTTGTCAAGCTAAAGAAGA	-	AAGATTCCTC				
Araneidae_Neoscona nautica	AATAAAT	TAGTTT-ATAAAAAT	ATTAGTTTGTCAAACTAAAGATGA	-GAAA	ATTTCCTC				
Araneidae_Neoscona scylla	AATATAT	TAGTTT-ATAAAAAT	ATTAGTTTGTCAAGCTAAAGAAGA	-	AAAATCCCTC				
Araneidae_Neoscona theisi	AGTAAAT	TAGTTTAAAT-AAAAAT	TTAGTTTGTCAAGCTAAAGAAGA	-	AAAATTCCTC				
Araneidae_Singa sp	TATAAAT	TAGTTTAAATAAAAAT	ATTAGTTTGTCAAACATAAGAGA	-GAA	TATTCCTC				
Clubionidae_Clubiona sp	ATTTAAGT	TAGTTAAAT-ATAAT	TTAATTTTGTCAAATTAAGATGA	-	TTTATTCCTC				
Cybaeidae_Argyroneta aquatica	AGAAAAAT	TAGTTAAACTATAAT	TTAATTTTGTCAAATTAAGATAG	-AGA	ATTCCCTC				
Dipluridae_Phyxioschema suthepium	GGATGAGAAGTTGAAT	- - -	AATGTTAATTTTGTCAAGTTAAAGGTGG	-	GAAATTCCTC				
Dysderidae_Harpactocrates apennicola	AGTTTATAAAGTT	-GTT-	-	-	-	TAATATAAGTTTGT	CAGATTTAAGAAGAAAAT	TATTCCTC	
Dysderidae_Parachtes ignavus	TGTTGTAAAGTTGATT	-	-	-	-	TAATGTAAGTTTGT	CAGGCTTAAGAATA	-GAATATCCAC	
Dysderidae_Parachtes limbarae	CGTATTTTAGGTT	-ATT-	-	-	-	TAATATAAGCTTGT	CAGGTTTAAGAAGA	-TTTAAATTCCTC	
Dysderidae_Parachtes riberali	TGTAATAAAGGTTATAAC	-TAAT	GTAAGTTTGT	CAGGCTTAAGAATA	-GATA	ATTCCAC			
Dysderidae_Parachtes romandiola	TGTAATAAAGGTT	-ATT-	-	-	-	TAATGTAAGTTTGT	CAGGCTTAAGATGA	-GAATATCCAC	
Dysderidae_Parachtes teruelis	AGTAATA	CGGTT-	-	-	-	ATTGAGACGTAAGTTTGT	CAGGCTTGAAAAATA	-GCTTATACCA	
Eresidae_Stegodyphus lineatus	AAAGAAGT	TAGTTAAATAATAAT	ATTAGTTTGT	CAGGCTAAAGTTAA	-AGAG	ATTTCCTC			
Gnaphosidae_Gnaphosa komprensus	ATAATAAT	TAGTTAAAT	-	-	-	TAATATTAGTTTGT	CAAGCTAAAGATAG	-GATAATTCCTC	
Gnaphosidae_Gnaphosa licenti	ATAATAAT	TAGTTAAAT	-	-	-	TAATATTAGTTTGT	CAAGCTAAAGATAGGACTAATTCCTC		
Hypoichilidae_Hypoichilus thorelli	AATGAAGT	TAGTTAAGT	-	-	-	TAATTCGAATTTGT	CAAGTTAGGGATGA	-TAGTATTCCTC	
Linyphiidae_Microlinyphia pusilla	ATATATAT	TAGTTAAAT	-	-	-	TAATATTAAATTTGT	CAAGTTAAAGATAT	-AGAATTCCTC	
Liphistiidae_Heptathela hangzhouensis	GAGAAAT	TAGTTAAAAATATAACAT	TAGATTGT	CATTCTAAAAAT	- - -	TTTATTTCTC			
Liphistiidae_Liphistius erawan	GAGAAAT	TAGTTAAAAAATAACAT	TAGGTTGT	CATCCTAAAAAT	- - -	TAAAAATTTCTC			
Liphistiidae_Songthela sp	AAGAAAT	TAGTTAAAAAATAACAT	TAGATTGT	CATCTAAAAAT	TAA - - -	TATTTCT			
Lycosidae_Alopecosa cursor	AGTTAAT	TAGTT	-	-	-	ATAATAATATTAATTTGT	CAAGTTAAAGTTGA	-AAATATTCCTC	
Lycosidae_Lycosa sinensis	ATTTAAT	TAGTTAATTAATAAT	ATTAAATTTGT	CAAGTTAAAGTTGA	-AAT	TATACCTC			
Lycosidae_Pardosa laura	ACTTAAT	TAGTT	-	-	-	ATAATAATATTAACCTGT	CAAGTTAAAGTTAA	-ATAAATTCCTC	
Lycosidae_Pirata subpiraticus	ACTAAAT	TAGTT	-	-	-	ATAATAATATTAATTTGT	CAAGTTAAAGTTGA	-ATTAAATTCCTC	
Lycosidae_Wadicosa fidelis	AGTAAAT	TAGTT	-	-	-	ATAATAATATTAATTTGT	CAAGTTAAAGTTAT	-GAGAATTCCTC	
Miturgidae_Cheiracanthium erraticum	AGAAAT	TAGTTAAAT	-	-	-	TAATATTAAATTTGT	CAAATTAAGATGG	-AAAAATTCCTC	
Miturgidae_Cheiracanthium triviale	AGATATAT	TAGTTAAGT	-	-	-	TAATATTAAATTTGT	CAAATTAAGATGA	-GTATATTCGCG	
Nemesiidae_Calisoga longitarsis	GAAAGAGAAGTTGATT	-	-	-	-	TAATATTAGTTTGT	CAGACTGAAGGTGG	-	AAAATACCGC
Araneidae_Trichonephila clavata	AGAAAT	TAGTTAAAT	-	-	-	AAAATATTAGTTTGT	CAAATTAAGATGT	-	AAGATTCCTC
Oecobiidae_Uroctea compactilis	ATTAGTGT	TAGTTAATT	-	-	-	TTAATATTAGTTTGT	CAAATTAAGAGGG	-GAT	TATAATAA
Oxyopidae_Oxyopes sertatus	AATAGTTT	TAGTT	-	-	-	ATAATAATATTAATTTGT	CAAGTTAAAGTAAG	-GAAA	ATTTCCTC
Oxyopidae_Peuceitia latikae	AGAAATTT	TAGTTAAAT	-	-	-	ATAATATTAAATTTGT	CAAATTAAGGTGGA	-GAA	GATTCCTC
Philodromidae_Philodromus cespitum	TGAAAT	TAGTTAAGT	-	-	-	TAATATTAAATTTGT	CAAATTAAGATGATAAAAAATTCCTC		
Pholcidae_Mesabolivar sp1	AGGTTTA	TAGTTTATA	-	-	-	AAATATTAAATTTGT	CAGGTTAAAGATGT	-CAAT	TATTCCTC
Pholcidae_Mesabolivar sp2	ATGGGGGT	AGTTTATA	-	-	-	AAATGTTAATTTGT	CAGATTAAAGAGGG	-TGAT	ATTCCAC
Pholcidae_Pholcus phalangoides	AGGGGGGAAGTTTAT	- - -	AAATATTAAATTTGT	CAGATTAAAGAGCG	-TAGGAT	CCGCG			
Pholcidae_Pholcus sp	AGGGGGGAAGTTTAT	- - -	AAATATTAAATTTGT	CAGATTAAAGAGCG	-TAGGAT	CCGCG			
Pisauridae_Dolomedes angustivirgatus	AGAAAT	TAGTTAAATAATAAT	ATTAAATTTGT	CAAATTAAGATAA	-GT	AAATTCCTC			
Pisauridae_Pisaura bicornis	AAAAAT	TAGTTAAAAAATAAT	ATTAAATTTGT	CAAATTAAGTTGT	-AGT	TATTCCTC			
Salticidae_Carrhotus xanthogramma	AAGAAAGT	TAGTTAAAT	-	-	-	TAATATTAAATTTGT	CAAATTAAGTTGT	-AAT	TATTCCTC
Salticidae_Cheliceroides longipalpis	AGAAAT	TAGTTAAAT	-	-	-	TAATATTAAATTTGT	CAAATTAAGATGA	-ATT	AATTCCTC
Salticidae_Dendryphantes sp	ATATATGT	TAGTTAAAT	-	-	-	TAATATTAAATTTGT	CAAATTAAGATGGA	AAAAATTCCTC	
Salticidae_Epeus alboguttatus	GAAAAAT	GATTTAAAT	-	-	-	TAATATTAAATTTGT	CAAATTAAGATGA	-TT	ATATTCCTC
Salticidae_Evarcha sp	AAGAAT	GATTTAAGT	-	-	-	TAATATTAAATTTGT	CAAGTTAAAGACGG	-AT	ATTTCCTC
Salticidae_Habronattus oregonensis	GAGAAAT	GATTTAAGT	-	-	-	TAATATTAAATTTGT	CAAGTTAAAGATGA	AAATTAATTCCTC	
Salticidae_Heliophanus lineiventris	AGAAAT	GATTTAAT	-	-	-	TAATATTAAATTTGT	CAAGTTAAAGATGA	-AA	ATTTCCTC
Salticidae_Plexippus paykulli	ATAGAGGT	TAGTTAAGT	-	-	-	TAATATTAAATTTGT	CAAATTAAGATGA	-ATA	ATTTCCTC
Salticidae_Telamonia vijijmy	AGAAAT	GATTTAAGT	-	-	-	TAATATTAAATTTGT	CAAATTAAGATGA	-ATA	ATACCTC
Selenopidae_Selenops bursarius	AGTAAAT	GATTTAAGT	-	-	-	TAATATTAAATTTGT	CAAGTTAAAGATGA	-TTT	TATACCTC
Sciaridae_Loxosceles rufescens	TGTGAGT	AAGTTTAT	- - -	AAATATTAAATTTGT	CAGATTAAAGAGAG	-GCT	GATTCAC		
Sciaridae_Loxosceles similis	GAATAGAT	AGTTTTAT	- - -	AAATATTAGTATGT	CATACTAAAGAGGT	-GAAT	ATCCCTC		
Sparassidae_Heteropoda venatoria	AGTAGAAT	TAGTTAAAT	-	-	-	TAATATTAAATTTGT	CAAGTTAAAGATGA	-GAAA	ATTTCCTC
Tetragnathidae_Leucauge celebesiana	AGAAAT	TAGTTAAAT	-	-	-	TAATATTAAATTTGT	CAAGTTAAAGATGA	-AT	ATTTCCTC
Tetragnathidae_Tetragnatha maxillosa	GTTATTA	TAGTTAAGT	-	-	-	TAATATTAGTTTGT	CAAGCTAAAGATGA	-AAAA	ATTTCCTC
Tetragnathidae_Tetragnatha nitens	GTAATA	TAGTTAAGT	-	-	-	TAATATTAGTTTGT	CAAGCTAAAGATGA	-AT	AAATTCCTC
Theraphosidae_Ornithocheilus huwena	AGAAGGGA	AGTTGAAT	- - -	AATATTAGCTTGT	CAGGTTAAAGGATG	-	AAAATGCCTC		
Theridiidae_Chrysso nordica	ATATAAGT	TAGTTGAAT	-	-	-	TAATATTAAATTTGT	CAGGTTAAAGATGAAAAATTCCTC		
Thomisidae_Heriaeus mellotei	AAGAATTT	TAGTT	-AAT	-ATAAT	ATTAAATTTGT	CAAATTAAGTAGA	-TATA	ATTTCCTC	
Thomisidae_Misumenops tricuspidata	AGAAATTT	TAGTTAAAA	-	-	-	TAATATTAAATTTGT	CAAATTAAGTAGA	-TTT	TATTCCTC
Thomisidae_Oxytate striatipes	AGAAATTT	TAGTT	-AAT	-ATAAT	ATTAGTTTGT	CAGACTAAAGTAGG	-ATGGT	TATATTCCTC	
Thomisidae_Thomisus onustus	AGAAATTT	TAGTT	-AAT	-ATAAT	ATTAAATTTGT	CAAATTAAGTAGG	-TAAT	ATTTCCTC	
Titanoecidae_Titanoeca sp	GTATATTT	TAGTTAAAT	-	-	-	TAATGTTAATTTGT	CAGGTTAAAGATGT	GATGT	ATACCTC



<i>tRNA</i>	AA arm	DHU arm	Anticodon arm	TψC arm	AA arm
Agelenidae_Agelenia silvatica	GATAAATTTAGTGA AAA	- TTCACGT	CATTATTTTCATGATG	GAAATG-----	TTATTGTAATCT
Araneidae_Araneus angulatus	GATTTTATAGTGA AAA	- TTCACAT	CATTATTTTCATGATG	AATG-----	TTAAGACTTCT
Araneidae_Araneus ventricosus	GATTTAATTGGTGA AAA	- TTCACGT	CATTATTTTCATGATG	AAAGATG-----	TTTAGCTTTCT
Araneidae_Araniella displicata	GAATTAGTAGTGA AAA	- TTCACGT	CATTATTTTCATGATG	AACAATA-----	TTTAGTCTCTCT
Araneidae_Argiope amoena	GATTTAGTAGTGA AAA	- TTCACGT	CATTATTTTCATGATG	AAAGATA-----	TTTAGACCTCT
Araneidae_Argiope bruenichi	GGTTAAGTAGTGA AG-	- TTCACGT	CATTATTTTCATGATG	AAAGATA-----	TTTAGACCTCT
Araneidae_Argiope perforata	GATTTAGTAGTGA AAA	- TTCACGT	CATTATTTTCATGATG	AAAATA-----	TTTAGACTTCT
Araneidae_Cyclosa argenteoalba	GATTATGTAGTGA AG-	- TTCACGT	CATTATTTTCATGATG	AAATA-----	TTTAGTCTTCT
Araneidae_Cyclosa japonica	GATTTAGTAGTGA AG-	- TTCACAT	CATTATTTTCATGATG	AAATA-----	TTTAGACTTCT
Araneidae_Cyrtarachne nagasakiensis	GATTTAATAGTGA AG-	- TTCACGT	CATTATTTTCATAATG	AAAATA-----	TTTTTTAGACTTCT
Araneidae_Cyrtophora moluccensis	GGAAATAGTAGTGA AG-	- TTCACAT	CATTATTTTCATGATG	AAAAAT-----	TTTTTTAGACCTCT
Araneidae_Archielecyon pygmaea	GTTTATTTAGTGA AG-	- TTCACAT	CATTATTTTCATGATG	AAAAATA-----	TTTAGACTTCT
Araneidae_Neoscona adianta	GATTTATTAGTGA AAA	- TTCACGT	CATTATTTTCATGATG	AAAGATG-----	TTTAGACCTCT
Araneidae_Neoscona multiplicans	GATTAGTTAGTGA AAA	- TTCACGT	CATTATTTTCATGATG	AAAAATG-----	TTTAGACCTCT
Araneidae_Neoscona nautica	GATTAAATAGTGA AAA	- TTCACAT	CATTATTTTCATGATG	AAAAATA-----	TTTAGACCTCT
Araneidae_Neoscona scylla	GATTATTTAGTGA AAA	- TTCACGT	CATTATTTTCATGATG	AAAAATG-----	TTTAGACCTCT
Araneidae_Neoscona theisi	GATTAAATAGTGA AAA	- TTCACGT	CATTATTTTCATGATG	AAAAATG-----	TTTAGACCTCT
Araneidae_Singa sp	GATTTAGTAGTGA AG-	- TTCACAT	CATTATTTTCATGATG	AAAAATA-----	TTTAAGACTTCT
Clubionidae_Clubiona sp	AATAATATAGTGTTA-	- TCACATT	ACTATTTCAATGTA	AAAGATG-----	TATTCTTTTTT
Cybaeidae_Argyroneta aquatica	GATAAAGTAGTGA AAA	- TTCACGT	CATTATTTTCATGATG	AAATAG-----	TTTAGTCTTCT
Dipluridae_Physioschema suthepium	GTAGTAGAGGTGGGA-	- TCACGT	CATTGTTCCAGGATGA	AGAGG-----	TAAGGATATTT
Dysderidae_Harpactocrates apennicola	GATAAATTTAGTA---	- TGTTACAT	CATTTTTTCATAATG	GAAATG-----	GATTTATTTATCTTCA
Dysderidae_Parachtes ignavus	GTAATTTTAGTA-----	- TTATATG	CATTTTTTCAGAGTGA	AGG-----	TAATTTATCTTCA
Dysderidae_Parachtes limbareae	CTAAATTTAGTATTT-	- TTCAGCT	CATTTTTTCATGATGA	AAAGGGTGTACG	ATAATTTATCTTCA
Dysderidae_Parachtes riberae	ATCTATTTAGTATAT-	- TTCAGCT	CATTTTTTCATGATG	GAGAGG-----	TGTTTTATCTTCA
Dysderidae_Parachtes romandiola	GTAATTTTAGTA-----	- TTATACG	CATTTTTTCAGAGTGA	AGGTGG-----	TTTTATCTTCA
Dysderidae_Parachtes tueuili	CTAAATTAAGTATAA-	- ATACAT	CATTTTTTCATGATGA	AGAGG-----	TATTTTATCTTCA
Eresidae_Stegodyphus lineatus	GATATAGTAGTGA AGT	TTTCACGT	CATTATTTTCATGATG	AAAGATG-----	TAGACCTTT
Gnaphosidae_Gnaphosa compirensis	ATAAATTTAGTGAAT-	- TTCACGT	CATTATTTTCATGATG	AAAAATG-----	TAATTAGTCTTCT
Gnaphosidae_Gnaphosa licenti	ATAAATTTAGTGAAT-	- TTCACGT	CATTATTTTCATGATG	AAAAATG-----	TATTTAGTCTTCT
Hypochoilidae_Hypochoilus thorelli	GGTATTTAAGTTT---	- TAAACAT	CATTATTTTCAAAATG	AAAGAG-----	GTCTTTTATCTTCA
Linyphiidae_Microlinyphia pusilla	ATTTATATAGTGA AG-	- TTCACCT	CATTATTTTCATGATG	AAAAATA-----	ATAAATAGATTTAT
Liphistiidae_Hepathela hangzhouensis	GTTTTTGTAGTGA A-	TTACACAT	GTTCTTTTCATGA	CAAAAAATA-----	GAATTTCT
Liphistiidae_Liphistius erawan	GTTTTTGTGGTGAC-	- AACACAT	GTTCTTTTCATGA	CAAGAT-----	AGACTTCT
Liphistiidae_Songthela sp	GTTTTTGTAGTGTA A-	- AACACAT	TATCCCTTTTCATG	GATAAAAAA-----	GAATTTCT
Lycosidae_Alopecosa cursor	GATAAATTTAGTGA AG-	- TTCACAT	CATTATTTTCATGATG	AAAGATA-----	TATTAGTCTCT
Lycosidae_Lycosa sinensis	GAATTTTITAGTGA AG-	- TTCACAT	CATTATTTTCATGATG	AAAGATG-----	TTTAGTTTTTCT
Lycosidae_Pardosa laura	GATAATTTAGTGA AG-	- TTCACGT	CATTATTTTCATGATG	AAAAATG-----	AATAGTCTCT
Lycosidae_Pirata subpiraticus	GATTTTTTAGTGA AG-	- TTCACGT	CATTATTTTCATGATG	AAATA-----	TAGACCTAT
Lycosidae_Wadicosa fidelis	GATAATATAGTGA AG-	- TTCACGT	CATTATTTTCATGATG	GAGATG-----	TATAGTTTTCT
Miturgidae_Cheiracanthium erraticum	ATTAATATAGTGTA A-	- ATCACAT	CATTATTTTCATGATG	AAAAATG-----	TAGTTTTCT
Miturgidae_Cheiracanthium triviale	AATATAGTAGTGTA A-	- TCACAT	CATTATTTTCATGATG	AAAAATG-----	TATTCCTTT
Nemesiidae_Calisoga longitarsis	GATTAAGAAGTGGAG-	- TCACAT	CATTGTTTCATGATG	AATG-----	TCTAGATCTTT
Araneidae_Trichonephila clavata	GATTATATAGTGA AAA	- TTCACAT	CATTATTTTCATGATG	AAAAATA-----	TTTAGTCTTCT
Oecobiidae_Uroctea compactilis	GATTTAGTGGTGA AAA	- TTCACGT	CATTGTTTCATGATG	GAGATG-----	TTAAGATCCTC
Oxyopidae_Oxyopes sertatus	GATTAAGAAGTTTTA-	- TAACGT	CATTGTTTCATGATG	GAGATG-----	TGTTAGTCTCT
Oxyopidae_Peuceitia latikae	GTTGGAAGAGTGTTA-	- TCACGT	CATTGTTTCATGATG	AAAGATG-----	AATTAGTCTCT
Philodromidae_Philodromus cespitum	GTTAAAATAGTGA AAA	- TATCACG	CATTATTTTCAAAATG	AAATTTG-----	ATTTAGTCTTAT
Pholcidae_Mesabolivar sp1	GAGTGTTAGGTGAAT	TAATCACG	TAGTTTTTCGTAT	TAAAGGTG-----	GGA-TTTGTTTTAT
Pholcidae_Mesabolivar sp2	GTTGTGAAGAGGGT	GTTTTCACG	TAATTTTTCATAT	TGAAGATG-----	AGATTTATTTTTAT
Pholcidae_Pholcus phalangoides	GATTTTGGTGGGT---	- TCACGT	CATTTTTTCATAATG	AAAGGAG-----	TCATTTATTTT
Pholcidae_Pholcus sp	GGTTTTATGGTGGGT-	- TCACGT	CATTTTTTCATAATG	AAAGGAG-----	GTCTATTTATTT
Pisauridae_Dolomedes angustivirgatus	ATTATATTAGTGTA A-	- ATCACAT	CATTATTTTCATGATG	AAAAACG-----	TATTTAGTCTTCT
Pisauridae_Pisaura bicornis	GAATATTTAGTGA AG-	- ATCACGT	CATTATTTTCATGATG	AAAAATG-----	TTTTTTAGTTTTCT
Salticidae_Carrhotus xanthogramma	GATTATATAGTGA---	- TTCACAT	TATTTATTTTCATG	AAAAAGAT-----	CTAGTCTTCA
Salticidae_Cheliceroides longipalpis	GAAAAATAGTGA AG-	- TTCACAT	TATTTATTTTCATG	AAAAATG-----	-ATAGATAAT
Salticidae_Dendryphantes sp	AATAAAGTAGTGA AG-	- TTCACCT	TATTTATTTTCATG	AAAAATG-----	-TAGTCTCT
Salticidae_Epeus albo guttatus	AATTTTATAGTGA AG-	- TTCACAT	TATTTATTTTCATG	AAAAAGATT-----	-GGTAGTCTTCT
Salticidae_Evarcha sp	GGAAATATAGTGA A-	- TTCACGT	TATTTATTTTCATG	AAAAATG-----	-GATTAGTCTTCT
Salticidae_Habronattus oregonensis	GGAGAGATAGTGA AG-	- TCACGT	TATTTATTTTCATG	AAAAATG-----	-AGTTAGTCTCT
Salticidae_Heliophanus lineiventris	GATTAAGTAGTGA AAA	- TTCACACT	TATTTATTTTCATG	AAAAATG-----	-TAGTCTTTT
Salticidae_Plexippus puykulli	GAATGAGTAGTGA AAA	- TTCACGT	TATTTATTTTCATG	AAAAATG-----	-GGTAGTCTCT
Salticidae_Telamonina viljimi	GGAAATATAGTGA AAA	- TTCACAT	TATTTATTTTCATG	AAAAATG-----	-GTTAGTCTCT
Selenopidae_Selenops bursarius	ATAAAAAGTAGTGAAT-	- ATCACAT	CATTATTTTCATAATG	AAAAATG-----	-AAAGGTTTTAGTCTTCT
Sciaridae_Loxosceles rufescens	GTA AAAAGGTGTGAGG-	- GCACGT	CACTTTTTCGTAGT	GAAGGAG-----	-ATCTTTTTAATTTCA
Scleridae_Loxosceles similis	GTTTATAAAGTA-----	- TTTTACAT	CATCTTTTCATGGT	GAAGGATT-----	CTTTTTATTTTCA
Sparassidae_Heteropoda venatoria	GATAAATTAGTGA AG-	- TTCACGT	CATTATTTTCATGATG	GAGATG-----	TTTAGTCTTCT
Tetragnathidae_Leucauge celebesiana	ATTTAAATAGTGAAT-	- TTCACGT	CATTATTTTCATGATG	AAAAATG-----	TTTAGTCTTCT
Tetragnathidae_Tetragnatha maxillosa	GATTTTTAGTGA AG-	- TTCACGT	CATTATTTTCATGATG	AAATA-----	-TAGACCTAT
Tetragnathidae_Tetragnatha nitens	GATTATTTAGTGA AAA	- TTCACAT	TATTTATTTTCATG	AAAAATA-----	-TTAGACCTAT
Theraphosidae_Ornithoconus huwena	GAGATTTGAAGTAGAA-	- TACGT	CATTTTTTCGTAA	TGAAGGTG-----	-GATAGAATTTT
Theridiidae_Chrysso nordica	GATATATTAGTGA AAA	- TTCATAT	CATTATTTTCATGATG	AAAGATC-----	TAGTTAAAATATT
Thomisidae_Heriaeus melloteei	GATAATTTAGTGA AG-	- TTCACAT	TACTATTTTCATG	TAAAGATG-----	-TATTTAGTCTTCT
Thomisidae_Misumenops tricuspidata	GATTATATAGTGAAT-	- TTCACGT	TATTTATTTTCATG	AAAAATG-----	TTTTTAGTCTTCT
Thomisidae_Oxytate striatipes	GAAAAATTAGTGAAT-	- TTCACGT	TACTATTTTCATG	AAAAATG-----	TTTAGTCTTCT
Thomisidae_Thomisus onustus	GATAATATAGTGA AG-	- TTCAGT	TACCATTTTCATG	TAAAGATG-----	-TATTAGTCTTCT
Titanoecidae_Titanoeca sp	GTTTAAGTAGTGA AAA	- TTCACA	TCACTATTTTCATAGT	GATAATG-----	TTTAGTCTTCT



tnF	AA arm			DHU arm			Anticodon arm			T arm	AA arm																																					
Agelenidae_Agelena silvatica	AT	G	T	T	T	A	AG	C	T	T	A	A	-	-	-	T	A	G	A	C	A	T	T	T	A	C	T	T	A	A	A	A	-	A	G	G	A	C	T	-	A	A	A	T	C	A	T	T
Araneidae_Araneus angulatus	A	T	T	T	T	T	A	G	C	T	T	T	A	A	-	-	-	A	G	A	C	A	T	T	T	A	C	T	T	A	A	A	A	-	A	A	G	C	T	-	T	A	A	C	A	T	T	
Araneidae_Araneus ventricosus	A	A	T	A	T	A	T	A	G	C	T	T	A	T	-	-	-	T	A	G	A	C	A	T	T	T	A	C	T	T	A	A	A	-	A	A	G	C	T	-	A	A	A	C	A	T	T	
Araneidae_Araniella displicata	T	T	T	T	T	T	T	A	G	C	T	T	A	A	-	-	-	A	G	A	G	C	T	T	T	A	C	T	T	A	A	A	-	A	G	A	C	T	-	A	A	A	T	A	T	T		
Araneidae_Argiope amoena	A	A	C	T	T	T	T	A	G	C	T	T	A	C	T	-	-	-	A	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	T	A	T	C	
Araneidae_Argiope bruennichi	A	A	C	T	T	T	A	G	C	T	T	A	C	T	-	-	-	C	A	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	T	A	T	C	
Araneidae_Argiope perforata	A	A	C	T	T	T	G	A	G	C	T	T	A	T	T	-	-	T	A	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	T	A	T	T	
Araneidae_Cyclosa argenteoalba	A	A	C	T	T	T	T	A	G	C	T	T	A	A	-	-	-	A	G	A	C	A	C	T	C	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	T	A	T	A		
Araneidae_Cyclosa japonica	A	A	T	T	T	T	A	G	C	T	T	A	A	-	-	-	-	T	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	T	A	T	A		
Araneidae_Cyrtarachne nagasakiensis	A	T	A	T	T	T	A	T	A	G	C	T	T	A	C	-	-	C	A	G	A	G	C	G	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	A	A	A	A	A
Araneidae_Cyrtophora moluccensis	A	A	A	T	C	T	T	T	A	G	C	T	T	A	A	-	-	T	G	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	A	A	A	A	
Araneidae_Hypsosinga pygmaea	G	T	T	A	T	A	T	A	G	C	T	T	A	C	-	-	-	A	G	A	C	A	T	T	T	A	C	T	T	A	A	A	-	A	A	G	C	T	-	A	A	A	T	A	T	T		
Araneidae_Neoscona adianta	A	T	T	C	T	C	T	A	G	C	T	T	A	-	-	-	-	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	C	A	T	C	T		
Araneidae_Neoscona multiplicans	A	A	T	C	T	A	T	A	G	C	T	T	A	T	-	-	-	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	C	A	T	C	T		
Araneidae_Neoscona nautica	A	A	T	T	T	A	T	A	G	C	T	T	A	-	-	-	-	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	T	A	T	T			
Araneidae_Neoscona scylla	A	C	T	T	T	A	T	A	G	C	T	T	A	T	-	-	-	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	C	A	T	C	T		
Araneidae_Neoscona theisi	A	C	T	T	T	A	T	A	G	C	T	T	A	T	-	-	-	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	C	A	T	C	T		
Araneidae_Singa sp	A	T	T	T	T	T	A	T	A	G	C	T	T	A	-	-	-	T	A	G	A	C	G	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	T	A	A	T	A	T	T		
Clubionidae_Clubiona sp	A	T	C	T	T	T	A	T	A	G	C	T	T	A	C	-	-	A	A	G	A	C	A	T	T	T	T	A	C	T	T	A	A	-	A	G	A	C	T	-	A	A	A	A	A	A	A	
Cybaeidae_Argyroneta aquatica	A	C	T	T	T	G	T	A	G	C	T	T	A	A	-	-	-	T	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	C	A	T	A	T	
Dipluridae_Physioschema suthepium	A	C	C	T	C	T	A	G	C	T	T	A	A	C	-	-	-	T	A	A	A	G	C	A	T	T	T	T	A	T	T	A	A	-	A	T	A	C	-	C	T	T	A	C	C	T	C	
Dysderidae_Harpactocrates apennicola	T	A	C	T	G	T	T	A	G	C	T	T	A	A	T	-	-	T	A	A	A	G	C	A	T	T	T	A	T	T	A	A	-	A	A	A	T	-	A	A	A	T	C	C	A	T	T	
Dysderidae_Parachtes ignavus	A	A	A	A	T	A	T	A	G	C	T	T	A	C	-	-	-	T	T	A	A	A	G	C	A	T	T	T	A	T	T	A	A	-	T	T	A	C	-	T	C	T	C	A	C	T		
Dysderidae_Parachtes limbarae	T	G	T	A	A	T	A	G	C	T	T	A	A	C	-	-	-	A	A	A	G	C	A	T	T	T	A	T	T	A	A	-	T	T	A	C	-	C	G	T	A	C	A	C				
Dysderidae_Parachtes riberaei	A	C	C	T	G	T	T	A	G	C	T	T	A	A	-	-	-	T	T	A	A	A	G	C	A	T	T	T	A	T	T	A	A	-	A	C	A	C	-	T	C	C	A	T	C	A	C	
Dysderidae_Parachtes ronderioli	A	T	A	C	A	T	A	T	A	G	C	T	T	A	C	-	-	-	T	T	A	A	A	G	C	A	T	T	T	A	T	T	A	A	-	C	C	A	C	-	T	C	C	A	C	T		
Dysderidae_Parachtes teruelis	A	C	A	A	A	T	A	G	C	T	T	A	C	T	-	-	-	T	A	A	A	G	C	A	T	T	T	A	T	T	A	A	-	A	T	A	C	-	T	C	T	C	A	T	C			
Eresidae_Stegodyphus lineatus	A	T	C	T	T	T	A	T	A	G	C	T	T	A	T	-	-	A	T	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	G	C	T	-	A	C	A	T	C	T	T		
Gnaphosidae_Gnaphosa kompirensis	A	T	C	T	T	T	G	T	A	G	C	T	T	A	-	-	-	T	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	T	-	A	A	A	C	A	T	A		
Gnaphosidae_Gnaphosa licenti	A	C	T	T	T	T	A	G	C	T	T	A	C	T	-	-	-	A	T	A	G	C	A	A	T	T	A	C	T	T	A	A	-	A	G	C	T	-	A	A	A	C	A	T	A			
Hypoichilidae_Hypoichilus thorelli	T	T	T	A	A	T	A	A	C	A	G	C	T	A	-	-	-	C	A	C	A	G	C	A	T	T	T	A	T	T	A	A	-	A	G	A	C	-	T	C	T	C	A	T	T			
Linyphiidae_Microlinyphia pusilla	A	T	T	T	A	T	A	T	A	G	C	T	T	A	T	-	-	-	T	A	G	A	C	A	T	T	T	A	T	T	A	A	-	A	G	C	T	-	A	A	C	A	T	T	T			
Linyphiidae_Tetrathela hangzhouensis	T	C	T	C	A	T	T	A	G	C	T	T	A	A	-	-	-	A	G	A	C	A	T	T	T	A	T	T	A	A	-	A	G	C	T	-	A	A	G	A	A	A	A	A	A	A		
Liphistiidae_Liphistius erawan	T	C	T	C	A	A	T	A	G	T	T	T	A	-	-	-	-	T	A	G	A	A	C	A	T	T	T	A	T	T	A	A	-	A	G	C	T	-	A	A	G	A	A	A	A	A	A	
Liphistiidae_Songthela sp	T	C	T	C	A	T	T	A	G	C	T	T	A	A	-	-	-	T	A	G	A	G	T	C	T	T	A	T	T	A	A	-	A	G	C	T	-	A	A	G	A	A	A	A	A	A		
Lycosidae_Alopecosa cursor	A	A	T	A	A	A	T	A	G	C	T	T	A	A	-	-	-	T	A	A	A	G	C	A	T	T	T	A	C	T	T	A	A	-	A	G	C	T	-	A	A	A	T	A	T	A	T	
Lycosidae_Lycosa sinensis	A	A	T	A	A	T	T	A	G	C	T	T	A	A	-	-	-	T	A	A	A	G	C	A	T	T	T	A	C	T	T	A	A	-	A	A	A	C	T	-	A	A	A	C	A	T	A	
Lycosidae_Pardosa laura	A	T	T	C	T	T	T	A	G	C	T	T	A	A	C	-	-	-	T	A	A	A	G	C	A	T	T	T	A	C	T	T	A	-	A	G	A	C	-	A	G	A	C	-	A	T	T	C
Lycosidae_Pirata subpiraticus	A	A	T	T	T	A	A	T	A	G	C	T	T	A	A	-	-	-	A	G	A	C	A	T	T	T	A	T	T	A	A	-	A	G	C	T	-	A	T	A	T	A	T	T	C			
Lycosidae_Wadicosa fidelis	A	T	T	T	A	T	A	T	A	G	T	T	A	T	-	-	-	T	A	A	A	C	A	C	T	T	T	A	C	T	T	A	-	A	A	A	C	-	A	T	A	C	A	T	A	T		
Miturgidae_Cheiracanthium erraticum	A	T	T	T	A	T	A	T	A	G	C	T	T	A	-	-	-	A	T	A	A	A	G	C	A	T	T	T	A	T	T	A	A	-	A	A	A	C	-	A	C	A	T	T	T	C		
Miturgidae_Cheiracanthium triviale	A	T	T	A	A	T	A	T	A	G	C	T	T	A	-	-	-	-	T	A	G	A	C	A	T	T	T	A	T	T	A	A	-	A	G	A	C	-	T	T	A	A	A	A	A	A		
Nemesiidae_Calisoga longitarsis	A	C	A	A	C	A	G	A	A	G	C	T	C	C	A	C	T	T	T	A	A	G	C	A	T	T	T	A	T	T	A	A	-	A	G	A	C	-	A	G	A	C	A	T	A	A		
Araneidae_Trichonephila clavata	A	G	T	T	A	T	A	G	C	T	T	A	A	-	-	-	-	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	A	G	C	-	A	A	A	T	A	T	T	T			
Oecobiidae_Uroctea compactilis	T	A	T	A	A	A	G	T	A	G	C	T	A	A	-	-	-	T	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	G	A	C	-	T	T	A	A	C	A	T	C		
Oxyopidae_Oxyopes sertatus	A	T	T	T	A	A	T	A	G	C	T	A	T	C	-	-	-	T	C	A	A	A	G	C	A	T	T	T	A	C	T	T	A	-	A	G	C	-	A	A	C	A	C	A	T	C		
Oxyopidae_Peuceitia latikae	A	A	T	T	A	T	T	A	G	C	T	T	A	A	T	-	-	-	T	A	A	A	G	C	A	T	T	T	A	C	T	T	A	-	A	G	C	-	A	A	A	C	A	T	C	A		
Philodoridae_Philodorus cespitum	A	T	C	T	T	T	T	A	G	C	T	T	A	-	-	-	-	T	A	G	A	C	A	T	T	T	A	C	T	T	A	A	-	A	G	C	-	A	A	A	C	A	T	A	A	A		
Pholcidae_Mesabolivar sp1	A	T	C	C	T	A	A	T	A	G	C	T	T	A	A	-	-	-	A	A	A	G	C	A	T	T	T																					

trnG	AA arm	DHU arm	Anticodon arm	T loop	AA arm
Agelenidae_Agelena silvatica	AGTATATT	AGTATATTAGTACA	TTTGATTTCCAATTAAAT	AGA - - - GGA - -	AAAATATT
Araneidae_Araneus angulatus	AATTATGT	AATATATAAGTATA	TTTGATTTCCAATCAAAA	AGA - - - GAT - -	TTAATTTA
Araneidae_Araneus ventricosus	GATATTGT	CGTATATTAGTACAT	TTTGACTTCCAATCAAGAGG	- - - AAA - -	AATATTTA
Araneidae_Araniella displicata	AGATATAT	AGTATATTAGTACA	TTTGATTTCCAATTAAAT	GGA - - - ATG - -	AAAATTTA
Araneidae_Argiope amoena	AATAATAT	TAGTATATCAGTACA	TTTGATTTCCAATCAAAATAG	AAAAAGAA	TAAAAATTTA
Araneidae_Argiope bruenichi	AATAATAT	TAGTATATAAGTACAT	TTTGATTTCCAATCAAGAGG	- - - AAG - -	AAAATTTA
Araneidae_Argiope perforata	AGTAATAT	AGTATATTAGTACA	TTTGATTTCCAATCAAAAT	GGA - - - AAG - -	AAAATTTT
Araneidae_Cyclosa argenteoalba	AATATATAT	TAGTATATAAGTACA	TTTGATTTCCAATTAAATAG	- - - AGA - -	AATATATA
Araneidae_Cyclosa japonica	GATTTTAT	TAGTATATTAGTACAT	TTTGATTTCCAATTAAAAAG	- - - GAA - -	AATATGTA
Araneidae_Cyrtarachne nagasakiensis	GTAAATTT	TAGTATATAAGTATAT	CTGATTTCCAATCAAAAT	GGT - - - AAGAA	TTATTTTA
Araneidae_Cyrtophora moluccensis	AACTATAT	TAGTATATTAGTACAT	TTTGATTTCCAATTAAAAAG	- - - AGA - -	AAAATTTA
Araneidae_Hypsosinga pygmaea	AATTATAT	TAGTATT - AAGTACAT	TTTGATTTCCAATCAAAAGG	- - - GAG - -	ATTATTTT
Araneidae_Neoscona adianta	AATAATGT	TAGTATATTAGTAT	GTTTGATTTCCAATCAAA	CGGT - - - GAAA -	AAAATTTA
Araneidae_Neoscona multiplicans	AATAATAT	TAGTATATTAGTATAT	TTTGATTTCCAATCAAAAT	GGT - - - GAAA -	AAAATTTA
Araneidae_Neoscona nautica	AATTATCT	TAGTATATTAGTATAT	TTTGATTTCCAATCAAAAT	GGT - - - AA - -	AAAATTTA
Araneidae_Neoscona scylla	AATAATGT	TAGTATATTAGTATAT	TTTGATTTCCAATCAAAAT	GGT - - - AA - -	AAAATTTA
Araneidae_Neoscona theisi	AAATAAGT	TAGTATATAAGTATAT	TTTGATTTCCAATCAAAAT	GGT - - - AA - -	GAAATTTA
Araneidae_Singa sp	AATATATT	TAGTATAATAGTACA	ATTGATTTCCAATCAAAAT	GGA - - - GG - -	AAAATTTT
Clubionidae_Clubiona sp	TATAATAT	TAGTATA - TAGTACA	TTTAATTTCCAATTAAAA	AGGA - - - GA - -	AAAATTTAT
Cybaeidae_Argyroneta aquatica	GTTTTATA	AAGGTATA - TTGTACG	TTTAATTTCCAATTAAG	GGGT - - - GAA -	ATTATTTG
Dipluridae_Phyxioschema suthepium	GAAGAGGA	AGTACA - TAGTATT	GCTGATTTCCAATTAG	AGGA - - - GAG -	AAATTTATG
Dysderidae_Harpactocrates apennicola	ATTAATTT	TAGTA - - - ATTTACAT	CTAATTTCCAATTAGATA	AAA - - - GAG -	TTTATTTT
Dysderidae_Parachtes ignavus	TACAATAT	TAGTAAG - TTATACG	TTTGATTTCCAATCAAA	GAAA - - - GAG -	GTGTTATT
Dysderidae_Parachtes limbareae	AATTGTTT	TAGTAT - - - ATTACAT	TTTGATTTCCAATCAAAAGT	- - - GAA -	AGGCTGTA
Dysderidae_Parachtes riberae	AATGATAA	AGTAT - - - AATACT	CTGATTTCCAATCAGAA	AATA - - - GAG -	TTAATATA
Dysderidae_Parachtes romandiola	TCATATT	AAGTATT - TTATACG	TTTAATTTCCAATTAAG	AAA - - - GAGT -	TTCATTTA
Dysderidae_Parachtes teruelis	TATTTATA	AAAGTAT - - - TTTACAT	CTAATTTCCAATTAGAT	AAA - - - GAT -	TATATATA
Eresidae_Stegodyphus lineatus	ATTAATGT	TAGTATA - TAGTATAT	TTTGATTTCCAATCAAA	AGGA - - - GAAG -	AGAATATT
Gnaphosidae_Gnaphosa kompirensis	AGAATAAT	TAGTATA - AAGTACAT	TTTGATTTCCAATTAAG	AGGT - - - GAA -	AGTATTTAT
Gnaphosidae_Gnaphosa licenti	AGAATATT	TAGTATA - AAGTACG	TTTAATTTCCAATTAAAA	AGT - - - GAA -	ATTATATT
Hypochilidae_Hypochilus thorelli	AATTTATA	AAGTTTT - - - TACG	TTTAATTTCCAATTAAAT	AAA - - - GATA -	AAAATTTA
Linyphiidae_Microlinyphia pusilla	ATTTTATA	TAGTATA - AAGTACAT	TTTAATTTCCAATTAAAA	AGT - - - AA - -	TAAATTTT
Liphistiidae_Leptathelia hangzhouensis	ATCTTTT	TAGTATTCATGTACAT	TTTGACTTCCAATCAAAAGT	- - - AAA -	TAAAGATA
Liphistiidae_Leptathelia erawan	TCCTTTT	TAGTATA - AAGTACAT	TTTGACTTCCAATCAAAAGT	- - - AAC -	AAAAGGAA
Liphistiidae_Songthela sp	ATCTTTT	TAGTATA - ATGTACAT	TTTGATTTCCAATCAAAAGT	- - - AAA -	TAAAGATA
Lycosidae_Alopecosa cursor	GTTATATA	TAGTATA - TAGTAT	GTTTAATTTCCAATTAAAA	AGGA - - - GGA -	TAGATTAT
Lycosidae_Lycosa sinensis	TATATAAT	TAAATATAAGTATAT	GTTTAATTTCCAATTAAAA	AGGA - - - GAT -	ATTATAAT
Lycosidae_Pardosa laura	AGTATATA	AAGTATTATAGTATAT	TTTAATTTCCAATTAAAA	AGGA - - - GAA -	TGAATTAT
Lycosidae_Wadicosia fidelis	GATATATT	TAGATTATAGTAT	GTTTAATTTCCAATTAAAA	AGGA - - - GAA -	TTTATTAT
Miturgidae_Cheiracanthium erraticum	AATATATA	AAGTATA - TTGTACAT	TTTAATTTCCAATTAAAA	AGGA - - - ACT -	AATTATTAG
Miturgidae_Cheiracanthium triviale	AATTAAGA	AAGTATT - ATGTACAT	TTTAATTTCCAATTAAAA	AGT - - - CTA	AAAATTATTTA
Nemesiidae_Calisoga longitarsis	ACGAAAT	AAGGTAA - - - TTTACG	GTTTGATTTCCAATGACC	CGAG - - - GA - -	GAAATTTA
Araneidae_Trichonephila clavata	GATTTATT	TAGTATAAAGTACAT	TTTAATTTCCAATTAAT	ATAGTA - - - GAG -	AAAATTTT
Oecobiidae_Uroctea compactilis	AATTTATA	AAGTATT - TTGTGCG	TTTGATTTCCAATCAAA	AGGA - - - GAA -	ATTATTTT
Oxyopidae_Oxyopes sertatus	GAGTAAGA	AGATTTTGTAT	GTTTAATTTCCAATTAAAA	AGGT - - - GAA -	TTTATTTT
Oxyopidae_Pucetia latikae	AATAATAA	AGGATT - AAGTACAT	TTTAATTTCCAATTAAAA	AGGA - - - GTA -	GTAAATTTT
Philodromidae_Philodromus cespitum	TATATATA	AAGTATTTTGTATAT	TTTGATTTCCAATCAAA	TGGA - - - GG - -	AATATTGA
Pholcidae_Mesabolivar sp1	AATGATAA	AGATTTTATATACAT	TTTAATTTCCAATTAAT	ATAA - - - GAA -	ATTATTTT
Pholcidae_Mesabolivar sp2	AATGAATA	AGGTAAT - ATTTACG	TTTAATTTCCAATTAAAA	AGGA - - - GGG -	AAAATTTT
Pholcidae_Pholcus phalangoides	TATAAAGA	AAGTT - - - TATGAC	GTTTGATTTCCAATCAAG	AGTA - - - GC - -	TATATTTT
Pholcidae_Pholcus sp	TATAAAGA	AGTT - - - TATGAC	GTTTGATTTCCAATCAAG	AGTA - - - GC - -	TATATTTT
Pisauridae_Dolomedes angustivirgatus	TGTTTAT	GAGTATTTAAAGTAT	GTTTAATTTCCAATTAAAA	AGGA - - - GGA -	AAAATTTG
Pisauridae_Pisaura bicornis	GATTATTT	AAGTATA - AAGTAT	GTTTAATTTCCAATTAAAA	AGGA - - - GCTT -	AATATTTT
Salticidae_Carrhotus xanthogramma	AATATAAA	AGGATA - ATATACG	TTTGATTTCCAATCAAA	AGTA - - - GAG -	CTTATTTT
Salticidae_Cheliceroides longipalpis	AATAAAAT	TAGTATAAATATAT	TTTGATTTCCAATCAAA	AGTA - - - GATA -	AAAATGTT
Salticidae_Dendryphantes sp	AATATAAT	AGTAT - - - TATTAC	ATTTGATTTCCAATCAAA	AGGT - - - GAG -	ATAATTTA
Salticidae_Epeus alboguttatus	AATATAAT	AGTAT - - - TATTAC	ATTTGATTTCCAATCAAA	AGTA - - - AAG -	ATAATATT
Salticidae_Evarcha sp	AATAATGA	AGTATT - TAGTACG	TTTGATTTCCAATCAAA	AGGA - - - GAT -	AAAATCTT
Salticidae_Habronattus oregonensis	AATATAGA	AGTATT - ATGTACAT	TTTGATTTCCAATCAAA	AGGT - - - GAA -	TGTATTTT
Salticidae_Heliophanus lineiventris	AATATAAA	AGGATTTATATACG	TTTGATTTCCAATCAAA	AGGT - - - GAA -	TTAATTTT
Salticidae_Plexippus paykulli	AATATATA	AGGATT - TAGTACG	TTTAATTTCCAATTAAAA	AGGA - - - AGGT -	TTTATATT
Salticidae_Telamonia vijlmi	ATAATATA	AGGATT - TAGTACAT	TTTGATTTCCAATCAAA	AGGA - - - GAT -	TAAATATT
Selenopidae_Selenops bursarius	AATTTAAT	AGGATT - ATGACG	TTTGATTTCCAATCAAA	AGGG - - - CAA -	AGGGATTA
Sicariidae_Loxosceles rufescens	ACGAAAT	TAGTAT - - - GATTAC	GTTTTATTTCCAATAAAA	AGGT - - - GGA -	TTAATTTT
Sicariidae_Loxosceles similis	AATATTTA	AAAGTATCATATTACAT	TTTAATTTCCAATTAAAA	AGTA - - - GAGG -	ATAATATT
Sparassidae_Heteropoda venatoria	AATATGT	AGTATA - TTGTACAT	TTTGATTTCCAATTAAT	ATAG - - - GAA -	TTTATATT
Tetragnathidae_Leucauge celebesiana	AATAAAAT	TAGTATA - TAGTATAT	TTTGATTTCCAATCAAA	AGGA - - - GAA -	TTTATATT
Tetragnathidae_Tetragnatha maxillosa	ATATAATT	TAGTATA - AAGTAT	GTTTGATTTCCAATCAAA	AGGA - - - GGA -	TTTAGAAT
Tetragnathidae_Tetragnatha nitens	AATAATAT	TAGTATA - AAGTACAT	TTTGATTTCCAATCAAA	AGGA - - - GAA -	AAGATCTT
Theraphosidae_Ornithoctonus huwena	GAAAGAGA	AAGTATT - AAGTACA	AGGATTTCCAGTCATT	GAGA - - - GG - -	ATAATTTT
Theridiidae_Chrysso nordica	GATTAAGA	AGGATA - TAGTACAT	TTTGATTTCCAATTAAAA	AGGT - - - GAAA -	TAAATTTT
Thomisidae_Heriaeus melloteei	AGAATATT	TAGTATA - TAGTACAT	TTTGATTTCCAATCAGAA	GGATGAG -	ATAATTTT
Thomisidae_Misumenops tricuspidata	AATTTATT	AAGTATT - AAGTAT	GCTTGATTTCCAATCAAG	AGGA - - - GGA -	ATTATTTT
Thomisidae_Oxytate striatipes	GTAAATAA	TAGTATTATAGTACG	TTTAATTTCCAATTAAAA	ATAGAATA	ATAATTTA
Thomisidae_Thomisus onustus	GATATATT	TAGTATA - TAGTACAT	TTTAATTTCCAATTAAAA	AGGTGAAGAG	AATAATATA
Titanoecidae_Titanoeca sp	ATATTAGA	AGGATA - AAGTACG	TTTGATTTCCAATCAAA	AGGA - - - GAATT	ATAATTTT
Consensus					
Occupancy					

tnH	AA arm	DHU arm	Anticodon arm	TψC arm	AA arm	
Agelenidae_Agelena silvatica	ATATATCT	AGTTTTAA	- - - ATAAAAACAAT	AATTTTGTGGAATTATA	ACCTTCT - AACAAATAC	
Araneidae_Araneus angulatus	ATATAATT	AGTTTTAA	- - - GAAAAACAAT	TGGTTTGTGGAACCAAA	CAAACT - AAAATTTAA	
Araneidae_Araneus ventricosus	AATATTTT	AGTTTAA	- - - TACAAACAAT	GGATTGTGGTGCCATA	AAAACT - AATATAAT	
Araneidae_Araniella displicata	ATTATTTT	AGTTTAT	- - - TAAAACATT	GACTTGTGGTGTCAAAA	AAATCT - AAATTTTT	
Araneidae_Argiope amoena	ATTATATT	AGTTTAT	- - - AAAAAACAAT	GGCTTGTGGTGCCAT	AAATCTA - AACATTTT	
Araneidae_Argiope bruennichi	ATAAATCT	AGTTTAT	- - - TAAAAACAAT	GGCTTGTGGTGCCATA	AAATCTA - AAAATTTT	
Araneidae_Argiope perforata	ATAAATATT	AGTTTAT	- - - TAAAACAAT	GGCTTGTGGTGCCATA	AAATCTA - AAAATTTT	
Araneidae_Cyclosa argenteoalba	AAATATTT	AGTTTAA	- - - AAAAAACAAT	TGGTTTGTGGAACCAT	AGATCTT - AATATTTT	
Araneidae_Cyclosa japonica	ACTTATAT	AGTTTAA	- - - ACAAACAAT	GGTTTGTGGACCAT	AAAACTT - AACATTTT	
Araneidae_Cyrtarachne nagasakiensis	AAAAATTT	AGTTTAA	- - - AAAAAACAAT	GGATTGTGGTTCAT	AAATCTT - ATAATTTT	
Araneidae_Cyrtophora moluccensis	ATTATTTT	AGTTTAA	- - - AAAAAAATT	TGGTTTGTGGAACCAAC	AGATCTA - AAAATCTT	
Araneidae_Hypsosinga pygmaea	ATAAATAT	AGTTTAT	- - - TAAAAACAAT	GGATTGTGGTCCATA	AAAACTT - ATTATTGC	
Araneidae_Neoscona adianta	AATATTTT	AGTTTAT	- - - ATAAAACAGT	GGTTTGTGGTACCACA	AAAACTT - TTAATTAT	
Araneidae_Neoscona multiplicans	AAATATTT	AGTTTAT	- - - ACAAACAAT	TGGTTTGTGGTACCAT	AAAACT - TTCATTAT	
Araneidae_Neoscona nautica	GTATAATT	AGTTTAA	- - - ATAAAACAGT	GGTTTGTGGAACCAT	AAATAGT - AAAATTTT	
Araneidae_Neoscona scylla	AATATTTT	AGTTTAT	- - - ATAAAACATT	GGTTTGTGGTACCATT	AAAACT - TTCATTAT	
Araneidae_Neoscona theisi	AATATTTT	AGTTTAT	- - - ATAAAACAGT	GATTTGTGGTATCAC	AAAACT - TTTATTAT	
Araneidae_Singa sp	AATATATT	AGTTTAA	- - - TTTAAAAACAAT	GGATTGTGGTCCATA	AAAACT - ATTATCTT	
Clubionidae_Clubiona sp	AATAAATTT	AGTTTAA	- - - CTAACAACAAT	AATTTGTGGAATTATA	AAATAT - ACAATAAA	
Cybaeidae_Argyroneta aquatica	AAATATCT	AGTTTAA	- - - - - - AAAACATT	TAACTTGTGGTGT	TAAAAATTTCT - AAAAAATTA	
Dipluridae_Physioschema suthepium	CCTTAATA	AGTTTTT	- - - - - - AACATCAG	CTTGTGGAGCT	GAATTAATCTAAT	TATTTTTT
Dysderidae_Harpactocrates apennicola	ACATATAT	AGTTTAA	- - - CCAAAACAGT	AATTTGTGGAATT	AAAAATAAA - ATTATTTT	
Dysderidae_Parachtes ignavus	TATAACTT	AGTTTAA	- - - TAAAAACAAT	AATTTGTGGAATTATA	AAACAAG - CTAATAAA	
Dysderidae_Parachtes limbareae	ACTATCAT	AGTTTAT	- - - ACAAACAAT	AATTTGTGGAATTATA	AAAAATAA - CTAATCAA	
Dysderidae_Parachtes riberaei	AATATATT	AGTTTAA	- - - AATAAAAACGAT	AATTTGTGGAATT	ACCAATAGA - ATAATTTA	
Dysderidae_Parachtes romandiolae	TACTATAA	AGTTTAA	- - - TACTAAAAACAAT	AATTTGTGGAATTATA	AAATCTC - TTAATACA	
Dysderidae_Parachtes teruelis	ACTATTTT	AGTTTAT	- - - ATAAAACAAT	AATTTGTGGAATTAT	TAACTT - TTAATAAA	
Eresidae_Stegodyphus lineatus	ATAAATATT	AGTTTAA	- - - TTTAAAAACT	TGGTTTGTGGAACCAAT	GACCTA - AAAATTAT	
Gnaphosidae_Gnaphosa kompirensis	AATTATCT	AGTTTAA	- - - AACAAACAAT	AGTTTGTGGAACAT	ATAAATCT - TTAATAAT	
Gnaphosidae_Gnaphosa licenti	ATTTATCT	AGTTTAA	- - - TAAAAACAAT	AGTTTGTGGAACAT	ATAAATCT - TCAATAAT	
Hypochoilidae_Hypochoilus thorelli	CTATACTA	AGTTT	- - - - - - AAAACATT	GATTTGTGGTAT	CAAAAATAAA - CTAATTTT	
Linyphiidae_Microlinyphia pusilla	ATAAAAAT	AGTTTAT	- - - TAAAACAAT	GACTTGTGGTGCT	CATAAATATA - TAAATTTA	
Liphistiidae_Heptathela hangzhouensis	TTCTTTAT	AGTTAAA	- - - TTATAATAT	CAGATTGTGGTGCT	GAA GTTTAT - TAGAGAAA	
Liphistiidae_Liphistius erawan	TCTCTAAT	AGTTAAA	- T GAAAAAT	AATATCAGATTGTGGGGCT	GAA GTTCGT - TTAGAGAG	
Liphistiidae_Songthela sp	TTCTTTT	AGTTAAA	- - - AAAAT	AATATCAGATTGTGGGGCT	GAA GTTTAA - TAAGGAAA	
Lycosidae_Alopecosa cursor	ATCCTACCT	AGTTTAA	- - - TATAAAAACAAT	AGTTTGTGGAACAT	ATAATTTCT - TTTAATTA	
Lycosidae_Lycosa sinensis	ATTTATTT	AGTTTAA	- - - ATAAAACAAT	AGTTTGTGGTACT	ACTAATTTCT - AACAAATTA	
Lycosidae_Pardosa laura	ATTTATCT	AGTTTAA	- - - ATAAAACAAT	AGTTTGTGGAACAT	ATAATTTCT - ATAAATTA	
Lycosidae_Pirata subpiraticus	AAAACTTT	AGTTTAT	- - - TAAAAACAAT	GGCTTGTGGTGCCAT	AAAACTA - AAAATTTT	
Lycosidae_Wadicosa fidelis	TTCTATCT	AGTTTAA	- - - ATAAAACAAT	AGTTTGTGGAACAT	ATAATTTCT - AAAATTAT	
Miturgidae_Cheiracanthium erraticum	AAAAAAT	AGTTTAT	- - - TAAAACAAT	AGTTTGTGGAACAT	ATAATCAT - AAAATTTA	
Miturgidae_Cheiracanthium triviale	ATTATAAT	AGTTTAA	- - - TAAAACAT	ATAGTTTGTGGAACAT	ATAATGATAT - AATATTTA	
Nemesiidae_Calisoga longitarsis	CCATAAAA	AGT	- - - - - - AAAATT	TACGTTAACTTGTGGAGT	TA AAAACCCCT - TGGATTAT	
Araneidae_Trichonephila clavata	TAAATATT	AGTTTAA	- - - TAAAAACAAT	TGATTTGTGGAAT	CAAAAATCTAA - AATATTTA	
Oecobiidae_Uroctea compactilis	ATTTAAAT	AGTTTAA	- - - ATAAAACAAT	GGTTTGTGGGACCAT	AAAACTCA - AACATCAA	
Oxyopidae_Oxyopes sertatus	AATATTTCT	AGTTTAA	- - - ATAAAACAAT	AAC TTGTGGAGT	TATAAATTTCT - TTTATAAA	
Oxyopidae_Peuceitia latikae	AAC TAAT	AGTTTAA	CAATTTTAAAAACAAT	AATTTGTGGAATTATA	AAATCTA - CAAATAAT	
Philodromidae_Philodromus cespitum	ATAAATCT	AGTTTAA	- - - ATAAAACAAT	AAC TTGTGGAGT	TAAATTTCA - TAAATAAT	
Pholcidae_Mesabolivar sp1	TTTTCAT	TAAAGTTAAT	- AATCAAACGAT	AGACTGTGGCACT	ATAAACTACCCAT	TTTTCA
Pholcidae_Mesabolivar sp2	TTACCAT	TAAAGTTAA	- - - TATAAACGAT	AGACTGTGGAACAT	ATAAATCTC - AAAAAATC	
Pholcidae_Pholcus phalangoides	TACGTATT	AGTTAAA	- - - TAATAACAAT	AGTTTGTGGAACAT	ATAATTTCTT	CCTATAAACAC
Pholcidae_Pholcus sp	TACTTATT	AGTTTAA	- - - TAATAACAAT	AGTTTGTGGAACAT	ATAATTTCTT	ATAAACAC
Pisauridae_Dolomedes angustivirgatus	AAAAATCT	AGTTTAA	- - - ATAAAACAAT	AATTTGTGGAATTATA	AAATTTCA - CAAATAAT	
Pisauridae_Pisaura bicornis	AATAAATCT	AGTTTAA	- - - ATAAAACAAT	AGTTTGTGGTACT	ATCAATTTCT - ACAATTAT	
Salticidae_Carrhotus xanthogramma	TCTTATCT	AGTTTAT	- - - ATAAAACAAT	AGTTTGTGGAACAT	ATAATTTCT - GTCAATTA	
Salticidae_Cheliceroides longipalpis	ATATATT	AGTTTAT	- - - TAAAAACAAT	TGATTTGTGGAACAT	ATAATTTCT - AAGATAAA	
Salticidae_Dendryphantes sp	AAATATCT	AGTTTAA	- - - TAAAAACAAT	AGTTTGTGGAACAT	ATAATTTCT - TATATTTA	
Salticidae_Epeus albo guttatus	ATATATT	AGTTTAT	- - - AATAAAAACAAT	AGCTTGTGGGCT	ATAATTTCT - TAAATAAA	
Salticidae_Evarcha sp	ATCTTTCT	AGTTTAA	- - - TCAAAAACAAT	AGTTTGTGGAACAT	ATAATTTCT - AATATAAG	
Salticidae_Habronattus oregonensis	ATCTAACT	AGTTTAA	- - - TAAAACAAT	AGTTTGTGGAACAT	ATAATTTCT - AAAATCAA	
Salticidae_Heliophanus lineiventris	AATTATAT	AGTTTAA	- - - TAAAAACAAT	AGTTTGTGGTACT	ATAATTTCT - ATAATTTA	
Salticidae_Plexippus paykulli	ATCTTTCT	AGTTTAA	- - - TAAAAACAAT	TGATTTGTGGAACAT	ATAATTTCT - AATATAAG	
Salticidae_Telamonia vijjmi	AATTATCT	AGTTTAA	- - - ATAAAACAAT	AGTTTGTGGAACAT	ATAATTTCT - TTAATAAA	
Selenopidae_Selenops bursarius	AATTATAT	AGTTTAC	- - - TAAAAACAAT	AGTTTGTGGAACAT	ACTAATCTA - ATAATCAA	
Sciaridae_Loxosceles rufescens	ATCCTAAC	AGTTTCAT	- - - - - - AACAT	TGGTATGTGGCACCAAT	AATACC - CGTATCCT	
Sciaridae_Loxosceles similis	TCAATATA	AGTTTAT	- - - - - - TACATT	TGGCATGTGCGGCCAACACAT	AAATCAA - CAAATAAT	
Sparassidae_Heteropoda venatoria	ATATATCT	AGTTTAA	- - - CAAAACAAT	AGTTTGTGGTACT	ATAATTTCA - ACTATATT	
Tetragnathidae_Leucauge celebesiana	AATATATT	AGTTTAA	- - - TAAAAACAAT	AGTTTGTGGAACAT	ATAATTTCT - AAAATAAA	
Tetragnathidae_Tetragnatha maxillosa	AATAAATTT	AGTTTAA	- - - ATAAAACAAT	AATTTGTGGAATT	TGATGATAT - GATATCAAC	
Tetragnathidae_Tetragnatha nitens	AATTATTT	AGTTTAT	- - - TAAAAACAAC	AATTTGTGGGATT	GT TTATAC - TAAATAAA	
Theraphosidae_Ornithoconotus huwena	AATTTAAA	AGTTTTT	- - - - - - GAAACAAT	TAACTTGTGGAGT	TAAAAATCCC - TAATCCTT	
Theridiidae_Chrysso nordica	AATTTATTT	AGTTTAT	- - - TAAAAACAAT	GATTTGTGGTAT	CATAAACTT - ATCTATATA	
Thomisidae_Heriaeus melloteei	ATTAAATAT	AGTTTAT	- - - CTAACAACAGT	AATTTGTGGAATT	TACAAAATTC - TATATTTAT	
Thomisidae_Misumenops tricuspidata	AAATAATAT	AGTTTAA	- - - ATAAAACAGT	AATTTGTGGAATT	TACAAAATTC - ATAATAAT	
Thomisidae_Oxytate striatipes	AAAAATCT	AGTTTAA	- - - ATAAAACAGT	AAC TTGTGGTGT	TACAAAATTTCT - TACATAAT	
Thomisidae_Thomisus onustus	TATAATAT	AGTTTAT	- - - TAAAACAGT	AATTTGTGGCATT	TACAAAATTC - TTTATTTA	
Titanoecidae_Titanoeca sp	ATATATTT	AGTTTAA	- - - ATAAAACAAT	TAGATTGTGGAT	CTACAAATTTCT - TATATTGT	

Consensus

AAT TATTTAGTTTAA + T

AATAAAAACAATAGTTTGTGGAACATATAAATTTCTCTAAAAATTAT

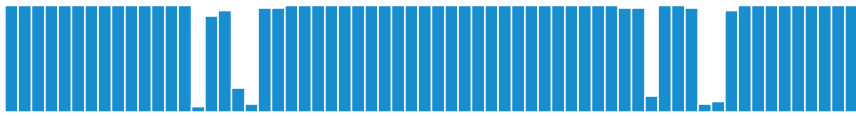
Occupancy

<i>trnL</i>	AA arm	DHU arm	Anticodon arm	TψC arm	AA arm
Agelenidae_Agelena silvatica	GAAAATAT	GCCTGA	- - TAAAAGGG	TTAATTTGATAGATTAATAATG	- AGA - - AATTTTAGTGG
Araneidae_Araneus angulatus	TATAAGGT	GCCTGA	- AT - - AAAGGG	TAACTTGATAGGTTAAATAATG	- ATA - - TATTATAATTT
Araneidae_Araneus ventricosus	GAATATGT	GCCTGA	- GT - - AAAGGATTA	ACTTGATAGGTTAAATATG	- AAA - - AATTTTTATTC
Araneidae_Araniella displicata	AATATAGT	GCCTGA	- GTA - - AAAGGG	TAACTTGATAGGTTAAATAATG	- AAA - - ATATTTTCGTGT
Araneidae_Arpiope amoena	AGAAAAGT	GCCTGA	- GTA - - AAAGGG	CTAACTTGATAGGTTAGATAATG	- AAA - - AATTTTAAC TT
Araneidae_Arpiope bruennichi	AATAAGT	GCCTGA	- GGA - - AAAGGG	CTAACTTGATAGGTTAGATAATG	- AAA - - TATTTCAATTT
Araneidae_Arpiope perforata	AATATAGT	GCCTGA	- TTA - - AAAGGG	CTAACTTGATAGGTTAGATAATG	- AAA - - AATGCTTATTT
Araneidae_Cyclosa argenteoalba	ATTTAAAGT	GCCTGA	- GTA - - AAAGGA	TTAAC TTGATAGGTTAAATAATG	- AAA - - AATTTTTATTT
Araneidae_Cyclosa japonica	AGTAAAGT	GCCTGA	- AT - - AAAGGG	TAACTTGATAGGTTAAATAATG	- AAA - - AATTTTTATTT
Araneidae_Cyrtarachne nagasakiensis	ATTATAGAGCCT	GA	- TT - - AAAGGG	TTAAC TTGATAGGTTAAATAATG	- AAA - - AATTTTTAAAA T
Araneidae_Cyrtophora moluccensis	AATAATAGT	GCCTGA	- GAA - - AAAGGA	CTAACTTGATAGGTTAGATTATG	- GGA - - AATTTTAATTT
Araneidae_Cyclosa pygmaea	AATAATGT	GCCTGA	- ATA - - AAAGGG	TAACTTGATAGGTTAAATAATG	- AAA - - AATTTTTATTT
Araneidae_Neoscona adianta	AATAATGT	GCCTGA	- TAA - - AAAGGG	TTAAC TTGATAGGTTAAATAATG	- AAA - - CAATTTTTATTT
Araneidae_Neoscona multiplicans	AATTTATGT	GCCTGA	- TTA - - AAAGGG	TTAAC TTGATAGGTTAAATAATG	- AAA - - AAATTTTTATTT
Araneidae_Neoscona nautica	AATAATGT	GCCTGA	- TAA - - AAAGGG	TTAAC TTGATAGGTTAAATAATG	- GAA - - TGATTTTTATTT
Araneidae_Neoscona scylla	AATTTATGT	GCCTGATTA	- - - AAAGGG	TTAAC TTGATAGGTTAAATAATG	- AGA - - AATTTTTATTT
Araneidae_Neoscona theisi	TGTAATGT	GCCTGA	- TTA - - AAAGGG	TTAAC TTGATAGGTTAAATAATG	- AAATGAATTTTTATTT
Araneidae_Singa sp	ATTTAAAGT	GCCTGA	- GTA - - AAAGGATTA	ACTTGATAGGTTAAATAATG	- GAA - - AATTCATATTT
Clubionidae_Clubiona sp	ATAATAGT	GCCTGA	- TT - - AAAGGG	TTAATTTGATAGATTAATAATG	- AAA - - AATTTTTAATTC
Cybaeidae_Argyroneta aquatica	ATTTAAAGT	GCCTGAATA	- - - AAAGGG	TAACTTGATAGATTAATAATG	- AAA - - AATTTTTATTAT
Dipluridae_Phyxioschema suthepium	AAAAAAAAGCCT	GA	- GG - - AAAGGG	TAACTTGATAGATTAACATCAGC	- CTCACAGCATTAAGAA T
Dysderidae_Harpactocrates apennicola	AGGTGTAT	GCCTGA	- TT - - AAAGGG	TTAATTTGATAGATTAATTTATG	- TAATTAATTTATGGAA T
Dysderidae_Parachtes ignavus	TATATTTAT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATTTAAG	- GTT - - AATTTTCAGGG
Dysderidae_Parachtes limbaree	AAGGTTAT	GCCTGA	- TTA - - AAAGGG	TAACTTGATAGATTAATTTATG	- CTC - - GATTTATCGAG
Dysderidae_Parachtes riberaei	GATAAATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATTTATG	- TTA - - GATTTATAAAG
Dysderidae_Parachtes rolandiae	TGTATAGT	GCCTGA	- TT - - AAAGGG	TTAAC TTGATAGATTAATTTATG	- AAT - - TATTTATAGGG
Dysderidae_Parachtes teruelis	ACTAAAAT	GCCTGA	- GT - - AAAGGG	TAACTTGATAGATTAATTTATG	- ATT - - TATATATAAGC
Eresidae_Stegodyphus lineatus	GTAAATAT	GCCTGA	- TA - - AAAGGG	TTAATTTGATAGATTAATAATGAAAA	- - TATTTTTATTAT
Gnaphosidae_Gnaphosa komprensis	AATAAGGT	GCCTGA	- TTTAAAAGGG	TAACTTGATAGATTAATAATGTTAT	- - AATTAATATAT
Gnaphosidae_Gnaphosa licenti	AATTAGGT	GCCTGATTTT	AAAAAGGG	TAACTTGATAGATTAATAATGTTAT	- - GATTAGTTTAT
Hypoichilidae_Hypoichilus thorelli	AGTAAGGT	GCCTGA	- TT - - AAAGGG	TTAATTTGATAGATTAATAACGAACA	- - GGTATATTTTA
Linyphiidae_Microlinyphia pusilla	TTATATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAATG	- GTA - - - ATTTTTTAT
Linyphiidae_Heptathela hangzhouensis	AGTAAGAT	GCCTGA	- - - TAAAAGGAT	TTCTGATAGATAAATCATG	- GTTA - - TCCCTCTACTT
Liphistiidae_Liphistius erawan	AGTAAGAT	GCCTGA	- A - - AAAGGG	AAATTTCTGATAGAATTTATAATG	- GACC - - TCCCTCTACTA
Liphistiidae_Songthela sp	AGTAAGAT	GCCTGA	- A - - AAAGGATTA	TTCTGATAGAATAAATTTATG	- - GTCATTCCTCTACTT
Lycosidae_Alopecosa cursor	AATTATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATTCATG	- ATT - - TATTTTTATTT
Lycosidae_Lycosa sinensis	AATTATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATTTATGAAAT	- - TATTTTTATTT
Lycosidae_Pardosa laura	AGTTATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAATGAAGA	- - TATTTTTATTT
Lycosidae_Pirata subpiraticus	AATTATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAATG	- ATA - - TATTTTTATTT
Lycosidae_Wadicosa fidelis	AATTATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAATG	- ATA - - TATTTTTATTT
Miturgidae_Cheiracanthium erraticum	AATTAGGT	GCCTGA	- ATA - - AAAGGG	TAACTTGATAGATTAATAATG	- ATT - - AATTTTTATTA
Miturgidae_Cheiracanthium triviale	GTAAAGGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAATG	- TTA - - TATTTTTATAA
Nemesiidae_Calisoga longitarsis	CTAAAAGAGCCT	GA	- TC - - AAAGGG	TCAGTTTGATAGATTGAATTTAGCAAA	- - CGAAATCAGGG
Araneidae_Trichonephila clavata	AATTTATGT	GCCTGA	- AT - - AAAGGG	TAACTTGATAGATTAACAATG	- AAA - - TATATCAAAT
Oecobiidae_Uroctea compactilis	TTTTAAGAT	GCCTGA	- - TGAAGAGG	TAACTTGATAGATTAATAATGATAA	- - TATTAATATAT
Oxyopidae_Oxyopes sertatus	GATAAAGT	GCCTGA	- TT - - AAAGGA	CTAATTTGATAGATTAGAACATG	- ATT - - GATTTTTATAT
Oxyopidae_Peuceitia latikae	AATAATGT	GCCTGA	- GT - - AAAGGG	TAACTTGATAGATTAATTTATG	- ATA - - TATTTATGTAC
Philodromidae_Philodromus cespitum	ACTAATGT	GCCTGA	- TTTAAAAGGG	TAACTTGATAGATTAATTTATG	- ATG - - AATAACAATTA
Pholcidae_Mesabolivar sp1	AGTTAGGT	GCCTGA	- AT - - AAAGGG	TAACTTGATATATTAATAATG	- AAA - - TAATTAGGTAG
Pholcidae_Mesabolivar sp2	AGTTAGGT	GCCTGA	- TT - - AAAGGG	TAACTTGATATATTAATAATG	- AAA - - TATTTAGGTAA
Pholcidae_Pholcus phalangoides	AATTATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATATATTAATAATGGCAG	- - GATATTTCCCTC
Pholcidae_Pholcus sp	AATTATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATATATTAATAACGGCAG	- - GATGTTCCCTC
Pisauridae_Dolomedes angustivirgatus	AATAAAGT	GCCTGA	- TA - - AAAGGA	CTAATTTGATAGATTAATTTATG	- ATA - - GATTTTTCTAT
Pisauridae_Pisaura bicornis	AATGATGT	GCCTGA	- AAGTAAAGGG	TAACTTGATAGATTAATAATG	- GAG - - AATTTACAATTT
Salticidae_Carrhotus xanthogramma	ATAAATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATTTAAG	- TTA - - AATTTTTATTTA
Salticidae_Cheliceroides longipalpis	ATTAAGGT	GCCTGATTA	- - - AAAGGG	TAACTTGATAGATTAATTTATG	- AAT - - TATTTATAAT
Salticidae_Dendryphantes sp	AATAATGT	GCCTGA	- AT - - AAAGGG	TAACTTGATAGATTAATTCATG	- TTT - - TATTTTTATTA
Salticidae_Epeus albo guttatus	ATTAAGGT	GCCTGA	- TT - - AAAGGA	TAACTTGATAGATTAATAATG	- TAA - - TATTTTTAATTT
Salticidae_Evarcha sp	AATAAGGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAAAG	- TAA - - AATGATATTAT
Salticidae_Habronattus oregonensis	ATTAAGGT	GCCTGA	- CT - - AAAGGG	TAACTTGATAGATTAATAAAG	- TTA - - GATTATATTAT
Salticidae_Heliophanus lineiventris	AATAAGGT	GCCTGA	- AT - - AAAGGG	TAACTTGATAGATTAATTTATG	- TTA - - AATTTTACTTT
Salticidae_Plexippus pykulli	ATTAAGGT	GCCTGA	- TT - - AAAGGA	TAACTTGATAGATTAATAAAG	- TTT - - AATTTATATT
Salticidae_Telamonia viljimi	AATAAGGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAAAG	- TGT - - TATTTATTTGG
Selenopidae_Selenops bursarius	ATTTAGGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAATG	- GTT - - TATTTTTATTT
Sciaridae_Loxosceles rufescens	AAAGGGAACCTGA	- - - - -	- ATAGGGTGG	TTTGATAGACCAGATTAAGAAATA	- - GATATTTCTAT
Sciaridae_Loxosceles similis	AATAATGAACCTA	ATTT	- - -	- AGGATGA	ACTTGATAGGTTATTAAGATAAATGATATGCTAT
Sparassidae_Heteropoda venatoria	AAGTAAGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAATG	- TTA - - GATTTTTTTAT
Tetragnathidae_Leucauge celebesiana	AGAAATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAATG	- AAT - - TATTTGTTATGT
Tetragnathidae_Tetragnatha maxillosa	GATTATAT	GCCTGA	- TT - - AAAGGG	TAACTTGATGGATTAATAATG	- AGA - - - ATTTTAAAT
Tetragnathidae_Tetragnatha nitens	AATTATAT	GCCTGA	- TA - - AAAGGG	TAACTTGATAGATTAATAATG	- TAT - - AATGCTAATTT
Theraphosidae_Ornithoctonus huwena	TTCTTAAAGACCTGA	- - - - -	- AAAGGATCA	ATTTTGATAGATTGATGCA	- - - GAA - - AACTGATACAG
Theridiidae_Chrysso nordica	ATTTATAGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAATG	- AAA - - AATTTTAAATTA
Thomisidae_Heriaeus melloteei	AAATATGT	GCCTGA	- AT - - AAAGGG	TAACTTGATAGATTAATAATG	- GAA - - AATTTTTTTAG
Thomisidae_Misumenops tricuspidata	AGATATGT	GCCTGA	- AT - - AAAGGG	TAACTTGATAGATTAATAATG	- GAA - - TATTTTTTTAG
Thomisidae_Oxytate striatipes	AATATAGT	GCCTGA	- AT - - AAAGGG	TAACTTGATAGATTAATTTATG	- GAA - - AATTTTTTTAG
Thomisidae_Thomisus onustus	AAATATGT	GCCTGA	- AT - - AAAGGG	TAACTTGATAGATTAATAATG	- GAA - - TATGCTTTTAG
Titanoecidae_Titanoeca sp	AAATATGT	GCCTGA	- TT - - AAAGGG	TAACTTGATAGATTAATAATG	- TTT - - TATTTTTATAT

Consensus

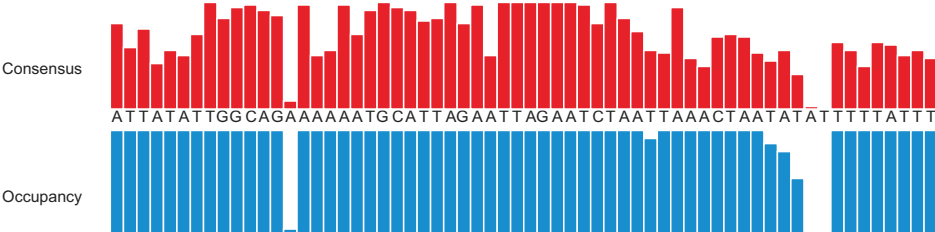


Occupancy



AATAAAGTGGCCGA+TTATTTAGGTGTTAGTCTCTTAAATTAAATTGAATA+A+AAATTTAGTTAAAT

tnL1	AA arm	DHU arm	Anticodon arm	TψC arm	AA arm
Agelenidae_Agelena silvatica	ACTAAAT	TGGCAG-AAAAAT	GCATTAGAATTAGAATCTAAATAGATAATA	---	TTATATT
Araneidae_Araneus angulatus	AATATTTT	TGGCAG-AAAAAT	GCAATAGATTTAGAATCTATAAATACTATTAA-	---	TTTCAGCT
Araneidae_Araneus ventricosus	ATTCCTTAT	TGGCAG-ATAAAT	GCATTAGATTTAGAATCTATTCAATCTAATAT-	---	TTCTCCTA
Araneidae_Araniella displicata	ATTCCTTTT	TGGCAG-AAAAAT	GGCGTAGATTTAGAATCTATTATTCTATTAT-	---	TGCTTCTC
Araneidae_Argiope amoena	ATTCCTTAT	TGGCAG-ATTAAT	GCAATTAGATTTAGAATCTACCAATTCTAACCA-	---	TTACCCCT
Araneidae_Argiope bruennichi	ATTCCTTAT	TGGCAG-ATTAAT	GCAATTAGATTTAGAATCTATTCAATCTATTAT-	---	TTCCCCCT
Araneidae_Argiope perforata	ATTCCTTAT	TGGCAG-ATTAAT	GCAATTAGATTTAGAATCTATCAATTCTAATTAT-	---	TTTCCCTT
Araneidae_Cyclosa argenteoalba	ATTTATTTT	TGGCAG-ATAAAT	GGCTTAGATTTAGAATCTAATTATTCTAAAAAT-	---	TTCTCTTT
Araneidae_Cyclosa japonica	ATTCCTTAT	TGGCAG-ATTAAT	GGCTTAGATTTAGAATCTATTACTCTATTAT-	---	TTTCTTCT
Araneidae_Cyrtarachne nagasakiensis	AATTAATTT	TGGCAGAAAAAAT	GCATTAGAATTAGAATCTAAATAAACTATTAT-	---	TGCTATTT
Araneidae_Cyrtophora moluccensis	TTTCATTTT	TGGCAG-ATAAAT	GGCTTAGATTTAGAATCTAATCTAATAAAT-	---	TTCTCCAT
Araneidae_Argiope pygmaea	ATTTTATTT	TGGCAG-AAAAAT	GCGTTAGATTTAGAATCTAAAATTTCTA- ---	---	TTTCTTGC
Araneidae_Neoscona adianta	ATTCCTTAT	TGGCAG-ATAAAT	GCATTAGATTTAGAATCTATTAAATCTAT- ---	---	TTATATGC
Araneidae_Neoscona multiplicans	ATTCCTTAT	TGGCAG-ATAAAT	GCAATTAGATTTAGAATCTATTAAATCTATTT- -	---	TTATATCC
Araneidae_Argiope nautica	ATTCCTTAT	TGGCAG-ATAAAT	GCAATAGATTTAGAATCTATAAATCTATTAT-	---	TATCATCA
Araneidae_Neoscona scylla	ATTCCTTAT	TGGCAG-ATTAAT	GCACTAGATTTAGAATCTATTAAATCTATGTT-	---	ATATCCCT
Araneidae_Neoscona theisi	ATTCCTTAT	TGGCAG-ATAAAT	GCAATTAGATTTAGAATCTAATTATTCTTTTT- -	---	ATATCCCT
Araneidae_Singa sp	ATTTATTTT	TGGCAG-ATAAAT	GCAATAGGTTTAGAATCTATTAACTCTAATT- -	---	ATTTCTTC
Clubionidae_Clubiona sp	ATTTAATTT	TGGCAG-ATAATT	GCATTAGAATTAGAATCTAATTAACATAATA- -	---	TAATATTA
Cybaeidae_Argyroneta aquatica	ATTTAAATTT	TGGCAG-ATAAAT	GCAATTAGAATTAGAATCTAACAACTCTCA- -	---	TATTATTT
Dipluridae_Phloxioschema stuepium	TCTCAATTT	TGGCAG-ACTAAT	GCAATAGAAATAGAATCTAATAAACCTAAAT- -	---	TATTATCC
Dysderidae_Harpactocrates appenicola	AAGTTTTTT	TAGCAA-ACTAAT	GCATAAGAATTAGAATCTTA-AAATGTATCTA-	---	TTACTTTT
Dysderidae_Parachtes ignavus	ATTTATATAT	TAGCAA-ACAATT	GCATAAAATTTAGAATTTTATATACTTAGCA-	---	TACAGAAA
Dysderidae_Parachtes limbareae	ATCACTATAT	TAGCAA-ATAAAT	GCAATAAAACCTAGAATTTTATCACTACTTT- -	---	TATCACAG
Dysderidae_Parachtes riberaei	ATCTTTTTT	TAGCAA-ATAAAT	GCATAAAACCTAGAATTTTATATACTTAC- -	---	AATTACTG
Dysderidae_Parachtes romandiola	TTCTTTTAT	TAGCAA-AAAAGT	GCATAAAATTTAGAATTTTATATACTAA- -	---	CATTACTG
Dysderidae_Parachtes teruelis	ATCTTTTAT	TGGCAG-ACAATT	GCTTAAATTTAGAATTTTACCATACCTTAA- -	---	TAGTAGAA
Eresidae_Stegodyphus lineatus	ATCTTATTT	TGACAG-AATATT	GTATTAGATTTAGAATCTAAATAAACTCTA- -	---	ATCCCTTT
Gnaphosidae_Gnaphosa compirensis	AATTAATTT	TGGCAG-ATAAAT	GCAATTAGAATTAGAATCTAATTAACATAAAAT- -	---	TTATCTTT
Gnaphosidae_Gnaphosa licenti	ATCTATTTT	TGGCAG-ATAAAT	GCAATTAGAATTAGAATCTAATTAACATAACTAA-	---	TTATTCCT
Hypochiilidae_Hypochiilus thorelli	CTCAATTTT	TGGCAG-AAAAAT	GCATTAAACTTAGAATTTAAAAAAGAATAAT-	---	AGTAATCA
Linyphiidae_Microlinyphia pusilla	TGGTAATAT	TAGCAA-ATAAGT	GCATTAGAATTAGAATCTAAAATGTTTTA- -	---	TAAGATTA
Liphistiidae_Heptathela hangzhouensis	ACTAAATTT	TGGCAG-AAAAAT	GCATCATTTAGAATATGAATATAGTAATCT- -	---	TTATTAGT
Liphistiidae_Liphistius erawan	ACTAAATTT	TGGCAGAAAAATTT	GCATCATATTTAGAATATGATTATAGGTAFACT-	---	ATTTAGTA
Liphistiidae_Songthela sp	ACTAAATTT	TGGCAG-AAAAAT	GCATCATATTTAGAATATGAATATAGAATCT- -	---	ATTTAGTA
Lycosidae_Alopecosia cursor	ATTTAAATTT	TGGCAG-AATAAT	GCAATTAGAATTAGAATCTAAGTAACTAAATAT-	---	CTCTATAT
Lycosidae_Lycosa sinensis	ATTTTATTT	TGGCAGAAATAAT	GCATTAGAATTAGAATCTAATCAACTATATATAT	---	ATATATTA
Lycosidae_Pardosa laura	ATAATATTT	TGGCAG-AACAAT	GCAATTAGAATTAGAATCTAATTAECTACACAT-	---	CATTATTA
Lycosidae_Pirata subpiraticus	ATTTATTTT	TGGCAG-AATAAT	GCAATTAGAATTAGAATCTAATTAECTATATA- -	---	TTATTACT
Lycosidae_Wadicosa fidelis	ATAATATTT	TGGCAG-AATAAT	GCAATTAGAATTAGAATCTAATTAECTACATAT-	---	AATTACTT
Miturgidae_Cheiracanthium erraticum	AATTAATTT	TGGCAG-ATAAAT	GCAATTAGAATTAGAATCTAA-AAAACTAATAAA-	---	TAATATTT
Miturgidae_Pirata subpiraticus	ATTTATTTT	TGGCAG-ATCAGT	GCATTAGAATTAGAATCTAATTAAACTAAAAAT-	---	TACCTTTT
Nemesiidae_Calisoga longitarsis	CCTAATGTT	TGGCAG-ATAAAT	GCATTAAATTTAGAATTTAAATACACCTTCAT-	---	TTTCAGAA
Araneidae_Trichonephila clavata	ATTTATTTT	TGGCAG-ATAAAT	GCATTAGACTTAGAATCTAATTAATCTAATTAT-	---	TTTCTATA
Oecobiidae_Uroctea compactilis	TTTTTATTT	TGGCAG-ACTAAT	GCAATTAGAATTAGAATCTAATAAACCTATAAA-	---	TTTTACCA
Oxyopidae_Oxyopes sertatus	ATTTATCTT	TGGCAGAAACAAAT	GCATTAGAATTAGAATCTAATTAAACTAAAA- -	---	TATTATTT
Oxyopidae_Peuceitia latikae	ATTTTATTT	TGGCAGACAAAAT	GCATTAGAATTAGAATCTAATTAAACTAAAA- -	---	TCTTTTTT
Phidromoridae_Philodromus cespitum	ATTTATATTT	TGGCAG-AGAAAT	GCAATAGAATTAGAATCTAATTAAGAAATTAAT-	---	TCTTATAT
Pholcidae_Mesabolivar sp1	GACAAAAAT	TAGCGG-ATAAAC	CGTAATAAATTTAGAATTTATAAATGATAAATT-	---	ATCCAAAT
Pholcidae_Mesabolivar sp2	GACAAAAAT	TGGCGG-ATAAAC	CGCAATAAATTTAGAATTTAATGAAGAAAGTT-	---	AAATAAGA
Pholcidae_Pholcus phalangoides	TCTTTATTT	TGGCGG-AAAA	CGCAATTAACCTTAGAATTTAATCAACCCTACTAA-	---	TTATACCTA
Pholcidae_Pholcus sp	TCTTTATTT	TGGCGG-AAAA	CGCAATAGACTTAGAATTTAATCAACCTACTAA-	---	TTATACCTA
Pisauridae_Dolomedes angustivirgatus	AATTAATTT	TGGCAGAAAAAAT	GCATTAGAATTAGAATCTAAATAAACTATTAT-	---	TGCTATTT
Pisauridae_Pisaura bicornis	AATTAATTT	TGGCAG-AAAAAT	GCATTAGAATTAGAATCTAATTAAACTAAAA- -	---	TTTATATCA
Salticidae_Carrhotus xanthogramma	TATATATTT	TGGCAG-ATAAAT	GCATTAGAATTAGAATCTAATGAAACTTTTA- -	---	TTACTTTT
Salticidae_Cheliceroides longipalpis	AATTAATTT	TGGCAG-ATTAAT	GCATTAGAATTAGAATCTAAATAATCTTT- -	---	AATTTTTT
Salticidae_Dendryphantes sp	AATTAATTT	TGGCAG-ATTAAT	GCATTAGAATTAGAATCTAATTATCTAAA- -	---	AATTTTTT
Salticidae_Epeus albuguttatus	AGTATATTT	TGGCAG-ACTAAT	GCATTAGAATTAGAATCTAATTACACTATAAT-	---	ATTTCTTT
Salticidae_Evarcha sp	AATTAATTT	TGGCAG-ATTAAT	GCATTAGAATTAGAATCTAATTAACCTTAA- -	---	TTAAATTT
Salticidae_Habronanus oregonensis	ACTAAATTT	TGGCAG-AAAAAT	GCATCATATTTAGAATATGAATATAGTAATCT-	---	TTTTTAGT
Salticidae_Heliophanus lineiventris	ATTTATATTT	TGGCAG-AAAAAT	GCATTAGAATTAGAATCTAATAAACCTAAAA- -	---	TGCTTTTC
Salticidae_Plexippus pykulli	AATTAATTT	TGGCAG-ATTAAT	GCATTAGAATTAGAATCTAATTACTCTATTA- -	---	TCACTTTT
Salticidae_Taratona vijijini	ATTTATATTT	TGGCAG-ATAAAT	GCATTAGAATTAGAATCTAATTAGCTAAAA- -	---	TTAAATTT
Selenopidae_Selenops bursarius	ATTTAAATTT	TGGCAG-AAAAAT	GCATTAGAATTAGAATCTAAATAAACTATCA-	---	TCTTATTT
Sciaridae_Loxosceles rufescens	CTCATTTTAT	TAGCAA-AACATT	GCAATTAGACTTAGAATCTAAACTGCTCT- -	---	TATCAGTC
Sciaridae_Loxosceles similis	ATTAATATAT	TAGCAA-AACATT	GCATTAGAATTAGAAGAACTAAATAAATTAC- -	---	ATATAGCT
Sparassidae_Heteropoda venatoria	ATATATTTT	TGGCAG-ATAAAT	GCATTAGAATTAGAATCTAA-TCAACTATTAA-	---	TGCTATTT
Tetragnathidae_Leucauge celebesiana	ATTTATTTT	TGGCAG-AAAAAT	GCAATAGATTTAGAATCTAATTAATCTAAAAA-	---	TTAGATGC
Tetragnathidae_Tetragnatha maxillosa	AATTAATAT	TGGCAG-ATAAAT	GCAATAGATTTAGAATCTAATAAATAAATCT-	---	ATTAATTA
Tetragnathidae_Tetragnatha nitens	AATAATATAT	TGGCAG-AATAAT	GCAATAGATTTAGAATCTATATATATATATAT-	---	ATATATAT
Theraphosidae_Ornithoctonus huwena	ACCTTCTTT	TGGCAG-ATTTAT	GCAATAGAATTAGAATCTAT-CAACTCCTTAT-	---	CTTTATTA
Theraphosidae_Chrysso nordica	ATTTATATTT	TAGCAA-ATAAAT	GCAATTAGAATTAGAATCTAAAATACTATT- -	---	TTTATATTT
Thomisidae_Heriaeus melleotiei	ATTTATATTT	TGGCAG-AAAAAT	GCATTAGAATTAGAATCTAATTAATCTTACAT-	---	TTTCAACT
Thomisidae_Misumenops tricuspidata	AATATATTT	TGGCAG-ATAAAT	GCATTAGAATTAGAATCTAATTAATCAATTTCA-	---	TTTTAAAC
Thomisidae_Oxytate striatipes	TATATATTT	TGGAG-AAAAAT	GCATTAGAATTAGAATCTAATTAATCTTAATA-	---	ATTACATT
Thomisidae_Thomisus onustus	AATATATTT	TGGCAG-ACAAT	GCATTAGAATTAGAATCTAATTAATCTAATAC-	---	ACAAATTT
Titanoecidae_Titanoeca sp	TAATTATTT	TGGCAG-AATAAT	GCAATTAGAATTAGAATCTAA-TAAACTAATA- -	---	AACATAGA



tnL2	AA arm	DHU arm	Anticodon arm	T loop	AA arm
Agelenidae_Agelena silvatica	ATCTATT	TGGCAGATC	-AGTGC	AAAGTTTAAAGCCTTAGATAC	AAATAACAT
Araneidae_Araneus angulatus	ATTAATAT	TGGCAGATT	-ATTGCA	CTAAGTTTAAAGCCTTAGATAT	AGAAATTTA
Araneidae_Araneus ventricosus	ATCTATT	TGGCAGAAT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	AAAAATTTA
Araneidae_Araniella displicata	AATCTATT	TGGCAGAGT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	AAAAAGTTA
Araneidae_Argiope amoena	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GAAATTTTA
Araneidae_Argiope bruennichi	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GAAATTTTA
Araneidae_Argiope perforata	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GAAATTTTA
Araneidae_Cyclosa argenteoalba	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	AAAAATTTA
Araneidae_Cyclosa japonica	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	AAAAATTTA
Araneidae_Cyrtarachne nagasakiensis	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	AAAAATTTA
Araneidae_Cyrtophora moluccensis	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GAAATTTTA
Araneidae_Argiope hypoxoschema	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	AAAAAGTTA
Araneidae_Neoscona adianta	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GAAATTTTA
Araneidae_Neoscona multiplicans	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GAAATTTTA
Araneidae_Neoscona nautica	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GAAATTTTA
Araneidae_Neoscona scylla	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GAAATTTTA
Araneidae_Neoscona theisi	AATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GAAATTTTA
Araneidae_Singa sp	ATAATATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GAAATTTTA
Clubionidae_Clubiona sp	CTCTATT	TGGCAGATT	-AGTGC	ATTAAGCTTAAAGACTTAATTAT	AACATCTA
Cybaeidae_Argyroneta aquatica	ATCTATT	TGGCAGATC	-AATGCA	TTAAGCTTAAAGCCTTAAAGAAC	GAAATTTAT
Dipluridae_Hypoxioschema suthepium	TCCTCTAT	TGGCAGACC	-AATGCA	CTAAGTTTAAAGCCTTAGACATT	ACCTACTTT
Dysderidae_Harpactocrates apennicola	TCCTTAATT	TGGTAGATA	-ATTAC	GCTTAAGTTTAAAGCCTTAGACATT	ACAACCCA
Dysderidae_Parachtes ignavus	AACTATAT	TGGTAGATA	-ATTAC	GCTTAAGTTTAAAGCCTTAAGCCATT	TACAACCA
Dysderidae_Parachtes limbareae	AACCTATAT	TGGTAGATA	-ATTAC	GCTTAAGTTTAAAGCCTTAAGCCATT	TACAACCA
Dysderidae_Parachtes riberei	ACCTATAT	TGGTAGATA	-ATTAC	GCTTAAGTTTAAAGCCTTAAGCCATT	TACAATCA
Dysderidae_Parachtes romandiolae	AACTATAT	TGGTAGATA	-ATTAC	GCTTAAGTTTAAAGCCTTAAGCCATT	TACAACCA
Dysderidae_Parachtes tuerlii	AACCTATAT	TGGTAGATA	-ATTAC	GCTTAAGTTTAAAGCCTTAAGCCATT	TACAATCA
Eresidae_Stegodyphus lineatus	ATCTATT	TGGCAGATC	-AGTGC	CTAAGTTTAAAGCCTTAGAAACAT	GAACAT
Gnaphosidae_Gnaphosa kopirensis	ATCTATT	TGGCAGATA	-AATGCA	TTAAGTTTAAAGCTTAATTAT	GAACTTCT
Gnaphosidae_Gnaphosa licenti	ATCTATT	TGGCAGACA	-AATGCA	TTAAGTTTAAAGCTTAATTAT	GAACTTCT
Hypoichilidae_Hypoichilus thorelli	GGCCTATT	TGGCAGATT	-ATTGCG	CTAAGTTTAAAGCCTTAGATAC	GATTATTT
Linyphiidae_Microlinyphia pusilla	ATCTAATT	TGGCAGATC	-AGTGC	CTAAGTTTAAAGCCTTAGAAAC	AATTTTAA
Linyphiidae_Tetranychella hangzhouensis	ACTGATAT	TGGCAGAATTT	ATGTA	GAAAGCTTAAAGCTCTTTT	TAATGGCGAAC
Liphistiidae_Liphistius erawan	GTTAACAAT	TGGCAGAGA	-ATTGCT	AAAGATTTAAGATCTTT	GAATGGGGAAC
Liphistiidae_Songthela sp	ACTGATAT	TGGCAGAAT	-AATGTT	TTAGATTTAAGCTCTTTAT	GGGTAAAC
Lycosidae_Alopecosa cursor	ATCTAATT	TGGCAGAACAA	AGTGCA	TTAAGTTTAAAGCTTAAATAT	TATTTTAA
Lycosidae_Lycosa sinensis	ATTTAATT	TGGCAGAATA	AAGTGCA	TTAAGTTTAAAGCTTAAATA	TGTATATA
Lycosidae_Pardosa laura	ATCTAATT	TGGCAGAAATA	AGTGCA	TTAAGTTTAAAGCTTAAATA	TATATATA
Lycosidae_Pirata subpiraticus	ATCTTTAT	TGGCAGACT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GTTATAAT
Lycosidae_Wadicosa fidelis	ATCTAATT	TGGCAGAACAA	AGTGCA	TTAAGTTTAAAGCCTTAAATAT	TAATACTTA
Miturgidae_Cheiracanthium erraticum	ATCTATT	TGGCAGATC	-AGTGC	CTAAGTTTAAAGCTTAAATAC	AAATATTTA
Miturgidae_Cheiracanthium triviale	ATCTATT	TGGCAGATC	-AGTGC	CTAAGTTTAAAGCTTAAATAC	AAATATTTA
Nemesiidae_Calisoga longitarsis	AACAATAT	TGGCAGACA	-ATTGCA	CTAAGTTTAAAGCCTTAGATAT	TCCATATAG
Araneidae_Trichonephila clavata	ATCTATT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	AAAAATTTA
Oecobiidae_Uroctea compactilis	TATTTAT	TGGCAGATT	-AGTGC	CTAAGTTTAAAGCCTTAGATAT	GTTAAGTT
Oxyopidae_Oxyopes sertatus	ATTCTATT	TGGCAGAACAA	ATGCA	TTAAGTTTAAAGCTTAAAAAT	AAATTTTA
Oxyopidae_Peuceitia latikae	TTCTATT	TGGCAGAATA	AGTGCA	TTAAGTTTAAAGCTTAAAAAT	AAATCCTA
Phidolomidae_Phidolomera cespitum	ATTTAAATT	TGGCAGATT	-AATGCA	TTAAGTTTAAAGCTTAAATAT	TAATATTTA
Pholcidae_Mesabolivar sp1	TC CCTTAT	TAGCAAATA	-AGTGC	ATTAAGTTTAAAGCCTTAAATAT	ACCATTAA
Pholcidae_Mesabolivar sp2	TC CCTCGT	TAGCAAACA	-AGTGC	ATTAAGTTTAAAGCCTTAAATAT	TCCATTAT
Pholcidae_Pholcus phalangoides	GT CCTCGT	TGGCAGATA	-AATGCG	CTAAGTTTAAAGCCTTAGATAT	TCTCTTCT
Pholcidae_Pholcus sp	GT CCTCGT	TGGCAGATA	-AATGCG	CTAAGTTTAAAGCCTTAGATAT	TCTCTTCT
Pisauridae_Dolomedes angustivirgatus	ATCTAATT	TGGCAGATT	-AAGTGCA	TTAAGTTTAAAGCTTAAATAT	AAAAATTTA
Pisauridae_Pisarma bicornis	ATCTAATT	TGGCAGAAATA	AGTGCA	TTAAGTTTAAAGCTTAAATAT	AAATATTTA
Salticidae_Carrhotus xanthogramma	TTCTAATT	TGGCAGACT	-AGTGC	ATTAAGTTTAAAGCCTTAAGTAT	GAACTTCC
Salticidae_Cheliceroides longipalpis	AATTAATT	TGGCAGATT	-AATGCA	TTAAGTTTAAAGCCTTAAATAC	GATACATT
Salticidae_Dendryphantes sp	TTCTAATT	TGGCAGATT	-AGTGC	ATTAAGTTTAAAGCCTTAAATAT	GAACTTCT
Salticidae_Epeus albo guttatus	AATCTATT	TGGCAGATT	-AGTGC	ATTAAGTTTAAAGCCTTAAATAT	AAACTTCT
Salticidae_Evarcha sp	ATCTATT	TGGCAGATT	-AGTGC	ATTAAGTTTAAAGCCTTAAATAT	GAATATCC
Salticidae_Habronattus oregonensis	ATCTAATT	TGGCAGATT	-AATGCA	TTAAGTTTAAAGCCTTAAATAT	GAACTTCT
Salticidae_Heliophanus lineiventris	ATCTAATT	TGGCAGATT	-AATGCA	TTAAGTTTAAAGCCTTAAATAT	AATTAATA
Salticidae_Plexippus pykulli	ATCTATT	TGGCAGATT	-AGTGC	ATTAAGTTTAAAGCCTTAAATAT	GAACTTCT
Salticidae_Telamonia viljimi	ATCTATT	TGGCAGATT	-AGTGC	ATTAAGTTTAAAGCCTTAAATAT	AAACCTCC
Selenopidae_Selenops bursarius	ATCTATT	TGGCAGATC	-AATGCA	TTAAGTTTAAAGCTTAAATAC	GAAATTTCT
Sciaridae_Loxosceles rufescens	ACTCATAT	TGGCAGATA	-ATTGCA	TTAAGTTTAAACCTTAAACCAT	CACTTTAA
Sclerosomatidae_Loxosceles similis	TCTAATTT	TGGCAGATC	-ATTGCG	CTAAGTTTAAAGCCTTAAACCTT	TAACCACTTTAG
Sparassidae_Heteropoda venatoria	TATCTATT	TGGCAGATC	-AGTGC	CTAAGTTTAAAGCCTTAGAAAC	AAATATCAT
Tetragnathidae_Leucauge celebesiana	ATCTATT	TGGCAGATC	-AATGCA	CTAAGTTTAAAGCCTTAGAAAC	AAGAATTTA
Tetragnathidae_Tetragnatha maxillosa	ATCTTTAT	TGGCAGACT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	GTTATAAT
Tetragnathidae_Tetragnatha nitens	ATATATAT	TGGCAGATT	-AGTGC	ATTAAGTTTAAAGCCTTAGAAAT	GTTATAAT
Theraphosidae_Ornithoconus huwena	TCCAATAT	TGGCAGAAA	-ATTGCA	TTAAGTTTAAAGCCTTAAATTT	CTCCACC
Theridiidae_Chrysso nordica	ATCTATAT	TGGCAGACT	-AGTGC	CTAAGTTTAAAGCCTTAGAAAT	AAGTAAGT
Thomisidae_Heriaeus melloteei	ATCTAATT	TGGCAGAAA	-AGTGC	ATTAAGTTTAAAGCCTTAAATAT	AATTATAC
Thomisidae_Misumenops tricuspidata	ATCTAATT	TGGCAGAAA	-AGTGC	ATTAAGTTTAAAGCCTTAAATAT	AATTTTCT
Thomisidae_Oxytate striatipes	ATCTAATT	TGGCAGAAA	-AGTGC	ATTAAGTTTAAAGCTTAAATAT	AATTATAA
Thomisidae_Thomisus onustus	ATCTAATT	TGGCAGAAA	-AGTGC	ATTAAGTTTAAAGCCTTAAATAT	AATTTTAT
Titanoecidae_Titanoeca sp	ATCTATGT	TGGCAGATT	-AATGCA	CTAAGTTTAAAGCCTTAGTAA	AAAAATTTA
Consensus	ATCTAATTGGCAGATT	AAGTGCACTAAGTTTAAAGCCTTAGATAT	AAAAATTTA		
Occupancy	ATCTAATTGGCAGATT	AAGTGCACTAAGTTTAAAGCCTTAGATAT	AAAAATTTA		

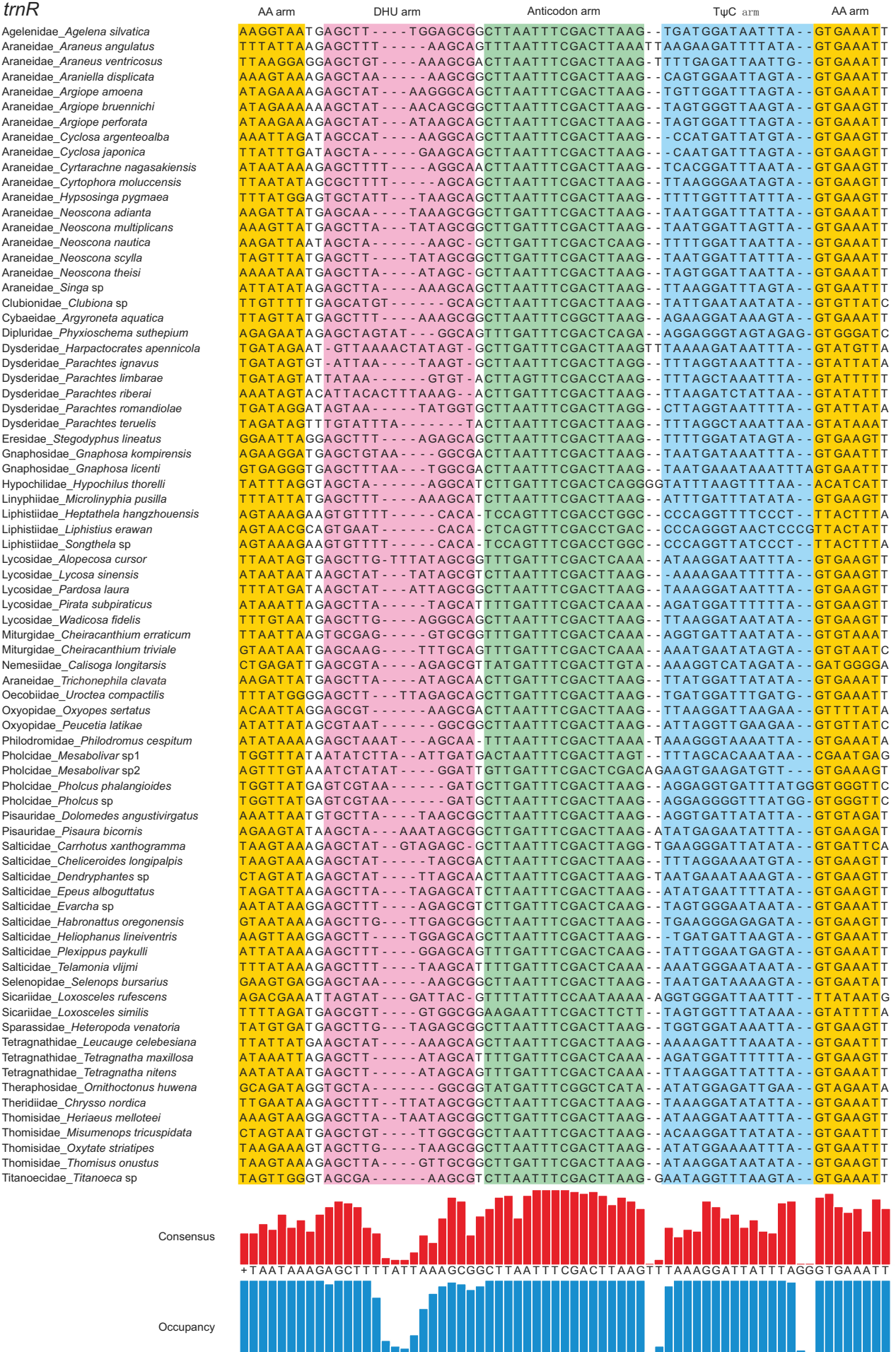
trm	AA arm	DHU arm	Anticodon arm	TψC arm	AA arm					
Agelenidae_Agelena silvatica	AATAAGA	T CAGCTAATTA	- TAAGCTT	ATGGGTT	CATACCTCATATATGAAAT - - - AAT	TACTCCT				
Araneidae_Araneus angulatus	GGGTT	CA	T AAGCTTA	T AAGCTT	CATACCTCAT	AAATGAAA - - - GAT	GCTGGCT			
Araneidae_Araneus ventricosus	AATAAAGT	CAGCTAATA - - -	AAGCTA	AATGAGTT	CATACCTCAT	AAATGAAA - - -	GATTCGGCT			
Araneidae_Araniella displicata	AATTAGGT	CAGCTAAGAC - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGAAATAA -	GATTTTTGCT			
Araneidae_Arargoie amoena	AATTTAGT	CAGCTAATT - - -	AAGCTA	AATGGGT	T CATACCCCAT	AAATGAAA - - -	AATTTTTGCT			
Araneidae_Arargoie bruenrichi	AATAAAGT	CAGCTAATT - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGAAA - - -	AATTTTTGCT			
Araneidae_Arargoie perforata	AATTAAGT	CAGCTAATT - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGAAA - - -	TATTTTTGCT			
Araneidae_Cyclosa argenteoalba	TGTTAGGT	CAGCTAATA - - -	AAGCTA	AATGAGTT	CATACCTCAT	AAATGAAT - - -	TATTTTTGCT			
Araneidae_Cyclosa japonica	ATATATGT	CAGCTAAAT - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGGAAT - - -	TATTTTTGCT			
Araneidae_Cyrtarachne nagasakiensis	AATAAAGT	CAGCTAATA - - -	AAGCTA	AATGAGTT	CATACCTCAT	AAATGA - - - -	ATTATCTCT			
Araneidae_Cyrtophora moluccensis	AATTAAGT	CAGCTAATT - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGAAA - - -	AATTTATGCT			
Araneidae_Cyrtophora pygmaea	GTTTTAAT	CAGCTAATA - - -	AAGCTA	AATGAGTT	CATACCTCAT	ATATGAAA - - -	TATATTACCT			
Araneidae_Neoscona adianta	AGCTAAAT	TAAGCTAATA - - -	AAGCTA	AATGAGTT	CATACCTCAT	AAATGAATA - - -	GATTACAGCT			
Araneidae_Neoscona multiplicans	ATTAATAT	CAGCTAAAT - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGGAAG - - -	TATTATAACG			
Araneidae_Neoscona nautica	AATATTGT	CAGCTAATA - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAAA - - -	TATTATAGCA			
Araneidae_Neoscona scylla	ATTATTGT	CAGCTAAAT - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGGATAA -	AATTTTAGCT			
Araneidae_Neoscona theisi	ATTTATGT	CAGCTAATA - - -	AAGCTA	AATGAGTT	CATACCTCAT	AAATGGAATA -	TATTATAGCT			
Araneidae_Singa sp	AATATAGT	CAGCTAATT - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGGAATG -	GATTATTAGCC			
Clubionidae_Clubiona sp	ATTTGAAT	CAGCTAACT - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGAAAT - - -	ATTATATTTC			
Cybaeidae_Argyroneta aquatica	ATATAGGT	CAGCTAATGA -	AAGCTA	ATGGGCT	CATATCTCAT	AAATGAA - - - -	GTTAATTATT			
Dipluridae_Phyxioschema suthepium	ATTTAAAGT	TAAGCTAAATA -	AAGCT	GGTGGGT	T CATACCTCAAT	ATGGGA - - - -	TATTTTTGCT			
Dysderidae_Harpactocrates apennicola	AATTAATA	TAAGCTATAT - - -	AAGCTA	AACGGGT	T CATACCTCGT	ATAAGAG - - - -	GTGATGCCT			
Dysderidae_Parachtes ignavus	TACAATAT	CAGCTATA - - - -	AAGCT	GACGAGTT	T CATACCTCGT	ATATGTA - - - -	TATTATGCCT			
Dysderidae_Parachtes limbaree	TAGAATAT	CAGCTATA - - - -	AAGCTA	ACGAGTT	T CATACCTCGT	AGAAAGA - - - -	GGTATGCCT			
Dysderidae_Parachtes riberaei	TGCTGTGT	CAGCTATA - - - -	AAGCTA	AACGGGT	T CATACCTCGT	TATCTGA - - - -	TAAATTGCCT			
Dysderidae_Parachtes rolandiae	AAAGTGGT	CAGCTATT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	ATATGTG - - - -	TATAGTGCCT			
Dysderidae_Parachtes teruelis	TATATAAT	CAGCTATAA - - - -	AAGCT	GACGGGT	T CATACCTCGT	TATGAAC - - - -	TAAATGCCT			
Eresidae_Stegodyphus lineatus	AAGTTTGT	CAGCTAATA - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGAAA - - -	AATTTTCATT			
Gnaphosidae_Gnaphosa komprensiv	AATATAGT	CAGCTATATT - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAAAGAATT - - -	AATATTAAAT			
Gnaphosidae_Gnaphosa licenti	AATATTGT	CAGCTATTTA - - -	AAGCTA	AATGAGTT	T CATACCTCAT	ATAAGA - - - -	TGTAATTTAATT			
Hypoichilidae_Hypoichilus thorelli	TGTAATAAT	CAGCTATG - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	TTATGGTTA - - -	TATATTAAAT			
Linyphiidae_Microlinyphia pusilla	TTTTATAT	AAAGCTAATT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAATAATT	AAATTTCTCAGG			
Linyphiidae_Heptathela hangzhouensis	ATAAAAGT	TAAGCTAATTA - - -	AAGCT	TGGGTT	CATACCCCAT	TTATGGTT - - - -	TCCCTTTTATA			
Liphistiidae_Liphistius erawan	ATAAAAGT	TAAGCTATTT - - -	AAGCT	CTGGGCT	CATACCCCAAT	T AAGGTTAT - - -	TCCCTTTTAT			
Liphistiidae_Songthela sp	ATAAAAGT	TAAGCTAATAAAT	AAGCT	TATGGGT	T CATACCCCAT	CTATGGTCT - - -	TCCCTTTTAT			
Lycosidae_Alopecosa cursor	ATTTAGGT	CAGCTAAAT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAAT - - - -	AATTTCTATAT			
Lycosidae_Lycosa sinensis	ATTTAAAT	CAGCTAAAT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAATT - - -	TATTTCTATT			
Lycosidae_Pardosa laura	ATTTATAGT	CAGCTATTA - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAACT - - -	TATTTTGTTT			
Lycosidae_Pirata subpiraticus	ATTTAGTA	CAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAATT - - -	TATTTTATTT			
Lycosidae_Wadicosa fidelis	GCTATATAT	AAAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAATA - - -	TATCTTTATT			
Miturgidae_Cheiracanthium erraticum	AGTTATGT	CAGCTAGTT - - - -	AAGCTA	AATGGGT	T CATACCTCAT	ATATGAAGTA -	TATATTAAAT			
Miturgidae_Cheiracanthium triviale	ATATATGT	CAGCTATTA - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	TTATGTAAA - - -	GATTTTGATT			
Nemesiidae_Calisoga longitarsis	AGCATGAT	TAAGCTAAAAT -	TAAGCTA	AACGGGT	T CATATCCGT	T AATGA - - - - -	GGTTTGGTT			
Araneidae_Trichonephila clavata	AATAATAT	CAGCTAATT - - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGAAA - - - -	TATAGTTTCT			
Oecobiidae_Uroctea compactilis	AATTAGGT	CAGCTAATG - - - -	AAGCT	GATGAGTT	T CATACCTCAT	AAATGAAA - - - -	AATTAATGCG			
Oxyopidae_Oxyopes sertatus	ATTAATAT	TAAGCTAATT - - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGATT - - - -	AATTTTGTAT			
Oxyopidae_Peuceitia latikae	ATTTATAT	TAAGCTAATAT - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGTAAA - - -	AATATTAAAT			
Philodoridae_Philodorus cespitum	ATTAATAT	TAAGCTATTA - - - -	AAGCTA	AATGAGTT	T CATACCTCATT	TATGAAAT - - - -	GATAACGATT			
Pholcidae_Mesabolivar sp1	AAAGAGGT	CAGCTAAAT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAATTGTT	TATATACCT			
Pholcidae_Mesabolivar sp2	ATTTAGGT	CAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGGATTTAT	TTTTGCCT			
Pholcidae_Pholcus phalangoides	GATGTGAT	CAGCTAATT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGGAATAGT	GATATCTCCT			
Pholcidae_Pholcus sp	AATATGAT	CAGCTAATT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGGAATAGT	GATATCTCCT			
Pisauridae_Dolomedes angustivirgatus	ATAAAGAT	CAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAATT - - -	TATTTCTATT			
Pisauridae_Pisaura bicornis	GTTTAAGT	CAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGAATT - - -	TATTTTATTT			
Salticidae_Carrhotus xanthogramma	ATTTAGGT	CAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGAAA - - - -	TATTTGTATT			
Salticidae_Cheliceroides longipalpis	GTTTAAGT	CAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATATCTCAT	ATAGTGAATT - - -	TATATTAAAT			
Salticidae_Dendryphantes sp	ATTAAGGT	CAGCTATA - - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGAA - - - - -	TAAATAATT			
Salticidae_Epeus albo guttatus	AATTAAGT	TAAGCTAATTT - - -	AAGCTA	AATGAGTT	T CATATCTC	ACAAATGAAAT - - -	TATTATAATT			
Salticidae_Evarcha sp	AATTAAGT	CAGCTAACT - - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGAATT - - -	TATATTAAAT			
Salticidae_Habronattus oregonensis	GTTAAGAT	CAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGAATT - - -	AATTTTATTT			
Salticidae_Heliophanus lineiventris	AATTTAGT	CAGCTAATT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	ATATGAATT - - -	AATAATAATT			
Salticidae_Plexippus paykulli	ATCTAAGT	CAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGAATAA - - -	AATAGTGATT			
Salticidae_Telamonia vijlmi	AATAAAGT	CAGCTAAAT - - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGAATGA -	AATATTATTT			
Selenopidae_Selenops bursarius	ATTAAGAAT	CAGCTAATT - - - -	AAGCTA	AATGAGTT	T CATATCTCAT	AAATGAATA - - -	AATCTCATTT			
Sciaridae_Loxosceles rufescens	AATAAAGT	CAGCTATTT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAAAGGA - - - -	TTGATTATCC			
Selenopidae_Loxosceles similis	ATATGGGT	TAAGCTAATC - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAAA - - - -	AATTTATTTCC			
Sparassidae_Heteropoda venatoria	ATATAAGT	CAGCTAATT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGATTA - - -	TATAGTTTCT			
Tetragnathidae_Leucauge celebesiana	TGTATAGT	CAGCTAATT - - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGA - - - - -	GTTAATTTCT			
Tetragnathidae_Tetragnatha maxillosa	AATATTAT	CAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAAA - - - -	AATTTCTTAT			
Tetragnathidae_Tetragnatha nitens	AATATAAT	CAGCTAATA - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	ATATGAAAT - - -	TATCTCATAT			
Theraphosidae_Ornithoctonus huwena	TAATAAAGT	TAAGCTAATAA -	AAAGCTA	AATGGGT	T CATACCTCAT	AAATGGA - - - -	AATGATAGCT			
Theraphosidae_Chrysso nordica	AATTAAGT	TAAGCTAATTT - - -	AAGCTA	AATGGGT	T CATACCTCAT	AAATGAAATTT -	TATTTTAAGT			
Thomisidae_Heriaeus melloteei	ATTAAGAAT	CAGCTATTT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAATTTAT	ATATTTGTTA			
Thomisidae_Misumenops tricuspidata	ATTTATAGT	CAGCTATTT - - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAATTAAT	TTTATAATT			
Thomisidae_Oxytate striatipes	ATTAAGGT	CAGCTATTTT - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAATTAAT	CTTTTGTGTT			
Thomisidae_Thomisus onustus	ATTAAGGT	CAGCTATTTT - - -	AAGCTA	AATGAGTT	T CATACCTCAT	AAATGAATTAAT	TTTGAATT			
Titanoecidae_Titanoeca sp	ATTAATAAT	TAAGCTATTTGT - -	AAGCT	GATGGGT	T CATACCTCAT	ATAAGTGAT - - -	TATTTATATAT			
Consensus										
Occupancy										

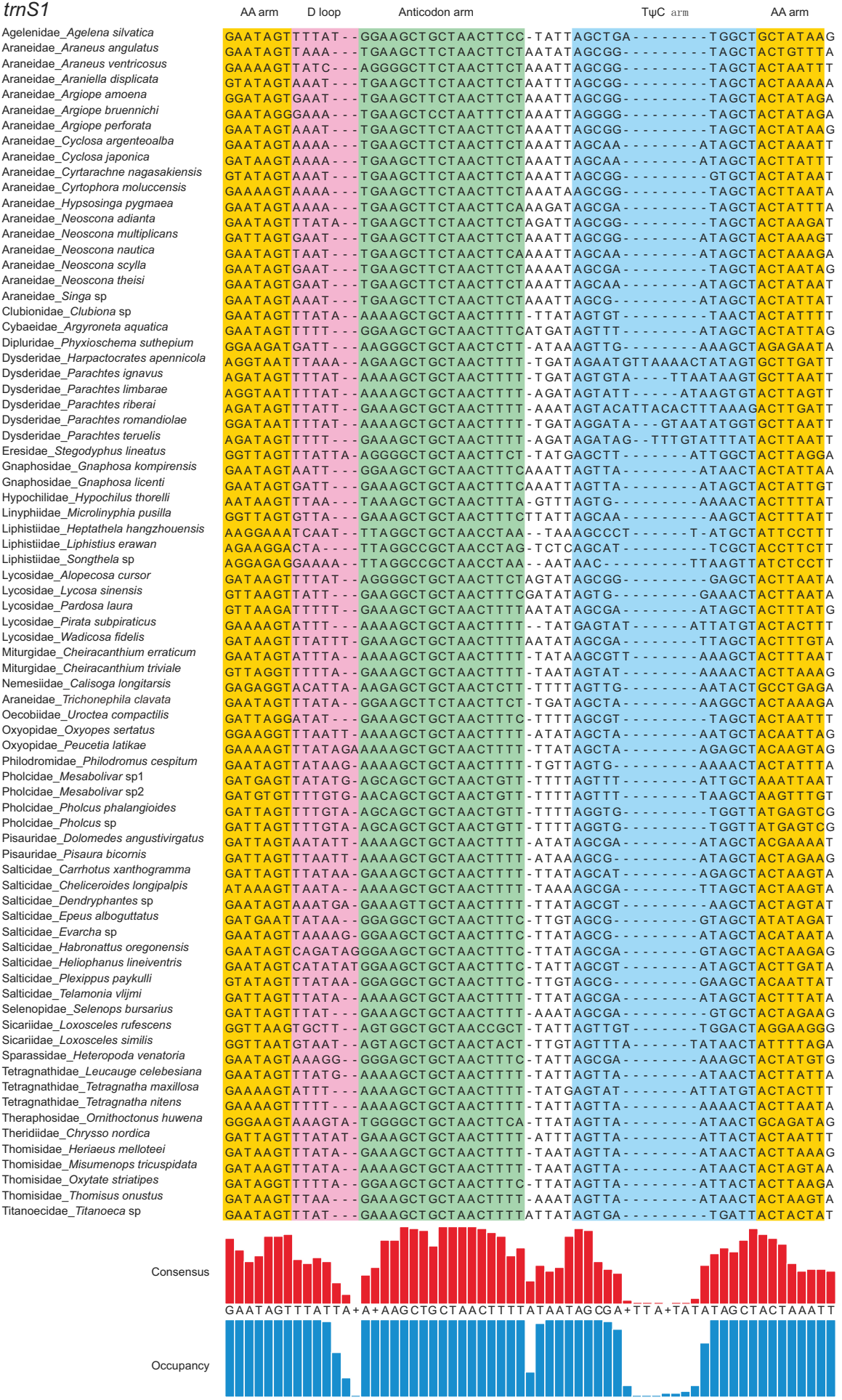
tRNA	AA arm				DHU arm				Anticodon arm				TψC arm				AA arm																							
Agelenidae_Agelena silvatica	T	G	A	G	A	T	A	A	G	C	T	T	-	-	-	-	T	A	G	A	G	T	A	A	C	A	A	C	A	C	C	C	C	A	C					
Araneidae_Araneus angulatus	A	A	T	A	T	-	A	A	G	C	T	T	-	-	-	-	-	T	G	C	A	-	A	T	T	C	A	T	T	A	A	A	G	T	T	A	A			
Araneidae_Araneus ventricosus	G	A	T	T	A	T	G	-	A	A	G	C	A	T	-	-	-	-	A	G	C	A	T	T	C	A	T	T	G	A	G	T	T	A	A	G	T	T		
Araneidae_Araniella displicata	A	G	A	T	T	T	G	-	A	A	G	C	A	T	-	-	-	-	A	G	C	A	T	T	C	A	T	T	G	A	T	T	T	T	T	T	T	T		
Araneidae_Archiele amoena	G	A	T	T	A	T	G	-	A	A	G	C	T	-	-	-	-	-	A	G	C	A	T	T	C	A	T	T	G	A	T	T	T	A	A	G	T	T	T	
Araneidae_Araneus bruennichi	G	A	T	T	A	T	G	-	A	A	G	C	A	T	-	-	-	-	T	G	C	A	-	A	T	T	C	A	T	T	G	A	T	T	T	T	T	A	A	
Araneidae_Archiele perforata	G	A	T	T	A	T	G	-	A	A	G	C	A	T	-	-	-	-	A	G	C	A	T	T	C	A	T	T	G	A	T	T	T	T	T	T	T	T	A	
Araneidae_Cyclosa argenteoalba	A	G	A	T	T	A	A	-	A	A	G	C	A	T	-	-	-	-	A	G	C	A	-	A	T	T	C	A	T	T	A	A	A	A	G	T	T	A	A	
Araneidae_Cyclosa japonica	A	G	A	T	T	A	T	-	A	A	G	C	T	-	-	-	-	-	T	G	C	A	-	A	T	T	C	A	T	T	G	A	T	T	T	T	A	A		
Araneidae_Cyrtarachne nagasakiensis	G	A	T	T	A	T	A	-	A	A	G	C	T	-	-	-	-	-	A	T	T	-	A	T	T	C	A	T	T	G	A	T	T	T	T	T	T	T	A	
Araneidae_Cyrtophora moluccensis	A	G	A	T	T	A	-	A	A	G	C	A	T	-	-	-	-	-	A	G	C	A	-	A	T	T	C	A	T	T	G	A	T	T	T	T	T	T	T	
Araneidae_Cyclosa pygmaea	G	A	T	T	A	T	G	-	A	A	G	C	A	T	-	-	-	-	A	G	C	A	-	A	T	T	C	A	T	T	G	A	T	T	T	T	A	A	G	T
Araneidae_Neoscona adianta	G	A	T	T	A	T	-	A	A	G	C	T	-	-	-	-	-	-	A	G	C	A	-	A	T	T	C	A	T	T	G	A	T	T	T	T	T	T	T	
Araneidae_Neoscona multiplicans	G	A	T	T	A	T	-	A	A	G	C	A	T	-	-	-	-	-	A	G	C	A	-	A	T	T	C	A	T	T	G	A	T	T	T	T	T	T	T	
Araneidae_Neoscona nautica	A	G	A	T	T	A	-	A	A	G	C	A	-	-	-	-	-	-	T	G	C	A	-	A	T	T	C	A	T	T	A	T	A	T	T	T	T	T	T	
Araneidae_Neoscona scylla	G	A	T	T	A	T	-	A	A	G	C	T	-	-	-	-	-	-	A	G	C	A	-	A	T	T	C	A	T	T	G	A	T	T	T	T	T	T	T	
Araneidae_Neoscona theisi	G	A	T	T	A	T	-	A	A	G	C	T	-	-	-	-	-	-	A	G	C	A	-	A	T	T	C	A	T	T	G	A	T	T	T	T	T	T	T	
Araneidae_Singa sp	T	A	T	T	A	T	G	-	A	A	G	C	A	T	-	-	-	-	T	G	C	A	-	A	T	T	C	A	T	T	G	A	T	T	T	T	T	T	T	
Clubionidae_Clubiona sp	A	A	A	T	A	G	A	G	A	C	A	T	-	-	-	-	-	-	T	T	G	G	C	T	T	T	A	T	T	G	T	A	A	T	A	A	A	A		
Cybaeidae_Argyroneta aquatica	T	G	A	A	T	A	A	G	C	T	-	-	-	-	-	-	-	-	G	A	G	G	C	T	T	C	A	T	T	G	T	T	A	A	T	A	A	T		
Dipluridae_Phyxiosoma suthepium	T	A	G	A	G	G	A	G	A	C	T	A	A	T	T	A	T	A	A	G	C	G	T	T	T	C	A	G	T	T	A	A	G	A	A	G	-	A	G	
Dysderidae_Harpactocrates apennicola	T	G	T	T	A	A	T	A	G	C	T	-	-	-	-	-	-	-	T	A	T	A	G	C	G	C	T	T	C	A	A	T	G	T	A	A	T	A	A	
Dysderidae_Parachtes ignavus	T	T	G	T	T	A	A	T	A	G	C	T	-	-	-	-	-	-	A	A	T	T	A	G	C	G	A	T	T	C	A	A	T	G	T	A	A	G	C	T
Dysderidae_Parachtes limbare	T	A	T	G	T	T	-	A	A	G	C	G	T	-	-	-	-	-	T	G	T	T	G	G	C	G	T	T	C	A	A	T	G	T	A	A	G	A	A	
Dysderidae_Parachtes riberaei	C	A	T	A	A	T	A	A	G	C	T	-	-	-	-	-	-	-	A	A	T	A	G	C	G	T	T	C	A	A	T	G	T	A	A	G	A	A	A	
Dysderidae_Parachtes rolandiae	A	T	G	T	T	G	T	T	A	G	C	T	-	-	-	-	-	-	T	A	T	A	G	C	G	T	T	C	A	A	T	G	T	A	A	G	C	T	A	
Dysderidae_Parachtes terueli	A	T	T	T	A	T	G	T	A	G	C	T	-	-	-	-	-	-	T	A	T	A	G	C	G	T	T	C	A	A	T	G	T	A	A	G	A	A		
Eresidae_Stegodyphus lineatus	A	A	T	A	G	A	T	A	A	G	C	T	-	-	-	-	-	-	T	A	A	G	C	G	A	T	T	C	A	A	T	G	T	A	A	G	A	A		
Gnaphosidae_Gnaphosa komprensiv	A	T	T	G	T	A	T	A	G	A	C	A	-	-	-	-	-	-	T	T	G	C	A	-	A	T	T	C	A	T	T	G	T	A	A	G	A	A		
Gnaphosidae_Gnaphosa licenti	T	A	A	T	T	A	T	A	G	C	A	-	-	-	-	-	-	-	T	T	A	G	C	G	A	T	T	C	A	A	T	G	T	A	A	G	A	A		
Hypoichilidae_Hypoichilus thorelli	G	T	T	C	A	A	A	T	A	G	C	T	-	-	-	-	-	-	T	T	A	G	C	T	G	T	C	T	A	A	T	G	A	A	A	A	A	A		
Linyphiidae_Microlinyphia pusilla	T	A	T	T	A	T	-	A	A	G	C	A	-	-	-	-	-	-	T	T	G	C	A	-	G	C	C	A	T	T	T	T	T	T	T	T	T	T		
Linyphiidae_Heptathela hangzhouensis	T	T	A	A	T	A	T	A	G	-	-	-	-	-	-	-	-	-	G	A	G	G	-	T	T	C	A	T	T	T	T	T	T	T	T	T	T	T		
Liphistiidae_Liphistius erawan	T	T	A	A	T	A	G	-	A	A	G	C	A	-	-	-	-	-	T	T	A	G	C	T	T	C	A	T	T	G	T	A	A	G	A	A	A	A		
Liphistiidae_Songthela sp	T	T	A	A	T	A	G	-	A	A	G	C	C	-	-	-	-	-	C	A	G	G	-	T	T	T	C	A	T	T	T	T	T	T	T	T	T	T		
Lycosidae_Alopecosa cursor	A	T	T	T	T	A	A	G	A	C	T	-	-	-	-	-	-	-	C	T	A	T	A	G	C	G	T	T	T	C	A	T	T	T	T	T	T	T		
Lycosidae_Lycosa sinensis	A	T	T	T	T	A	A	G	A	C	T	-	-	-	-	-	-	-	T	T	A	A	G	C	A	T	T	T	T	T	T	T	T	T	T	T	T	T		
Lycosidae_Pardosa laura	T	T	T	T	T	A	A	G	A	C	T	-	-	-	-	-	-	-	A	T	A	A	G	C	G	T	T	T	T	T	T	T	T	T	T	T	T	T		
Lycosidae_Pirata subpiraticus	A	G	A	T	T	T	-	A	A	G	C	T	-	-	-	-	-	-	T	C	A	G	C	A	A	T	T	T	T	T	T	T	T	T	T	T	T	T		
Lycosidae_Wadicosa fidelis	T	T	T	T	T	A	A	G	A	C	T	-	-	-	-	-	-	-	T	A	A	G	C	G	T	T	T	T	T	T	T	T	T	T	T	T	T	T		
Miturgidae_Cheiracanthium erraticum	T	A	G	A	T	A	-	A	A	G	C	A	-	-	-	-	-	-	A	A	T	A	G	C	G	-	-	-	-	-	-	-	-	-	-	-	-	-		
Miturgidae_Cheiracanthium triviale	A	T	A	G	A	T	A	-	A	A	G	C	A	-	-	-	-	-	A	A	A	T	A	G	C	T	-	-	-	-	-	-	-	-	-	-	-	-		
Nemesiidae_Calisoga longitarsis	A	A	G	G	A	A	T	A	A	G	C	T	-	-	-	-	-	-	T	T	G	G	C	G	T	T	T	C	A	A	T	G	T	A	A	G	A	A		
Araneidae_Trichonephila clavata	A	G	A	T	T	A	-	A	A	G	C	A	-	-	-	-	-	-	A	A	T	A	G	C	A	-	-	-	-	-	-	-	-	-	-	-	-	-		
Oecobiidae_Uroctea compactilis	G	T	A	A	A	-	A	A	G	C	A	-	-	-	-	-	-	-	G	A	G	C	G	A	C	T	A	T	T	T	T	T	T	T	T	T	T	T		
Oxyopidae_Oxyopes sertatus	G	T	T	A	A	T	A	G	A	C	T	-	-	-	-	-	-	-	T	A	A	G	C	G	T	T	T	C	A	A	T	G	A	A	A	A	A	A		
Oxyopidae_Peuceitia latikae	T	A	G	A	T	T	-	A	A	G	C	T	-	-	-	-	-	-	T	A	A	G	C	G	T	T	T	T	T	T	T	T	T	T	T	T	T	T		
Phidoluridae_Philodromus cespitum	T	A	T	T	A	A	G	A	C	T	-	-	-	-	-	-	-	-	T	T	A	G	C	G	T	T	T	T	T	T	T	T	T	T	T	T	T	T		
Pholcidae_Mesabolivar sp1	G	A	A	T	T	T	-	A	A	G	C	T	-	-	-	-	-	-	A	T	G	T	A	G	T	G	T	C	A	T	T	G	T	A	G	T	A	A		
Pholcidae_Mesabolivar sp2	T	T	G	T	T	A	-	A	T	T	A	G	C	T	-	-	-	-	T	T	A	G	C	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T		
Pholcidae_Pholcus phalangoides	T	T	T	A	A	G	A	C	T	-	-	-	-	-	-	-	-	-	G	G	T	A	G	C	G	T	T	T	T	T	T	T	T	T	T	T	T	T		
Pholcidae_Pholcus sp	A	T	G	T	A	A	G	A	C	T	-	-	-	-	-	-	-	-	G	G	T	A	G	C	G	T	T	T	T	T	T	T	T	T	T	T	T	T		
Pisauridae_Dolomedes angustivirgatus	A	T	T	T	A	A	-	A	A	G	C	T	-	-	-	-	-	-	T	A	A	G	C	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Pisauridae_Pisaura bicornis	G	A	T	T	A	T	A	G	A	C	T	-	-	-	-	-	-	-	T	A	A	G	C	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Salticidae_Carrhotus xanthogramma	G	A	A	A	A	A	-	A	A	G	C	T	-	-	-	-	-	-	T	T	A	G	C	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Salticidae_Cheliceroides longipalpis	T	A	A	T	T	A	-	A	A	G	C	A	-	-	-	-	-	-	T	A	A	G	C	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Salticidae_Dendryphantes sp	T	T	A	A	A	G	A	C	A	-	-	-	-	-	-	-	-	-	A	T	A	G	C	A	-	-	-	-	-	-	-	-	-	-	-	-	-			
Salticidae_Epeus albo guttatus	T	A	G	A	T	T	A	G	A	C	T	-	-	-																										

AA arm

Occupancy

trnQ	AA arm	DHU arm	Anticodon arm	TψC arm	AA arm		
Agelenidae_Agelena silvatica	TCTGTTACAGTGTT	---ATTGCACGT	AAAAAATTTGATTTTT	AAAGAGATGA	---TATCATCTATCAGAA		
Araneidae_Araneus angulatus	TTTGTTAAAGTTTC	----ACACTT	AAAAAATTTGATTTTT	AAATAGATTT	---AAATATCTAACAAA		
Araneidae_Araneus ventricosus	TTTGTTAAAGTGTT	---AGGCACAT	AAAAAATTTGATTTTT	AAAGGAGCAA	---AACTTGCCTAACAAA		
Araneidae_Araniella displicata	TTTGTTAAAGTGTT	---CAGCACAT	AAAAAATTTGATTTTT	AAAGGGATTT	---AAATATCTAACAAA		
Araneidae_Argiope amoena	TTTGTTAAAGTGTT	---AAGCACTT	AAAAAATTTGATTTTT	AAAGAGACTAA	AAAAGTATCTAACAAA		
Araneidae_Argiope bruennichi	TTTGTTAAAGTGTT	---TAGCACTT	AAAAAATTTGATTTTT	AAAGAGATAT	---GAAAATATCTAACAAAT		
Araneidae_Argiope perforata	TTTGTTAAAGTGTT	---AGGCACAT	AAAAAATTTGATTTTT	AAAGAGATAT	---GAAAATATCTAACAAAT		
Araneidae_Cyclosa argenteoalba	TTTGTTAAAGTGTA	---GTGCACCT	AAAAAATTTGATTTTT	AAAGAGATT	---AAATATCTAACAAAT		
Araneidae_Cyclosa japonica	TTTGTTAAAGTGTT	---CTGCACCT	AAAAAATTTGATTTTT	AAAGAGATAT	---AAATATCTAACAAAT		
Araneidae_Cyrtarachne nagasakiensis	TTTGTTAAAGTGTC	---ACGCACAT	AAAAAATTTGATTTTT	AAAGAGATAG	---ATTTATCTAACAAAT		
Araneidae_Cyrtophora moluccensis	TTAGTTAAAGTGTT	---TTTGCACAT	AAAAAATTTGATCTTT	ATAGAGATAG	---ATTTATCTAACTTTT		
Araneidae_Hyposinga pygmaea	TTTGTTAAAGTGTT	---CAGCACAT	AAAAAATTTGATTTTT	AAAGAGATGG	---AAATATCTAACAAAT		
Araneidae_Neoscona adianta	TTTGTTATAGTGTC	---TAGCACAT	AAAAAATTTGATTTTT	AGGGGATAT	---AATATATCTAACAAAT		
Araneidae_Neoscona multiplicans	TTTGTTAAAGTGTT	---TAGCACAT	AAAAAATTTGATTTTT	ATAGAGATAT	---AAAATATCTAACAAA		
Araneidae_Neoscona nautica	TTTGTTAAAGTGTT	---TAGCACAT	AAAAAATTTGATTTTT	AAAGAGATAA	---AATATATCTAACAAAT		
Araneidae_Neoscona scylla	TTTGTTATAGTGTC	---TAGCACAT	AAAAAATTTGATTTTT	AAAGAGATAT	---AAAATATCTAACAAAT		
Araneidae_Neoscona theisi	TTTGTTAAAGTGTT	---TTGCACAT	AAAAAATTTGATTTTT	AAAGAGATAT	---AAAATATCTAACAAAT		
Araneidae_Singa sp	TTTGTTAAAGTGTT	---ACGCACCT	AAAAAATTTGATTTTT	AAAGAGATAT	---AAATATCTAACAAA		
Clubionidae_Clubiona sp	TTTGTTAAAGTGTT	---AGGCACAT	AAAAAATTTGATTTTT	AAAGAGATGA	---AACCATCTGACATAA		
Cybaidae_Argyrota aquatica	TCATTATAGTGTT	---TCGCGACAT	AAAAAATTTGATTTTT	AAAGTGATTT	---AATAATCTAATAGAA		
Dipluridae_Phyxioschema sutepium	TTTCATAAAGTGAA	TCACCTT	CACGTAAAAAATTTGAATTTT	AAATTGATGA	---AACCATTATGATAA		
Dysderidae_Harpactocrates apennicola	TTTATACAA	-----	---AATAGT	GAAAAATTTGATTTTT	ATCAAGACAG	---AAATGTCTGTTTATA	
Dysderidae_Parachtes ignavus	TTTACAAA	AAATTCG	-----	---TAAAAATTTGATTTTT	ATAATGACAG	---ACATGCTTACTTTA	
Dysderidae_Parachtes limbarae	GTTACAAA	-----	---AACCAT	AAAAAATTTGATTTTT	ATATAGACAG	---ATATGTCTTTTGCAC	
Dysderidae_Parachtes riberei	ATTTAAAAAATTTTA	-----	---TAAAAATTTGATTTTT	ATACAGACAG	---AATGCTCTTTTATA		
Dysderidae_Parachtes romandiola	CCTTACAAA	AAATTT	-----	---CATAAAAATTTGATTTTT	ATAAGGCAC	---AAGTGCCCTGTTTTT	
Dysderidae_Parachtes teruelis	TTTACAAA	AAAT	-----	---TACATAAAAAATTTGATTTTT	ATTTAGACAG	---ATATGTCTTTAACT	
Eresidae_Stegodyphus lineatus	TCCTAATAAGTGTT	---TTTGCACAT	AAAAAATTTGATTTTT	ATACAGAGATTT	---TTTATACTAATAGAA		
Gnaphosidae_Gnaphosa komprehnisi	TCCTATTATAGTGTT	---TAGCGACAT	AAAAAATTTGATTTTT	AAAGTGATGA	---ATTCATCTAATAGAA		
Gnaphosidae_Gnaphosa licenti	TCCTATTATAGTGTT	CTAT	GCACATAAAAAATTTGATTTTT	AAAGTGATGT	---AATCATCTAATAGAA		
Hypochilidae_Hypochilus thorelli	TATAACA	AAAGTG	-----	---AAACACTT	AAAAAATTTGATTTTT	AAATTTGATTA	---AATATACCTGTTCGTT
Linyphiidae_Microlinyphia pusilla	TTAGTTAAAGTGTT	-----	---ACACAT	AAAAAATTTGATTTTT	ATAATGATTT	---AGAGCTAACTTTA	
Liphistiidae_Heptathela hangzhouensis	TAGTATTTAGTTTT	-----	---ATAACAT	AAGATTTTGATTTCT	AAAATAATGG	---GGACATTAATACTAA	
Liphistiidae_Liphistis erawan	TAGTATTAAGGTAAA	-----	---TTTACGT	AAGATTTTGATTTCT	AAATTAATGG	---AGACATTTAAGCTAA	
Liphistiidae_Songthela sp	TAGTATTAGTTAA	-----	---ATAACAT	AAGATTTTGATTTCT	AGGATGATGG	---AAACATTAATACTAA	
Lycosidae_Alopecosa cursor	TCCTATTATGGTGTA	---ATAGCACAT	AAAAAATTTGATTTTT	AAAGAGATAA	---TTATATCTAATAGAA		
Lycosidae_Lycosa sinensis	TTTATTAAGGTGTT	---TTTGCACCT	AAAAAATTTGATTTTT	AAAGAGATAA	---ATTTTATCTAATAAAA		
Lycosidae_Pardosa laura	TTTATTAAGGTGTA	---CATGCACAT	AAAAAATTTGATTTTT	AAAGAGATAT	---ATTTATCTAATAAAA		
Lycosidae_Pirata subpiraticus	TCCTATTAAAGTGTA	---AATGCACAT	AAAAAATTTGATTTTT	ATAGAGATAT	---ATAATATCTAATAGAA		
Lycosidae_Wadicosia fidelis	TCCTATTAAAGTGTC	---GATGCACAT	AAAAAATTTGATTTTT	ATAGAGATAT	---ACTATATCTAATAGAA		
Miturgidae_Trichocanthium erraticum	CTACTAGGATGTT	---AAAGCACAT	AAAAAATTTGATTTTT	AAAGAAATGA	---AACCATT	CAGTAGTA	
Miturgidae_Cheiracanthium triviale	ACTACGGGGGTGTA	AAAAAGCACAT	AAAAAATTTGATTTTT	AAAGAAATGA	---ATTCATT	CAGTAGTA	
Nemesiidae_Calisoga longitarsis	TTTCCACA	AAAGTCTA	---CGAT	GACGCAAGATTTTGAGTTT	GAAGAGATGG	---ATACATCTGTGATCC	
Araneidae_Trichonephila clavata	CTTGTTAAAGTGTA	---TATGCACAT	AAAAAATTTGATTTTT	AAAGAGATTT	---AAATATCTAACAAAT		
Oecobiidae_Uroctea compactilis	TCCTATTAAAGTGTT	---AGCGCACAT	AAGAAATTTGATTTCT	AAAGAGATGG	---TAATCATCTAATAATT		
Oxyopidae_Oxyopes sertatus	TCCTATTAAAGTGCT	---TTTGCACAT	AAAAAATTTGATTTTT	ATAGAGATAT	---ATCATATCTAATTGAA		
Oxyopidae_Peucetia latikae	TCCTATTATAGTGTA	TC	CAGCACATAAAAAATTTGAATTTT	ATAGATAT	---TATATATCTAATAGAT		
Philodromidae_Philodromus cespitum	TCTGTTATAGTGTA	C-TAT	GCACATATAAATTTGATTTATA	AAAGTGG	-----ATTTCTAACAGAG		
Pholcidae_Mesabolivar sp1	TTCAATTAAGTGTA	-----	---TTCACAT	AAAAAATTTGATTTTT	AAAAAGGA	---AACTACCTAATTATT	
Pholcidae_Mesabolivar sp2	TCCTTTAAAGTGTT	---CAACT	CACGTA	AAAAAATTTGATTTTT	AAAAAGGA	---AATTACCTAATAATT	
Pholcidae_Pholcus phalangioides	TCAAACATAGTGTA	---AATAGCACCT	AAAAAATTTGATTTTT	AAAAAGAGG	-----AAATATCTGCCATT		
Pholcidae_Pholcus sp	TCAAACATAGTGTA	---AACAGCACCT	AAAAAATTTGATTTTT	AAAAAGAGG	-----GAACATCTGCCGTT		
Pisauridae_Dolomedes angustivirgatus	TCCTATTAAAGTGTA	---ACTTGCACG	AAAAAATTTGATTTTT	ATAGAGATAT	---ACTTATATCTAATAGAA		
Pisauridae_Pisaura bicornis	ATGTGTTATAGTGTT	---TTTGCACAT	AAAAAATTTGATTTTT	AAAGGGATAT	---TTATCTAACAAAT		
Salicidae_Carrhotus xanthogramma	TTTATTAAGGTGTC	---CTTGCACAT	GAAAGTTGATTTT	CAGGGAGATGT	---TAACATCTAATAAA		
Salicidae_Cheliceroides longipalpis	TTTATTAAGGTGTT	---TAAAAAAGCACAT	AAAAAATTTGATTTTT	AAAGTGATGA	---ATTCATCTAATAAAG		
Salicidae_Dendryphantès sp	TTTATTAAGGTGTT	---CTGCACAT	AAAAAATTTGATTTTT	AAAGGGATGT	---AAACATCTAATAATG		
Salicidae_Epeus alboguttatus	TTTATTAAGGTGTC	---TTCGCACAT	AAAAAATTTGATTTTT	CAGGGAGATGT	---TAACATCTATTAACT		
Salicidae_Evarcha sp	TTTATTAAGGTGTC	---TTCGCACAT	GAAAGTTGATTTT	CAAGGAGATGA	---ATCCATCTAATAATT		
Salicidae_Habronattus oregonensis	TTTATTAAGGTGTT	---CTTAAGCACAT	GAAAAATTTGATTTT	CAAGGAGATGT	---AATTCTATCTAATAATT		
Salicidae_Heliophanus lineiventris	TTTATTAAGGTGTA	---CTTGCACAT	GAAAAATTTGATTTT	CAGGGAGATGG	---AGACATCTAATAAAA		
Salicidae_Plexippus paykulli	TTTATTAAGGTGTT	---CCGCGACAT	GAAAAATTTGATTTT	CAAGGAGATGC	---TCTCATCTAATAAAT		
Salicidae_Telamonia viljimi	TTTATTAAGGTGTC	---TAAAGCACAT	GAAAAATTTGATTTT	CAAGGAGATGT	---TATTCTATCTAATAATT		
Selenopidae_Selenops bursarius	TCCTACTAAGGTGTC	---TAACGCGACAT	AAAAAATTTGATTTTT	AAAGAGATAG	---ATATATCTAGTAGAA		
Sicariidae_Loxosceles rufescens	TAGAATAAAGTGTC	---ACCACAT	AAAAAATTTGATTTTT	AAAGAGATAG	---AAATATCTATTTCTA		
Sicariidae_Loxosceles similis	AAGAATAAAGTCAT	-----	---CCATAGAAAT	TTGATTTT	CAAAAAGATAG	---CAATATCTATTTTCTA	
Sparassidae_Heteropoda venatoria	TCCTATTAAAGTGTC	---ATCGCACAT	AAAAAATTTGATTTTT	ATAGAT	---AATTATCTAATAAGAA		
Tetragnathidae_Leucauge celebesiana	AATGTTAAAGTGTT	---TTTGCACCT	AAAAAATTTGATTTTT	AAAGAGATAT	---AAATCTAACATTT		
Tetragnathidae_Tetragnatha maxilloso	TTTTAATTAGTGTA	---AACCGCACG	AAAAAATTTGATTTTT	AAAGAGGCT	---AATTAAATAAATTAATA		
Tetragnathidae_Tetragnatha nitens	TATTTAATTAGTGTC	---TTAGCACAT	AAAAAATTTGATTTTT	AAAGACTTTA	---AATCAATTAATAATT		
Theraphosidae_Ornithoctonus huwena	TTCTTAAAAAGTGAC	---ACCTCACG	TGGT	TTGGGCCACAAAAAGATGA	---AAACATCCTTCTTAA		
Theriidae_Chrysos nordica	AATATTAAGGTGTA	---ATTTGCACAT	AAAAAATTTGATTTTT	AAAGAGATGA	---AAACATCTAATTTTT		
Thomisidae_Heriaeus melleotiei	TCCTATTATAGTGTC	---CAGGCACAT	AAAAAATTTGATTTTT	AAAGAGATAA	---AATAAATCTAATAGAA		
Thomisidae_Misumenops tricuspidata	TCCTATTATGGTGTT	---ATTGCACAT	GAAACATTTGACTTT	CAAGAGATT	---AATAAATCTAATAGAA		
Thomisidae_Oxytate striatipes	TTTTTAAAAAGACTT	-----	---ATTTAACCTAAT	TTGATTTT	AAAAAACACAAATAAAAAGACT	AAAAA	
Thomisidae_Thomisus onustus	TCCTATTAAAGTGTT	---CAGGCACAT	AAAAAATTTGATTTTT	AAAGAGATTT	---TTAAATCTAATAGAA		
Titanoecidae_Titanoeca sp	TCCTATTACAGTGTA	-----	---CCACGT	AAAAAATTTGAATTTT	AAAAAGATT	---ATAAATCTAATAGAA	





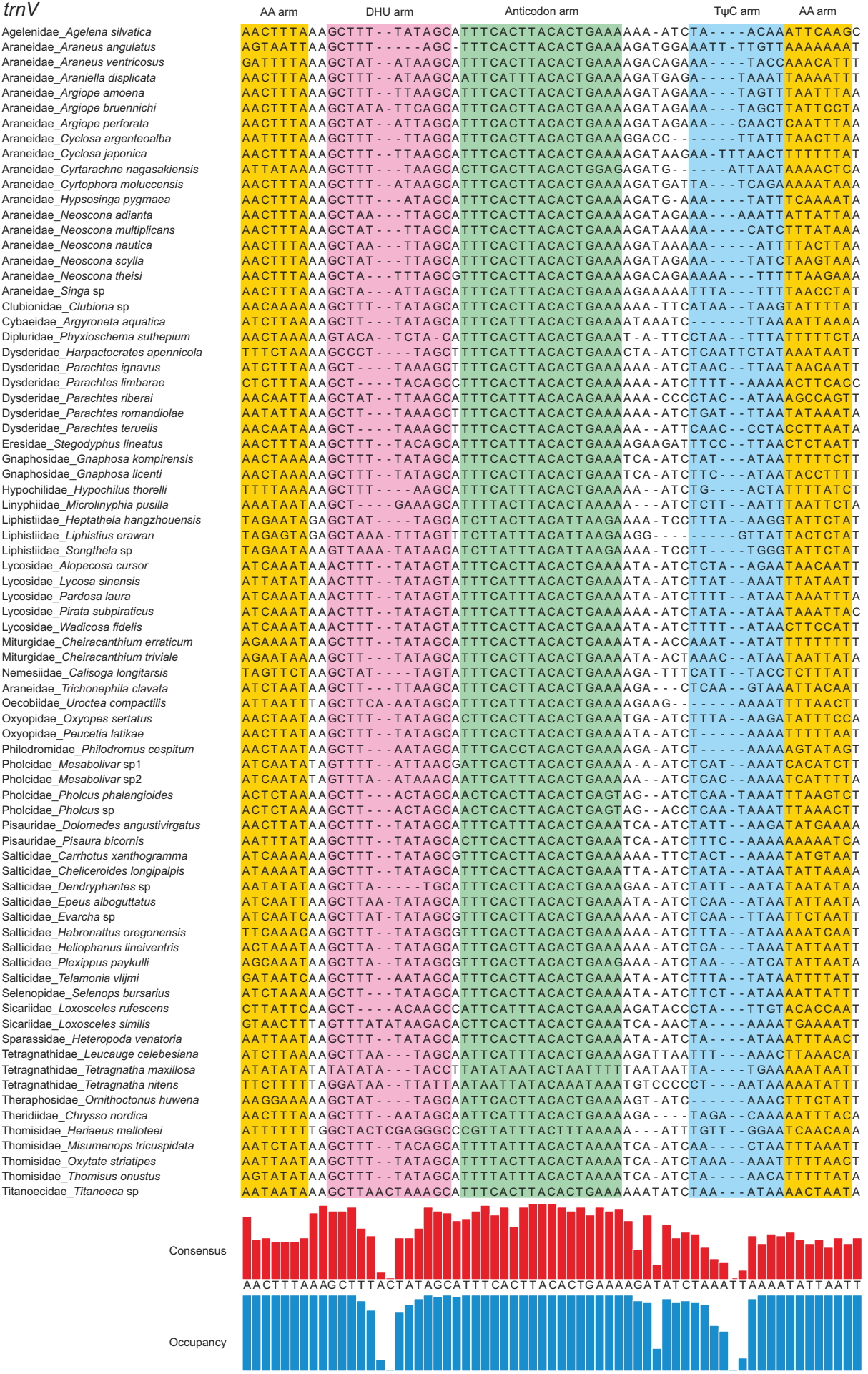
tsnS2	AA arm	D loop	Anticodon arm	TψC arm	AA arm
Agelenidae_Agelena silvatica	GATTTTATTTAAA	--ATTGTTTTGAAAGCAGT	--TTAT	AAGA-AAATATTTCTT	TAAAGTCT
Araneidae_Araneus angulatus	GATTTTATTGTTA	--AATGTTTTGAAAACATT	--TATT	AAGA--ATAATTTCTT	TAAATCA
Araneidae_Araneus ventricosus	GACTTTATATAA	--GATGTTTTGAAAGCATT	--TTACAAGA	--TAAGTATCTT	GAAGTCA
Araneidae_Araniella displicata	GATTTTATAATGAA	--GATGTTTTGAAAACATT	--TTAAAAGA	--AAAAGTTCTT	TAAAGTCA
Araneidae_Argiope amoena	GACTCGACTAAAA	--GATGTTTTGAAAACATT	--TTAT	AAGA--GGTAATCTT	TAGAGTCA
Araneidae_Argiope bruennichi	GATTCTATTTAAAA	--GATGTTTTGAAAGCATC	--TTATAAGA	--AATTCCTTT	TAGAGTCA
Araneidae_Argiope perforata	GACTCTATTA AAT	--GATGTTTTGAAAGCATT	--TTATAAGA	--GATAAATCTT	TAGAGTCA
Araneidae_Cyclosa argenteoalba	GGCCTTATAAATAA	--GGTGT TTTGAAAACATC	--TTTT	AAGA--TAAAACTTT	GGGGTCA
Araneidae_Cyclosa japonica	GGCTCTATGTAT	--AATGTTTTGAAAGCAAT	--TTTTAAGA	--GTATTCCTT	TGAAGCCA
Araneidae_Cyrtarachne nagasakiensis	GACTTTATTTTGAAA	--AATGTTTTGAAAGCATT	--TTAAAAGA	--ATAAATTTCTT	TAAAGTCA
Araneidae_Cyrtophora moluccensis	GATTTTATAACAA	--AATGTTTTGAAAACATT	--TTTTAAGA	--CTTAGTCTT	TAAAGTCA
Araneidae_Hypsosinga pygmaea	GGCTTTATAATAAA	--GGTGT TTTGAAAACACC	--TTATAAGA	--TATAATCTTT	TAAAGTCA
Araneidae_Neoscona adianta	GACTTTATATAAA	--ATTGTTTTGAAAGCAAT	--TTATAAGA	--ATAAATTTCTT	TAAAGTCA
Araneidae_Neoscona multiplicans	GATTTTATTGAG	--GTTGT TTTGAAAGCAAT	--CTAT	AAGA--GATAGTTCTT	TAAAGTCA
Araneidae_Neoscona nautica	GATTTTATTTAAA	--GTTGT TTTGAAAGCAAT	--TTATAAGA	--ATAAATTTCTT	TAAAGTCA
Araneidae_Neoscona scylla	GATTTTATAAAGAT	--GTTGT TTTGAAAGCAAC	--TTGT	AAGA--AATAGTTCTT	TAAAGTCA
Araneidae_Neoscona theisi	GACTTTATTTAAG	--GTTGT TTTGAAAGCAAC	--TTGAAGA	--AATAGTTCTT	TAAAGTCA
Araneidae_Singa sp	GACTTTATTTAAA	--GTTGT TTTGAAAGCAAC	--TTATAAGA	--AATATTTCTT	TGAAGTCA
Clubionidae_Clubiona sp	GGCTTTATTTAAA	--ATTATTTTGAAAATAAT	--TTATAAGA	--ATATCTT	TAAAGTTT
Cybaeidae_Argyroneta aquatica	GACTTTATGAAT	--ATTGT TTTGAAAGCAGT	--AGATAAGA	--ATGATTCCTT	TAAAGTCA
Dipluridae_Phyxioschema suthepium	AACCTCTATTT	--TTTGT TTTGAAAACAAA	--AGTTAAGA	--AAAACTTT	TAGAGTCG
Dysderidae_Harpactocrates apennicola	GATTTTATGATA	--AGTATTTTGAAAGTATT	--TAATAAAGG	--TTAGTCCTT	AAAAATTA
Dysderidae_Parachtes ignavus	GATTTTATAAA	--AGTATTTTGAAAATACT	--TAATAAAGG	--CAGGTTCTTT	TGATTTAA
Dysderidae_Parachtes limbarae	GATTTTATAGA	--GGTATTTTGAAAGTACC	--TGAGAAGG	--TTGATCCTTT	TAGTAATG
Dysderidae_Parachtes riberei	GATAATATAAA	--TGATTTTGAAAGTACT	--GTAGAAGG	--TAAGGTGCCTT	TATATAAA
Dysderidae_Parachtes romandiolae	GATTTTAGTAA	--AATATTTTGAAAATATT	--TAATAAAGG	--TTAGTCCTTT	TATATAAA
Dysderidae_Parachtes teruelis	GATTTTAGCA	--AGTATTTTGAAAATACA	--TAATAAAGG	--TTCTGCCTTT	TAAATAAA
Eresidae_Stegodyphus lineatus	GATTTTATGAAA	--AATGTTTTGAAAGCATT	--TAAGAAGG	--ATTATCCTT	AAAAATCA
Gnaphosidae_Gnaphosa compirensis	GACTTTATAATA	--ATTATTTTGAAAATAAT	--TAGGAAGA	--TAATCTT	TAAAGTCA
Gnaphosidae_Gnaphosa licenti	GACTTTATAATA	--GTTGT TTTGAAAACAGT	--TAGTAAGA	--TATTCCTT	TAAAGTCA
Hypochnilidae_Hypochnilus thorelli	ATTTCTATGAT	--TGTTGT TTTGAAAACACT	--TAGTAAGG	--TAACCTT	TAGTATTA
Linyphiidae_Microlinyphia pusilla	GACCTAAATTTA	--GTTGT TTTGAAAACAAAT	--TTTT	AAAG--AAAACTTTT	TAAGTCA
Liphistiidae_Hepathela hangzhouensis	GCCTAAATTTGGCA	--ATTGT TTTGAAAACAAAT	TAATTT	TAGGT--CTCCTAAGAGTTT	
Liphistiidae_Liphistius erawan	GCTTTTAGCA	--GTTGT TTTGAAAGCAAC	--GATTACAGG	--TCACCCT	AAGAGTTT
Liphistiidae_Songthela sp	GCCAATAGGCA	--ATTGT TTTGAAAGCAAA	--TTAAGA	--TTTATCT	AGGAGTTT
Lycosidae_Alopecosa cursor	GGCTTAGTTTA	--ATTGT TTTGAAAACAAAT	--TTATAAGA	--ATATTTCTT	TAAAGTCT
Lycosidae_Lycosa sinensis	GGCTTTATTTAA	--ATTGT TTTGAAAACAAAT	--TTTTAAGA	--AATTCCTT	TAAAGTCT
Lycosidae_Pardosa laura	GGCTTTATTTTA	--GTTGT TTTGAAAACAAAT	--TTTTAAGA	--AATATTTCTT	TAAAGTCC
Lycosidae_Phlocus subpurpicus	GGCTTTATTTTA	--GTTGT TTTGAAAACAAAT	--TTTTAAGA	--AATTTCTT	TAAAGTCT
Lycosidae_Wadicosa fidelis	GGCTTTATTTTA	--ATTGT TTTGAAAACAAAT	--TTTTAAGA	--AATTTCTT	TAAAGTCT
Miturgidae_Cheiracanthium erraticum	GATTTTATATTA	--ATTGT TTTGAAAGCAGT	--TATAAAGG	--ATTTCTT	TAAAGTCT
Miturgidae_Cheiracanthium triviale	GATTTTAAATTA	--ATTGT TTTGAAAACAGT	--TATGAAGA	--TAAATCTT	TGAAGTCT
Nemesiidae_Calisoga longitarsis	GGGTTCAATAAT	--GGTATTTTGAAAGTACT	--AGAGAAGG	--AATTCCTT	TGAACCGG
Araneidae_Trichonephila clavata	GATTTTAAATTTA	--AATGTTTTGAAAGCATT	--TTTTAAGGTT	CATATACCTT	TAAAGTCA
Oecobiidae_Pelata compactilis	GACTTTAGGAGT	--GGTGT TTTGAAAACATT	--TAATAAAGG	--GTACCTT	TAAAGTCT
Oxyopidae_Oxyopes sertatus	GACTTTATATAAA	--GTTGT TTTGAAAACAAAT	--TTATAAGA	--TTATTCCTT	TAAAGTCA
Oxyopidae_Peuceitia latiae	GACTTTAGTAATA	--ATTGT TTTGAAAACAGT	--TTTTAAGA	--GATATTCCTT	TAAAGTCT
Phidoluridae_Philodromus cespitum	GATTTTATTTAAA	--ATTGT TTTGAAAACAAAT	--TTGAAAGA	--TTAGTCTT	TAAAGTCA
Pholcidae_Mesabolivar sp1	GATTCTATAAATG	--GATATTTTGAAAGTATT	--CTATAAAGG	--TAATCTT	TGGCTTGA
Pholcidae_Mesabolivar sp2	GGTCTATATATG	--AGTATTTTGAAAGTACT	--CTATAAAGG	--TAATCTT	TGGTACAT
Pholcidae_Pholcus phalangoides	GATTCTAACATG	--GATGT TTTGAAAGCGTC	--CTTAAAGG	--TAATCTT	TGGCTGTG
Pholcidae_Pholcus sp	GATTCTAATAATG	--GGTGT TTTGAAAGCGCC	--CTTAAAGG	--TAATCTT	TGGCTGTG
Pisauridae_Dolomedes angustivirgatus	GACTTCATTATA	--GTTGT TTTGAAAGCAGC	--TTATAAGA	--ATGCTTCCTT	TAAAGTCT
Pisauridae_Pisaura bicornis	GATTTCAATTAATA	--ATTGT TTTGAAAACAGT	--TTATAAGA	--ATATTTCTT	TGAAGTCT
Salticidae_Carrhotus xanthogramma	GGCTTTAATTTAAA	--GCTATTTTGAAAGTAGT	--TTAAAAGG	--AAATTCCTT	TAAAGTTT
Salticidae_Cheliceroides longipalpis	GACTTTATTAATA	--ATTATTTTGAAAGTAGT	--TAATAAGA	--TTAAACTTT	TAAAGTCA
Salticidae_Dendryphantes sp	GCTTTATTTATA	--ATTATTTTGAAAATAAT	--TAATAAGA	--ATATTCCTT	TAAAGTCA
Salticidae_Epeus albo guttatus	GATTTTAAATATATA	--ATTATTTTGAAAATAAT	--TAATAAAGG	--ATTTCTT	TAAAATCA
Salticidae_Evarcha sp	GACTTTAATTATA	--ATTATTTTGAAAGTAAT	--TAAGAAGG	--ATTTCTT	TAAAGTCA
Salticidae_Habronattus oregonensis	GACTTTATTAATA	--ATTATTTTGAAAGTAAT	--TGATAAAGG	--ATTCCTT	TAAAGTAG
Salticidae_Heliophanus lineiventris	GACTTTAGTTATA	--GTTATTTTGAAAGTAAC	--TTGAAAGA	--TTTTCTT	TAAAGTCA
Salticidae_Plexippus pykulli	GGCTTTAAGTATA	--ATTATTTTGAAAGTAAT	--TAATAAAGG	--ATTTCTT	TAAAGTCA
Salticidae_Telamonina viljimi	GATTTTATTTATA	--ATTATTTTGAAAGTAAT	--TAAAAGG	--AATTCCTT	TAAAGTCG
Selenopidae_Selenops bursarius	GACTTTAATAG	--AATGTTTTGAAAGCAGT	--CGGGAAGG	--TTATTCCTT	TAAAGTCA
Sciaridae_Loxosceles rufescens	GTTTCTAGTAAC	--GGTATTTTGAAAGTACT	--AGGT	AAGG--GTAGCCTT	TAGGCAGT
Scleridae_Loxosceles similis	GATTTTATAAT	--TATGT TTTGAAAACATT	--GAATAAAGG	--CTGAGCCTT	TATAGTTG
Sparassidae_Heteropoda venatoria	GGCTTTATTTAAA	--GTTGT TTTGAAAGCAAT	--TAATAAGA	--TTAGTCTT	TAAAGTCA
Tetragnathidae_Leucauge celebesiana	GATCCTATTTA	--TATGT TTTGAAAGCATT	--TACT	AAGA--AATTTCTT	TAGGGTCA
Tetragnathidae_Tetragnatha maxillosa	GT TTTTATTTA	--AGTGT TTTGAAAACACT	--TCTAAGA	--AAAATTTTCTT	TAAAGGCCA
Tetragnathidae_Tetragnatha nitens	GT TTTTATAAA	--AGTGT TTTGAAAACACT	--TATCAAGG	--AAAAGTCCTT	TAGAGGCCA
Theraphosidae_Ornithoctonus huwena	GT TTTAGAAATT	--TCTATTTTGAAAGTGA	--ATATAAAGG	--ATTGCTCT	TGAAAGTG
Theridiidae_Chrysso nordica	GGCTTTATATTAGTAA	AATGT TTTGAAAAGCATT	--TTTTAAGA	--ATTTATCTT	TAAAGTCA
Thomisidae_Heriaeus meloteei	GACTTTATTTAAG	--GGTGT TTTGAAAGCATC	--TTATAAGA	--TAATCTT	TAAAGTCT
Thomisidae_Misumenops tricuspidata	GACTTTACTTTAA	--GATGT TTTGAAAGCATT	--TAATAAGA	--TAATCTT	TAAAGTCT
Thomisidae_Oxytate striatipes	GACTTTATTTAA	--GATATTTTGAAAATATC	--TATAAAGA	--TTAATCTT	TAAAGTCT
Thomisidae_Thomisus onustus	GACTTTACTAATA	--AATGT TTTGAAAGCATT	--TTTTAAGA	--TTATCTT	TAAAGTCT
Titanoecidae_Titanoeca sp	GGCTTTATATTT	--GATATTTTGAAAGTATC	--TATT	AAGA--AATGTTCTT	TGAAGTTT
Consensus	GACTTTATTAAAAAAATTTGTTTTGAAAGCAATTA+TTATAAGATAAAATATTCTTTAAAGTCA				
Occupancy					

tnT	AA arm	DHU arm	Anticodon arm	TψC arm	AA arm
Agelenidae_Agelena silvatica	TGTTGAT	TAGTTTAAAGT	AAAATAT	AAGTTTTGTAAGCTTA	--AGATCTAA--ATAAAGT
Araneidae_Araneus angulatus	GATTGAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTA	--AGAATCTAA--AAGGATCA	
Araneidae_Araneus ventricosus	TGTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGATTCCTAT--AGGCATCA	
Araneidae_Araniella displicata	TGTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGATCCTTAT--CGTTATCA	
Araneidae_Arpiope amoena	GGTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGATTCTAA--AGACATCA	
Araneidae_Arpiope bruennichi	GGTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGATTCCTAG--AAACATCA	
Araneidae_Arpiope perforata	AGTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGATTCTAA--AGACATCA	
Araneidae_Cyclosa argenteoalba	GGTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGAATCTAA--ATAGACCA	
Araneidae_Cyclosa japonica	GATTAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGAATCTAA--GAAGATCA	
Araneidae_Cyrtarachne nagasakiensis	GGTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGAATCTAA--TAAACATCA	
Araneidae_Cyrtophora moluccensis	GGTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGATTCTAA--TAAGATCA	
Araneidae_Hypsosinga pygmaea	GATTAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGCTTT	--AGAATCTAA--AAACATCA	
Araneidae_Neoscona adianta	GTTTGAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGATTCTAA--TATCATCA	
Araneidae_Neoscona multiplicans	GTTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGATTCTAT--AAGCATCA	
Araneidae_Neoscona nautica	GTTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AAGTTCCTAT--AAACATCA	
Araneidae_Neoscona scylla	GTTTGAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGATCCTAA--TAAACACCA	
Araneidae_Neoscona theisi	GTTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGAATCTAA--TAAACATCA	
Araneidae_Singa sp	TGTTAAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTT	--AGATTCCTAA--GAAGATCA	
Clubionidae_Clubiona sp	GTTTAAAT	TAGTTTAAAGT	AAAACAGAACTTTGTAAGCTTG	--TGATCTAT--ACAAAGAT	
Cybaeidae_Argyroneta aquatica	GATTGAT	TAGTTTAAAGT	AAAACAGAACTTTGTAAGCTTA	--AAATCTAA--TAGAAAA	
Dipluridae_Physioschema suthepium	AGTTAAAT	TAGTTTAAAGT	AAAATGAACTTTGTAAGCTTA	--AGGTCCTAG--ATTGAAAT	
Dysderidae_Harpactocrates apennicola	TAAATGTT	TGGTTTAAAGT	AAAACATAAACTTTGTAAGTTTA	--AAATCTAAT--TTAAAAAA	
Dysderidae_Parachtes ignavus	TAAATGTGTAGTTTAAAT	AAAACATGAGCTTTGTAAGTTTT	--TATTGTAA--ATATGTGA		
Dysderidae_Parachtes limbarae	TAAATGCCTGGTTTAAAGT	AAAACATAAACTTTGTAAGTTTA	--AGTTAAAA--AGACATAG		
Dysderidae_Parachtes riberaei	AAATGTGTAGTTTAAAGT	AAAACAGAACTTTGTAAGTTTA	--TTTTATAT--AAGAATGT		
Dysderidae_Parachtes romandiolae	TAAATGTGTGGTTTAAAGT	AAAACATAAACTTTGTAAGTTTA	--CATTACAA--AAATAGT		
Dysderidae_Parachtes teruelis	AAATGTGTAGTTTAAAGT	AAAATATAAACTTTGTAAGTTTA	--AGTTATAG--AATATGTA		
Eresidae_Stegodyphus lineatus	GAATATATAGTTTA	-TAAAAATATAAACTTTGTAAGTTTA	--AGATCTAA--AGGGAAAA		
Gnaphosidae_Gnaphosa komprensiv	GGTTTAT	TAGTTTAAAGT	AAAATAAAAGCTTTGTAAGTTTA	--AGATCTAA--TTATGTAA	
Gnaphosidae_Gnaphosa licenti	GGTTAAAT	TAGTTTAAAGT	AAAATAAAAGCTTTGTAAGTTTA	--AGATCTAA--TTATGTAA	
Hypochiilidae_Hypochiilus thorelli	TATTAAT	TAGTTTAAAGT	AAAATAGAACTTTGTAAGTTTC	--AGATCTAA--AAGAAGAA	
Linyphiidae_Microlinyphia pusilla	GTTAAAT	TAGTTTAAAGT	AAAATAAGAACTTTGTAAGTTTC	--AGACCTTTAATTGGTTA	
Liphistidae_Tetrathela hangzhouensis	GCTCTAA	TAGTTTAATT	AAAATATTGATTTGTAAGCTCAA	--AGATCCATT--TTGGAGCT	
Liphistidae_Liphistius erawan	GCTCTCATAGTTTAAATA	AAAACATCGACTTTGTAATTCGA	--AATTTTAT--ACAGAGCT		
Liphistidae_Songthela sp	GCTCTAA	TAGTTTAAATA	AAAATATTGATTTGTAATTCTA	--AGATTTAT--TTAGAGCT	
Lycosidae_Alopecosa cursor	GATTGGT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AGATTTAAG--ATAGTGAA	
Lycosidae_Lycosa sinensis	GATTGGT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AAATTTTAA--AAAAAAA	
Lycosidae_Pardosa laura	GATTGGT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AAATTTAA--TTAAGTAG	
Lycosidae_Pirata subpiraticus	GATTGGT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AAATTTTAA--TTAAATAA	
Lycosidae_Wadicosa fidelis	GATTGGT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AAATTTAA--TTAAATAT	
Miturgidae_Cheiracanthium erraticum	TACTAAT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AGAAGTTAT--ATAAATGA	
Miturgidae_Cheiracanthium triviale	TATTAAT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTAAGAAGGATTA	--ATAAATAT--ATAAATAT	
Nemesiidae_Calisoga longitarsis	GGGATAT	TAGTTTAAAGT	ATAACGCAAGCTTTGTAAGTTTA	--AGATCTAAT--GAATATTA	
Araneidae_Trichonephila clavata	GGTTAAT	TAGTTTAAAGT	AAAATAAAAACTTTGTAAGTTTA	--AGATCTATAAGAAATTA	
Oecobiidae_Uroctea compactilis	ATAGAGT	TAGTTTAAAGT	AAAATAGAACTTTGTAAGTTTC	--AGATTTAAG--AAAAATAA	
Oxyopidae_Oxyopes sertatus	GGTTGAT	TAGTTTAAAGT	AAAACGTAATTTTGTAAGTTTA	--ATTTCTAT--AAAAATAA	
Oxyopidae_Peuceitia latikae	GGTTGAT	TAGTTTAAAGT	AAAACATAAATTTTGTAAGTTTA	--TATTTCTAA--AATCATAT	
Philodromidae_Philodromus cespitum	GTTAAAT	TAGTTTAAAGT	AAAACACAGATTTTGTAAGCTA	--AGATTCCTT--TTATAATT	
Pholcidae_Mesabolivar sp1	TGTTGAGT	TAGTTTATTTAAAAAT	GTAATTTTGTAATTTAAGAAG	-----AAATATTT	
Pholcidae_Mesabolivar sp2	GCTAGGGT	TAGTTTAAAT	AAAACATAAATTTTGTAATTTGAGAGG	-----TTATATTA	
Pholcidae_Pholcus phalangoides	GGTTGTT	TAGTTTAGGT	AAAACAGGGGCTTGTAATCCTTGACGACTAGA	--GTATAGCC	
Pholcidae_Pholcus sp	GGTTGTT	TAGTTTAGGT	AAAACAGGGGCTTGTAATCCTTGACGAGCTAGA	--GTATAGCC	
Pisauridae_Dolomedes angustivirgatus	GATTGGT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--TGATCTAT--TGATAATT	
Pisauridae_Pisaura bicornis	GTTTGAT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AATTCCTAA--AATAATAG	
Salticidae_Carrhotus xanthogramma	AGTTGAT	TAGTTTAAAGT	--AAACAAAGGCTTTGTAAGCTA	--AAATCTAA--ATATTGAA	
Salticidae_Cheliceroides longipalpis	GGTTAAT	TAGTTTAAAGT	AAAACAGAACTTTTGTAATTTTC	--AGTTCTAT--AAATTTA	
Salticidae_Dendryphantes sp	AGTTAAT	TAGTTTAAAGT	AAAACAGAGATTTTGTAAGCTA	--CGATTCCTAT--ATATTAAA	
Salticidae_Epeus albo guttatus	AGTTAAT	TAGTTTAAAGT	AAAACGAAATTTTGTAAGTTTA	--AGATCTAA--TTAAATTA	
Salticidae_Evarcha sp	GGTTAAT	TAGTTTAAAGT	AAGACAGAAATTTTGTAATTTTC	--AGATCTAA--ATATTGAT	
Salticidae_Habronattus oregonensis	GGTGAT	TAGTTTAAAGT	AAAACAGAGATTTTGTAATTTTC	--AAATCTAA--TTAAGAT	
Salticidae_Heliophanus lineiventris	TGTTAAT	TAGTTTAAAGT	AAAACGTAATTTTGTAATTTA	--TAATCTAG--AAATTTA	
Salticidae_Plexippus pykulli	GGTGAT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AGTTCTAT--ATATTTAT	
Salticidae_Telamonia vijikii	GGTGAT	TAGTTTAAAGT	AAAACAGAGATTTTGTAATTTTC	--AGTTCTAT--ATATTTAT	
Selenopidae_Selenops bursarius	AGTTGAT	TAGTTTAAAGT	AAAATAGAACTTTTGTAAGTTTA	--AGCTCTAA--ATGTTATA	
Sciaridae_Loxosceles rufescens	GGTTGTT	TAGTTTAGGT	AGAATGAGAGCTTTGTAAGCTCA	--AGGGGCTAG--AGAAATTT	
Sciaridae_Loxosceles similis	GTTTGTT	TAGTTTAAAGT	AGAATGGAGCTTTTGTAAGTCC	--ATGAGCTAA--AAATGATA	
Sparassidae_Heteropoda venatoria	GGTGAT	TAGTTTAAAGT	AAAATAGAACTTTTGTAAGTTTA	--AGATCTAA--TAAAAAAA	
Tetragnathidae_Leucauge celebesiana	GGCTAAT	TAGTTTAAAGT	AAAACGTAATTTTGTAAGTTTA	--AATTCCTAA--TAAGATAA	
Tetragnathidae_Tetragnatha maxillosa	TGTTGAT	TAGTTTAAAGT	AAAACATAAATTTTGTAAGTTTA	--AATTCCTAA--ATACTAAT	
Tetragnathidae_Tetragnatha nitens	TGTTAAT	TAGTTTAAAGT	AAAACATAAACTTTTGTAAGTTTA	--AATTG---ATAAAGAA	
Theraphosidae_Ornithoctonus huwena	GATTAAT	TAGTTTAAAGT	AGAAACGTAATTTTGTAATTTA	--AAGTCTAA--GAAGGATG	
Theridiidae_Chrysso nordica	TATAAGT	TAGTTTAAAGT	AAAACATAAATTTTGTAAGTTTA	--AATTCCTAT--AAAGATAA	
Thomisidae_Heriaeus melloteei	GTTGAGT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--TAATTCCTAT--TTAAAAAA	
Thomisidae_Misumenops tricuspidata	GTTAAGT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AGATTCCTAT--TTAAAAAG	
Thomisidae_Oxyteta striatipes	ATTAAGT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AAATTCCTAA--AAAAATAA	
Thomisidae_Thomisus onustus	GTTTAGT	TAGTTTAAAGT	AAAACATAAATTTTGTAATTTA	--AAATTCCTAT--TAAAATGA	
Titanoecidae_Titanoeca sp	TTCTGAT	TAGTTTAAAGT	AAAAACATTAATTTTGTAATTTAA	--AAATCTAT--TTTTGTTT	

Consensus

GGTTAATTAGTTTAAAGTAAAAACATAAATTTTGTAAGTTTAAGAAA+TCTAATAAAAAATAA

Occupancy



trnW	AA arm			DHU arm			Anticodon arm			TψC arm			AA arm		
Agelenidae_Agelena silvatica	AGAATAA	TAGATAA	-TAATTCT	ATTAGCTTT	CAAGGTT	AAAAGT	GTA	-	-	-	-	-	ATCTTAT	A	
Araneidae_Araneus angulatus	GGTAAAT	TAGGATAT	-AAATTCT	ATTAGT TTT	CAAGGCT	AGAGGAC	T	-	-	-	-	-	AAATTCAA		
Araneidae_Araneus ventricosus	AGTAAAT	TAGGATAT	-AAATTCT	ATTAGT TTT	CAAGGCT	AGAGGAC	T	-	-	-	-	-	AAATTCAA		
Araneidae_Araniella displicata	AGAATAT	TAGATAT	-ACATTCT	ATTAGT TTT	CAAAAC	TAAAAG	AGCT	-	-	-	-	-	AAATTCAA		
Araneidae_Argiope amoena	AAGTTAT	TAGGATAT	-AAATTCT	ATTAGT TTT	CAAAGCT	TAAAGG	AGCT	-	-	-	-	-	ATTTTCAA		
Araneidae_Argiope bruennichi	AGAAATAT	TAGGATAT	-AAATTCT	GTTAGT TTT	CAAGGCT	TAAGAG	AGCT	-	-	-	-	-	ATTTTCAA		
Araneidae_Argiope perforata	AGGTATAT	TAGGATAT	-AAATTCT	ATTAGT TTT	CAAGGCT	TAATGAG	AGCT	-	-	-	-	-	AATTTCAA		
Araneidae_Cyclosa argenteoalba	AAAAATAT	TAGGATAT	-AAATTCT	GTTAGT TTT	CAAAGCT	TAATGAG	AGCT	-	-	-	-	-	AATTTCAA		
Araneidae_Cyclosa japonica	AATATAT	TAGGATAT	-AAATTCT	GTTAGT TTT	CAAGGCT	TAAGAG	AGCT	-	-	-	-	-	ATTTTCAA		
Araneidae_Cyrtarachne nagasakiensis	AAAAATAT	TAGATAT	-AAATTCT	GCTAGT TTT	CAAGGCT	AGAGAG	AGCT	-	-	-	-	-	AAAAATCA		
Araneidae_Cyrtophora moluccensis	ATATATTA	GAAGAAA	-AAATTCT	GTTAGT TTT	CAAAAC	TAAAAG	TGCT	-	-	-	-	-	AATATTTCA		
Araneidae_Argiope pygmaea	AATATAT	TAGATAT	-AAATTCT	GTTAGT TTT	CAAAAC	TAAAAG	AGCT	-	-	-	-	-	ATATTTCAA		
Araneidae_Neoscona adianta	AGAATAT	TAGATAT	-AAATTCT	GTTAGT TTT	CAAGGCT	TAAAAG	AGCT	-	-	-	-	-	AATTTCAA		
Araneidae_Neoscona multiplicans	AGAAATAT	TAGATAT	-AAATTCT	GTTAGT TTT	CAAGGCT	TAAAAG	AGCT	-	-	-	-	-	AATTTCTC		
Araneidae_Neoscona nautica	AAAAATAT	TAGATAT	-AAATTCT	GTTAGT TTT	CAAGGCT	TAAAAG	AGCT	-	-	-	-	-	AATTTCAA		
Araneidae_Neoscona scylla	AGAATAT	TAGATAT	-AAATTCT	GTTAGT TTT	CAAGGCT	TAAAAG	AGCT	-	-	-	-	-	AATTTCA		
Araneidae_Neoscona theisi	AGAAATAT	TAGATAT	-AAATTCT	GTTAGT TTT	CAAGGCT	TAAAAG	AGCT	-	-	-	-	-	AATTTCAA		
Araneidae_Singa sp	TGAATAT	TAGGATAT	-AAATTCT	GTTAGT TTT	CAAGGCT	TAAAAG	AGCT	-	-	-	-	-	AATTTCAA		
Clubionidae_Clubiona sp	AAAAAT	TAAGGAT	- - TTGGTCT	GTTAGCTTT	CAAGGTT	TAAAGGT	GTT	-	-	-	-	-	ACTTATAT		
Cybaeidae_Argyroneta aquatica	AGAATAT	TAGATAA	-GAATTCT	ATTAGCTTT	CAAGGTT	TAAAGT	GTT	-	-	-	-	-	TGATATAA		
Dipluridae_Phixioschema suthepium	AAAGGAG	GAAGATT	- TGACATCT	AATAGTTTT	CAAGGCT	GGAT	AAGGG	-	-	-	-	-	TATGAAG		
Dysderidae_Harpactocrates apennicola	ACTTTTT	TAGAAA	- ATATTCT	ATTAAATTT	CAAGGTT	TAAAAG	TGCT	-	-	-	-	-	TATAAAGA		
Dysderidae_Parachtes ignavus	AATAATTT	TAGAAA	- ATATTCT	GTTAAATTT	CAAAGTT	TAAAAG	TGCT	-	-	-	-	-	AAAAAGAT		
Dysderidae_Parachtes limbarae	ATTGTTT	TAGAAA	- GTATTCT	GTTAAATTT	CAAAGTT	TAAAAG	TGTT	-	-	-	-	-	GAAGAAGT		
Dysderidae_Parachtes riberae	AGTGTTT	TAGAAA	- GTATTCT	GTTAAATTT	CAAAGTT	TAAAAG	TGTT	-	-	-	-	-	AAAAAGAT		
Dysderidae_Parachtes romandiolae	AATAGTTT	TAGAAC	- GTATTCT	GTTAAATTT	CAAAGTT	TAAAAG	TGTT	-	-	-	-	-	TTATAAG		
Dysderidae_Parachtes teruelis	AGTAATAT	TAGAAAT	- AATTTCT	ATTAAATTT	CAAAAT	TAAAAG	TGTT	-	-	-	-	-	AAAAAGAT		
Eresidae_Stegodyphus lineatus	AGAATAGT	TAGAAAAG	TGATTCT	ATTAACTTT	CAAGGTT	TAAAAT	TGGT	-	-	-	-	-	AAGCTAAA		
Gnaphosidae_Gnaphosa compirensis	ATTAATAT	TAGATAA	-AAATTCT	ATTAGCTTT	CAAAGTT	TAAAAG	TGCT	-	-	-	-	-	TATATGAA		
Gnaphosidae_Gnaphosa licenti	ATTAAAT	TAGATAA	-AATTTCT	ATTAGCTTT	CAAAGTT	TAAAAG	TGTT	-	-	-	-	-	TATATGAA		
Hypochoilidae_Hypochoilus thorelli	TTTAAAGT	TAGGATAA	-GTATTCT	ATTAGCTTT	CAAAGTT	TAAAGGT	GAG	-	-	-	-	-	AAATATGA		
Linyphiidae_Microlinyphia pusilla	ATAATAT	TAGGATA	- TTAGTCT	ATTGATTTT	CAAAGTT	CAAA	TGAAGT	-	-	-	-	-	TATCTAAT		
Liphistiidae_Heptathela hangzhouensis	AAGATTTT	TAGTTAA	TTTAAACT	AGAGACCTT	CAAAGCT	CAAA	TAT	-	-	-	-	-	AAGTCTTA		
Liphistiidae_Liphistius erawan	AAGATTTT	TAGTTAA	TTTAAACT	AGTAGCCTT	CAAAGCT	CAAA	TCAA	-	-	-	-	-	CAATCTTA		
Liphistiidae_Songthela sp	AAGATTTT	TAGTTAA	TTTAAACT	AGAGACCTT	CAAAGCT	CAAA	TAT	-	-	-	-	-	AAATCTTA		
Lycosidae_Alopecosa cursor	GTTTAT	TAGATAT	- - AGTCT	ATTAGCTTT	CAAGGTT	TAAAAG	TGTT	-	-	-	-	-	AATCTAAT		
Lycosidae_Lycosa sinensis	AATTTGT	TAGATAA	-TAATTCT	ATTAACTTT	CAAGGTT	TAAAAT	TGTT	-	-	-	-	-	AATCTAAT		
Lycosidae_Pardosa laura	AGTTTAT	TAGATAAGAA	ATTTCT	ATTAACTTT	CAAGGTT	TAAAAG	TGTT	-	-	-	-	-	AATCTAAT		
Lycosidae_Pirata subpiraticus	AGTTTAT	TAGATAA	-TAATTCT	ATTAGCTTT	CAAAGTT	TAAAAG	TGTA	-	-	-	-	-	AATCTAAT		
Lycosidae_Wadicosa fidelis	AGTTTAT	TAGATAA	-TAATTCT	ATTAGCTTT	CAAGGTT	TAAAAG	TGTA	-	-	-	-	-	TATTTAAA		
Miturgidae_Cheiracanthium erraticum	ATATAAT	TAGATAA	- ATGTTCT	GTTAGCTTT	CAAAGTT	TAAAAG	TGCTCT	-	-	-	-	-	AATGTGAA		
Miturgidae_Cheiracanthium triviale	ATATTAAT	TAGATAA	- ATGTTCT	GTTAACTTT	CAAGGTT	TAAAAG	TGCTCT	-	-	-	-	-	TATGTGAA		
Nemesiidae_Calisoga longitarsis	TATTGAGT	TAGATAT	-ATAATCT	ATTAGCTTT	CAAGGTT	TGT	TAAAGG	-	-	-	-	-	AACGGGGA		
Araneidae_Trichonephila clavata	AGTATAT	TAGATAA	-ATATTCT	GTTAGT TTT	CAAGGCT	TAAAAG	TACT	-	-	-	-	-	AATATCTA		
Oecobiidae_Uroctea compactilis	TATTAAAT	TAGATAA	-ATATTCT	ATTAGT TTT	CAAAGCT	TAAAAG	TGCT	-	-	-	-	-	AAATCTTT		
Oxyopidae_Oxyopes sertatus	AGGAAAGT	TAGATAT	- - GGTCT	ATTAAATTT	CAAGGTT	TAAAAG	TGTA	-	-	-	-	-	TACTAATA		
Oxyopidae_Peucebia latikae	AAGTATAT	TAGATAA	- TGTTTCT	ATTAAATTT	CAAAGTT	TAAAAG	TGTG	-	-	-	-	-	AATCTTAT		
Philodromidae_Philodromus cespitum	ATAATAT	TAGATAA	-TTATTCT	ATTAGT TTT	CAAAAC	TAAAAT	ATAC	-	-	-	-	-	AATCTAAT		
Pholcidae_Mesabolivar sp1	AATTTAAT	TAGGATA	TAATTTAGTCT	CTCAGTTT	CAAAAT	TGAAT	TGGG	-	-	-	-	-	AATAAAAG	AATTTACA	
Pholcidae_Mesabolivar sp2	ATGAAAAT	TAGGATA	TAATTTAGTCT	TTTAGTCTT	CAAAAT	TGAAT	TGGT	-	-	-	-	-	AGAAATTTACA		
Pholcidae_Pholcus phalangoides	AGAGGGG	TAGGAT	- ATCTAGTCT	AATAACCTT	CAAAGTT	TATAGGT	G	-	-	-	-	-	TATAAGATTTACA		
Pholcidae_Pholcus sp	AGAGGGA	TAGGAT	- ATCTAGTCT	AATAACCTT	CAAAGTT	TATAGGT	G	-	-	-	-	-	TATAAGATTTACA		
Pisauridae_Dolomedes angustivirgatus	GTGATAT	TAGATAA	-AAATTCT	GTTAACTTT	CAAGGTT	TAAAAG	TGCT	-	-	-	-	-	TTTTATAT		
Pisauridae_Pisaura bicornis	AGGAATAT	TAGATAA	-AATTTCT	ATTAACTTT	CAAGGTT	TAAAAT	TACT	-	-	-	-	-	GTACAAAT		
Salticidae_Carrhotus xanthogramma	ATAATAT	TAGATAT	-AAGTTCT	GTTAGCCTT	CAAAGCT	GAAAGT	GTA	-	-	-	-	-	ATCTTATG		
Salticidae_Cheliceroides longipalpis	ATAATAT	TAGATAA	-TAATTCT	ATTAACTTT	CAAAGTT	TAAAAT	TCT	-	-	-	-	-	ATCTTATG		
Salticidae_Dendryphantes sp	TATAATGT	TAGATAA	-TAATTCT	ATTAACTTT	CAAAGTT	TAAAAG	TGTA	-	-	-	-	-	ATCTAATG		
Salticidae_Epeus alboguttatus	GAAATAT	TAGGATAA	-ATATTCT	ATTAGCCTT	CAAAGTT	TAAAGAT	CT	-	-	-	-	-	ATCTTATG		
Salticidae_Evarcha sp	AGAATAT	TAGATAA	-TAATTCT	ATTAGCCTT	CAAAGTT	TAAAAG	TGTT	-	-	-	-	-	ATCTAATG		
Salticidae_Habronattus oregonensis	AGGATAT	TAGATAA	-TAATTCT	ATTAGCCTT	CAAAGTT	TAAAAG	TACT	-	-	-	-	-	ATCTAATG		
Salticidae_Heliophanus lineiventris	ATAATAT	TAGATAA	-AAATTCT	GTTAACTTT	CAAAGTT	TAAAAG	TCT	-	-	-	-	-	ATCTTATG		
Salticidae_Plexippus paykulli	AGAAATAT	TAGATAA	-TAATTCT	ATTAACTTT	CAAAGTT	TAAAAG	TGTT	-	-	-	-	-	ATCAAATG		
Salticidae_Telamonia vijimi	AAAATAT	TAGATAA	-TAATTCT	ATTAACTTT	CAAAGTT	TAAAAG	TGTT	-	-	-	-	-	ATCTAATG		
Selenopidae_Selenops bursarius	AAGATAT	TAGATAT	-TTATTCT	GTTAGCTTT	CAAGGTT	TAAAAG	TGCT	-	-	-	-	-	ATCTAATA		
Sciaridae_Loxosceles rufescens	AGTTGAT	CAGGATT	- - CAGGTCT	GTTAAATTT	CAAGGTT	TAAAGG	AGCTAT	-	-	-	-	-	GAAAAATTA		
Sciaridae_Loxosceles similis	AGATGTT	TAGGATA	- ATAACTT	TTAAATTT	CAAGGTT	TAAAGG	AGCTG	-	-	-	-	-	AATATTTA		
Sparassidae_Heteropoda venatoria	AGAATAT	TAGATAT	-AAATTCT	ATTAGCTTT	CAAGGTT	TAAAAG	TGTT	-	-	-	-	-	AAATCTTA		
Tetragnathidae_Leucauge celebesiana	AGAGTAT	TAGATAA	-TGATTCT	GTTAAATTT	CAAGATT	TAAAAG	TGCT	-	-	-	-	-	ATCTAAAA		
Tetragnathidae_Tetragnatha maxillosa	AGATATAT	TAGGATAA	- - AGTCT	GTTAGT TTT	CAAGATT	TAAAGGT	GTA	-	-	-	-	-	TATAATTA		
Tetragnathidae_Tetragnatha nitens	AAAAATAT	TAGGATA	- - TAGTCT	GTTAAATTT	CAAGATT	TAAAGG	AGTA	-	-	-	-	-	ATAATATA		
Theraphosidae_Ornithoconus huwena	AGAAAAGT	TAGATAA	-TAATTCT	ATTAACTTT	CAAGGTT	TAAAAG	TGGA	-	-	-	-	-	AAATAAAG		
Theridiidae_Chrysso nordica	AGGAATAT	TAGATAA	-TCATTCT	ATTAGCTTT	CAAGGTT	TAAAAG	TGCT	-	-	-	-	-	ATACTGAA		
Thomisidae_Heriaeus melloteei	AGTAAAGT	TAGATAT	-TAATCT	ATTAACTTT	CAAAGTT	GAAAAT	TG	-	-	-	-	-	AAGATTAA		
Thomisidae_Misumenops tricuspidata	AGTAAAGT	TAGATA	-TTAATCT	ATTAACTTT	CAAAGTT	TAAAAT	TGAA	-	-	-	-	-	TTGATTAA		
Thomisidae_Oxytate striatipes	ATTAAGT	TAGATA	- ATAACT	ATTAACTTT	CAAAGTT	TGAAAT	GTA	-	-	-	-	-	ATTTATTA		
Thomisidae_Thomisus onustus	AGTAAAGT	TAGATA	- -TAATCT	ATTAACTTT	CAAAGTT	GAAAAT	TGTA	-	-	-	-	-	TAAATTTG		
Titanoecidae_Titanoeca sp	ATAATAT	TAGATAT	-TTATTCT	ATTAGCTTT	CAAAGTT	TAAAAT	TGCT	-	-	-	-	-	TACTTATA		



Consensus

