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Electronic appendices are refereed with the text. However, no attempt has been made to impose a uniform style on the electronic appendices.

APPENDIX A:

Code	Higher Taxonomy	Species	Genbank Acc. #
Chordata			
Profile			
CH 1	Vertebrata; Actinopterygii	<i>Danio rerio</i>	NC_002333
CH 2	Vertebrata; Amphibia; Anura	<i>Xenopus laevis</i>	NC_001573
CH 3	Vertebrata; Dipnoi	<i>Protopterus dolloi</i>	NC_001708
CH 4	Vertebrata; Chondrichthyes	<i>Mustelus manazo</i>	NC_000890
CH 5	Vertebrata; Sauropsida; Crocodylidae	<i>Alligator mississippiensis</i>	NC_001922
CH 6	Vertebrata; Mammalia; Primates	<i>Homo sapiens</i>	NC_001807
CH 7	Vertebrata; Hyperoartia	<i>Lampetra fluviatilis</i>	NC_001131
CH 8	Vertebrata; Lepidosauria	<i>Dinodon semicarinatus</i>	NC_001945
CH 9	Hyperotreti	<i>Myxine glutinosa</i>	NC_002639
CH 10	Cephalochordata	<i>Branchiostoma floridae</i>	NC_000834
Test			
CH11	Vertebrata; Testudines	<i>Chelonia mydas</i>	NC_000886
CH12	Vertebrata; Amphibia; Caudata	<i>Mertensiella luschani</i>	NC_002756
CH13	Vertebrata; Sauropsida; Aves	<i>Struthio camelus</i>	NC_002785
CH14	Vertebrata; Mammalia; Cetartiodactyla	<i>Bos taurus</i>	NC_001567
CH15	Vertebrata; Actinopterygii; Teleostei	<i>Salmo salar</i>	NC_001960
Annelida			
Profile			
AN 1	Branchiobdellae	<i>Xironidrilus formosus</i>	AF310721
AN 2	Hirudinida; Glossiphoniidae	<i>Theromyzon bifarium</i>	AY047330
AN 3	Hirudinida; Hirudinidae	<i>Hirudo medicinalis</i>	U74067
AN 4	Hirudinida; Erpobdellidae	<i>Erpobdella testacea</i>	AF116027
AN 5	Oligochaeta; Tubificidae	<i>Tubifex tubifex</i>	U74076
AN 6	Oligochaeta; Lumbricidae	<i>Lumbricus terrestris</i>	NC_001673
AN 7	Oligochaeta; Megascolecidae	<i>Pontodrilus bermudensis</i>	AF003256
AN 8	Polychaeta; Alvinellidae	<i>Paralvinella palmiformis</i>	U74070
AN 9	Polychaeta; Eunicidae	<i>Marphysa sanguinea</i>	AY040708
AN 10	Polychaeta; Terebellidae	<i>Loimia medusa</i>	AY040704
Test			
AN11	Oligochaeta; Lumbriculidae	<i>Eclipidrilus frigidus</i> <i>Monopylephorus</i>	AY040706
AN12	Oligochaeta; Tubificidae	<i>rubroniveus</i>	AY040709
AN13	Hirudinida; Piscicolidae	<i>Stibarobdella macrothela</i>	AF116022
AN14	Hirudinida; Haemadipsidae	<i>Chtonobdella bilineata</i>	AF003267
AN15	Polychaeta; Nereididae	<i>Platynereis dumerilii</i>	NC_000931
Nematoda			
Profile			
NE 1	Rhabditoidea	<i>Caenorhabditis elegans</i>	NC_001328

NE 2	Ascaridida; Ascarididae	<i>Ascaris suum</i>	NC_001327
		<i>Contraecum cf.</i>	
NE 3	Ascaridida; Anisakidae	<i>spiculigerum</i>	U57031
NE 4	Strongylida; Trichostrongylidae	<i>Trichostrongylus axei</i>	U57041
NE 5	Strongylida; Haemonchidae	<i>Ostertagia circumcincta</i>	U57036
NE 6	Strongylida; Ancylostomatidae	<i>Necator americanus</i>	NC_003416
		<i>Heligmosomoides</i>	
NE 7	Strongylida; Heligmosomatidae	<i>polygyrus</i>	U57034
NE 8	Enoplea	<i>Trichinella spiralis</i>	NC_002681
NE 9	Spirurida	<i>Onchocerca volvulus</i>	NC_001861
NE 10	Spirurida; Filarioidea	<i>Wuchereria bancrofti</i>	AJ271612
Test			
NE11	Strongyloididae	<i>Strongyloides stercoralis</i>	U57039
NE12	Strongylida; Haemonchidae	<i>Haemonchus contortus</i>	U57033
NE13	Strongylida; Ancylostomatidae	<i>Ancylostoma duodenale</i>	NC_003415
NE14	Strongylida; Strongylidae	<i>Strongylus vulgaris</i>	U57040
		<i>Nippostrongylus</i>	
NE15	Strongylida; Heligmonellidae	<i>brasiliensis</i>	U57035

Platyhelminthes

Profile

PL 1	Turbellaria; Acoelomorpha	<i>Meara sp.</i>	AJ405973
PL 2	Trematoda; Strigeidida	<i>Schistosoma mansoni</i>	NC_002545
PL 3	Trematoda; Strigeidida	<i>Schistosoma japonicum</i>	NC_002544
PL 4	Trematoda; Echinostomida	<i>Fasciola hepatica</i>	NC_002546
PL 5	Trematoda; Plagiorchiida	<i>Paragonimus westermani</i>	NC_002354
		<i>Diphyllobothrium</i>	
PL 6	Cestoda; Pseudophyllidea	<i>nihonkaiense</i>	AB015755
PL 7	Cestoda; Pseudophyllidea	<i>Spirometra erinacei</i>	AB015754
PL 8	Cestoda; Hymenolepididae	<i>Hymenolepis diminuta</i>	NC_002767
		<i>Echinococcus</i>	
PL 9	Cestoda; Taeniidae	<i>multilocularis</i>	NC_000928
PL 10	Cestoda; Taeniidae	<i>Taenia asiatica</i>	AB066494

Test

PL11	Trematoda; Strigeidida	<i>Schistosoma mekongi</i>	NC_002529
PL12	Trematoda; Strigeidida	<i>Schistosoma malayensis</i>	AF295106
PL13	Cestoda; Pseudophyllidea	<i>Sparganum proliferum</i>	AB015753
PL14	Cestoda; Taeniidae	<i>Taenia crassiceps</i>	NC_002547
PL15	Cestoda; Taeniidae	<i>Taenia solium</i>	NC_004022

Arthropoda

Profile

AR 1	Myriapoda; Chilopoda; Scutigromorpha	<i>Allothreua maculata</i>	AF370834
AR 2	Myriapoda; Chilopoda; Craterostigmomorpha	<i>Craterostigmus tasmanianus</i>	AF370835
AR 3	Myriapoda; Diplopoda; Harpagophoridae	<i>Thyropygus sp.</i>	NC_003344
AR 4	Myriapoda; Diplopoda; Spirobolidae	<i>Narceus annularis</i>	NC_003343
AR 5	Chelicerata; Arachnida; Opiliones	<i>Dalquestia formosa</i>	AF370833
AR 6	Chelicerata; Merostomata	<i>Limulus polyphemus</i>	NC_003057
AR 7	Chelicerata; Merostomata	<i>Carcinoscorpius</i>	AF370828

AR 8	Chelicerata; Arachnida; Scorpiones	<i>rotundicauda</i> <i>Androctonus australis</i>	AF370829
AR 9	Hexapoda; Diplura	<i>Campodea tillyardi</i>	AF370844
AR 10	Hexapoda; Epiplura	<i>Tetrodontophora</i> <i>bielanensis</i>	NC_002735
AR 11	Chelicerata; Arachnida; Acari	<i>Ixodes hexagonus</i>	NC_002010
AR 12	Crustacea; Remipedia Myriapoda; Chilopoda;	<i>Speleonectes gironensis</i>	AF370851
AR 13	Lithobiomorpha	<i>Lithobius forficatus</i>	NC_002629
AR 14	Myriapoda; Symphyla	<i>Hanseniella sp.</i>	AF370839
AR 15	Hexapoda; Insecta; Orthoptera	<i>Locusta migratoria</i>	NC_001712
AR 16	Hexapoda; Insecta; Hemiptera	<i>Triatoma dimidiata</i>	NC_002609
AR 17	Hexapoda; Insecta; Coleoptera	<i>Tribolium castaneum</i>	NC_003081
AR 18	Hexapoda; Insecta; Lepidoptera	<i>Bombyx mori</i>	NC_002355
AR 19	Hexapoda; Insecta; Thysanura	<i>Thermobia domestica</i>	AF370848
AR 20	Crustacea; Branchiopoda	<i>Daphnia pulex</i>	NC_000844
AR 21	Hexapoda; Insecta; Diptera	<i>Drosophila melanogaster</i>	NC_001709
AR 22	Crustacea; Malacostraca; Decapoda	<i>Penaeus monodon</i>	NC_002184
AR 23	Crustacea; Malacostraca; Euphausiacea	<i>Nematoscelis difficilis</i> <i>Hutchinsoniella</i>	AY047601
AR 24	Crustacea; Cephalocarida	<i>macracantha</i>	AF370852
AR 25	Crustacea; Maxillopoda; Copepoda	<i>Cletocamptus deitersi</i>	AF315009
Test			
AR26	Crustacea; Maxillopoda; Copepoda	<i>Calanus pacificus</i>	AF315013
AR27	Crustacea; Malacostraca; Peracarida	<i>Campylaspis affinis</i>	AF137515
AR28	Hexapoda; Insecta; Blattaria	<i>Blattella germanica</i> <i>Crioceris</i>	S72627
AR29	Hexapoda; Insecta; Coleoptera	<i>duodecimpunctata</i>	NC_003372
AR30	Hexapoda; Insecta; Lepidoptera	<i>Ostrinia furnacalis</i>	NC_003368
AR31	Hexapoda; Insecta; Diptera	<i>Anopheles gambiae</i>	NC_002084
AR32	Hexapoda; Insecta; Archaeognatha	<i>Dilta littoralis</i>	AF370847
AR33	Crustacea; Branchiopoda; Notostraca	<i>Lepidurus sp.</i>	AF209067
AR34	Crustacea; Malacostraca; Decapoda	<i>Homarus americanus</i>	AF370853
AR35	Crustacea; Malacostraca; Decapoda	<i>Pagurus longicarpus</i>	NC_003058
AR36	Chelicerata; Arachnida; Acari	<i>Rhipicephalus sanguineus</i>	NC_002074
AR37	Chelicerata; Arachnida; Acari	<i>Boophilus geigy</i>	AY008680
AR38	Chelicerata; Arachnida; Opiliones Myriapoda; Chilopoda;	<i>Opilio parietinus</i>	AF370832
AR39	Lithobiomorpha	<i>Anopsobius neozelanicus</i>	AF334313
AR40	Myriapoda; Diplopoda;	<i>Proteroiulus fuscus</i>	AF370842
Mollusca			
Profile			
ML 1	Cephalopoda; Teuthoida	<i>Loligo bleekeri</i>	NC_002507
ML 2	Cephalopoda; Teuthoida	<i>Cycloteuthis sirventi</i>	AF000036
ML 3	Cephalopoda; Sepioida	<i>Sepia officinalis</i>	AF120630
ML 4	Cephalopoda; Octopoda	<i>Octopus californicus</i>	AF377968
ML 5	Cephalopoda; Vampyromorpha	<i>Vampyroteuthis infernalis</i>	AF000071
ML 6	Scaphopoda; Dentaliidae	<i>Dentalium pilsbryi</i>	AF120639
ML 7	Scaphopoda; Rhabdidae	<i>Rhabdus rectius</i>	AF120640

ML 8	Bivalvia; Palaeoheterodonta	<i>Psilunio littoralis</i>	AF120652
ML 9	Gastropoda; Archaeogastropoda	<i>Sinezona confusa</i>	AF120631
ML 10	Cephalopoda; Nautilida	<i>Nautilus pompilius</i>	AF120628
ML 11	Polyplacophora; Lepidopleuridae	<i>Lepidopleurus cajetanus</i>	AF120626
ML 12	Gastropoda; Archaeogastropoda	<i>Diodora graeca</i>	AF120632
ML 13	Gastropoda; Neritopsina	<i>Theodoxus fluviatilis</i>	AF120633
ML 14	Gastropoda; Caenogastropoda	<i>Truncatella guerinii</i>	AF120635
ML 15	Polyplacophora; Mopaliidae	<i>Katharina tunicata</i>	NC_001636
ML 16	Polyplacophora; Acanthochitonidae	<i>Acanthochitona crinita</i>	AF120627
ML 17	Polyplacophora; Chitonidae	<i>Liolophura japonica</i>	AB066269
ML 18	Gastropoda; Opisthobranchia	<i>Pupa strigosa</i>	NC_002176
ML 19	Gastropoda; Pulmonata	<i>Cepaea nemoralis</i>	NC_001816
ML 20	Gastropoda; Pulmonata	<i>Albinaria coerulea</i>	NC_001761
ML 21	Bivalvia; Anomalodesmata	<i>Cuspidaria cuspidata</i>	AF120655
ML 22	Bivalvia; Heteroconchia	<i>Venerupis philippinarum</i>	NC_003354
ML 23	Bivalvia; Pteriomorpha	<i>Lithophaga lithophaga</i>	AF120644
ML 24	Bivalvia; Pteriomorpha	<i>Crassostrea gigas</i>	NC_001276
ML 25	Bivalvia; Protobranchia	<i>Yoldia limatula</i>	AF120642

Test

ML26	Bivalvia; Protobranchia	<i>Nucula proxima</i>	AF120641
ML27	Cephalopoda; Teuthoidea	<i>Loligo pealei</i>	AF120629
ML28	Cephalopoda; Sepioida	<i>Heteroteuthis hawaiiensis</i>	AF000044
ML29	Cephalopoda; Octopoda	<i>Megaleledone senoi</i>	AF377977
ML30	Bivalvia; Palaeoheterodonta	<i>Lampsilis cardium</i>	AF120653
ML31	Gastropoda; Caenogastropoda	<i>Balcis eburnea</i>	AF120636
ML32	Gastropoda; Archaeogastropoda	<i>Tegula viridula</i>	AF132340
ML33	Gastropoda; Caenogastropoda	<i>Viviparus georgianus</i>	AF120634
ML34	Polyplacophora; Chitonidae	<i>Acanthopleura loochooana</i>	AB066223
ML35	Polyplacophora; Chitonidae	<i>Acanthopleura gemmata</i>	AB066222
ML36	Gastropoda; Opisthobranchia	<i>Peltodoris atromaculata</i>	AF120637
ML37	Gastropoda; Pulmonata	<i>Siphonaria pectinata</i>	AF120638
ML38	Bivalvia; Heteroconchia	<i>Chama gryphoides</i>	AF120656
ML39	Bivalvia; Anomalodesmata	<i>Lyonsia floridana</i>	AF120654
ML40	Bivalvia; Pteriomorpha	<i>Lima lima</i>	AF120649

Echinodermata

Profile

EC 1	Echinoidea; Arbaciidae	<i>Arbacia lixula</i>	NC_001770
EC 2	Echinoidea; Echinidae	<i>Paracentrotus lividus</i>	NC_001572
EC 3	Crinoidea; Antedonidae	<i>Florometra serratissima</i>	NC_001878
EC 4	Holothuroidea; Synallactidae	<i>Pseudostichopus mollis</i>	U32221
EC 5	Holothuroidea; Psolidae	<i>Psolus chitonoides</i>	U32220
EC 6	Holothuroidea; Cucumariidae	<i>Cucumaria miniata</i>	AF009350
EC 7	Asteroidea ; Luidiidae	<i>Luidia foliolata</i>	AF217380
EC 8	Asteroidea ; Goniasteridae	<i>Mediaster aequalis</i>	AF217385
EC 9	Asteroidea; Asterinidae	<i>Asterina pectinifera</i>	NC_001627
EC 10	Asteroidea ; Labidiasteridae	<i>Rathbunaster californicus</i>	AF217387

Test

EC11	Asteroidea ; Solasteridae	<i>Crossaster papposus</i>	AF217383
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EC12	Holothuroidea; Stichopodidae	<i>Parastichopus parvimensis</i>	U32199
EC13	Holothuroidea; Phyllophoridae	<i>Pentamera lissoplaca</i>	U32219
EC14	Asteroidea ; Brisingidae	<i>Brisingaster robillardi</i>	AF217392
EC15	Echinoidea; Strongylocentrotidae	<i>Strongylocentrotus purpuratus</i>	NC_001453

APPENDIX B:

Order	Family	Species	Accession Number
Lepidoptera (Profile)	Geometridae	<i>Lambdina fiscellaria</i>	AF064521
	Arctiidae	<i>Halysidota tessellaris</i>	AY165683
	Nolidae	<i>Nola triquetrana</i>	AY165692
	Notodontidae	<i>Heterocampa umbrata</i>	AF549793
	Noctuidae	<i>Feltia jaculifera</i>	U60990
	Lymantridae	<i>Dasychira dorsipennata</i>	AY165695
	Lasiocampidae	<i>Phyllodesma americana</i>	AY165690
		<i>Calledapteryx</i>	
	Uraniidae	<i>dryopterata</i>	AY165694
	Bombycidae	<i>Bombyx mori</i>	NC002355
	Drepanidae	<i>Drepana bilineata</i>	AY165691
	Sphingidae	<i>Proserpinus clarkiae</i>	AF170855
	Nymphalidae	<i>Boloria epithone</i>	AF170862
	Lycaenidae	<i>Euphilotes bernardino</i>	AF170864
	Saturniidae	<i>Hemileuca electra</i>	AF170856
	Thyatiridae	<i>Habrosyne scripta</i>	AY165703
	Riodinidae	<i>Apodemia mormo</i>	AF170863
	Ceratocampidae	<i>Anisota rubicunda</i>	AY165693
	Pyalidae	<i>Ostrinia nubilalis</i>	AF170853
	Satyridae	<i>Coenonympha tullia</i>	AF170860
	Cossidae	<i>Acosus centerensis</i>	AY165631
	Pieridae	<i>Colias eurytheme</i>	AF044024
	Papilionidae	<i>Papilio constantinus</i>	AF044002
	Limacodidae	<i>Euclea delphinii</i>	AY165632
	Hepialidae	<i>Korscheltellus lupulina</i>	AF549607
	(Test)	Arctiidae	<i>Cycnia tenera</i>
Arctiidae		<i>Hyphantria cunea</i>	AY165723
Drepanidae		<i>Drepana arcuata</i>	AY165719
		<i>Hydriomena</i>	
Geometridae		<i>transfigurata</i>	AF549638
Geometridae		<i>Pero honestaria</i>	AY165722
		<i>Prochoerodes</i>	
Geometridae		<i>transversata</i>	AF549685
Noctuidae		<i>Feralia major</i>	AF549687
		<i>Phalaenostola</i>	
Noctuidae	<i>larentioides</i>	AF549769	
Notodontidae	<i>Peridea basitriens</i>	AF549791	

	Pyrilidae	<i>Desmia funeralis</i>	AY165724
	Saturniidae	<i>Hyalophora cecropia</i>	AY165720
	Sphingidae	<i>Lapara bombycoides</i>	AF549802
Coleoptera (Profile)	Pedilidae	<i>Pedilus sp.</i>	AY165670
	Cerambycidae	<i>Typocerus velutinus</i>	AY165677
	Melandryidae	<i>Melandrya striata</i>	AY165673
	Tenebrionidae	<i>Tribolium cataneum</i> <i>Crioceris</i>	NC003081
	Chrysomelidae	<i>duodecimpunctata</i>	NC003372
	Melyridae	<i>Collops sp.</i>	AY165674
	Lampyridae	<i>Photurus pennsylvanica</i>	AY165656
	Cantharidae	<i>Rhagonycha fulva</i>	AY165676
	Curculionidae	<i>Otiorhynchus raucus</i>	AY165668
	Scolytidae	<i>Scolytus sp.</i>	AY165681
	Coccinellidae	<i>Harmonia axyridis</i>	AY165684
	Silphidae	<i>Necrophila americana</i>	AY165669
	Dermestidae	<i>Anthrenus sp.</i>	AY165779
	Scarabaeidae	<i>Amphimallon majalis</i>	AY165642
	Lucanidae	<i>Ceruchus piceus</i> <i>Philonthus</i>	AY165672
	Staphylinidae	<i>caeruleipennis</i>	AY165678
	Elateridae	<i>Ctenicera mediana</i>	AY165675
	Buprestidae	<i>Dicerca divaricata</i>	AY165645
	Heteroceridae	<i>Heterocerus sp.</i>	AY165682
	Elmidae	<i>Stenelmis sp.</i>	AY165649
	Psephenidae	<i>Psephenus herricki</i>	AY165680
	Cicindellidae	<i>Cicindela sexguttata</i>	AY165643
	Carabidae	<i>Pterostichus mutus</i>	AY165644
	Dytiscidae	<i>Laccophilus sp.</i>	AY165648
	Gyrinidae	<i>Gyrinus sp.</i>	AY165671
(Test)	Cerambycidae	<i>Judolia montivagans</i>	AY165712
	Lycidae	<i>Caenia dimidiata</i> <i>Leptinotarsa</i>	AY165730
	Chrysomellidae	<i>decemlineata</i>	AY165708
	Dermestidae	<i>Dermestes lardarius</i>	AY165734
	Scarabaeidae	<i>Trox unistriatus</i> <i>Hemicrepidius</i>	AY165707
	Elateridae	<i>memnonius</i>	AY165705
	Chrysomellidae	<i>Chrysolina sp.</i>	AY165716
	Chrysomellidae	<i>Chrysochus auratus</i>	AY165728
	Cicindellidae	<i>Cicindela punctulata</i>	AY165729
	Lampyridae	<i>Pyraclonema sp.</i>	AY165715
	Lampyridae	<i>Pyrocoelia rufa</i>	NC003970
	Scolytidae	<i>Dendroctonus jeffreyi</i>	AF067994
Hymenoptera	Sphecidae	<i>Ammophila sp.</i>	AF146683

(Profile)	Gasteruptionidae	<i>Gasteruption sp.</i>	AF146676
	Ichneumonidae	<i>Pimpla aequalis</i>	AF146681
	Chrysididae	<i>Stilbum sp.</i>	AY165696
	Formicidae	<i>Formica fusca</i>	AB010925
	Tiphiidae	<i>Myrmosa sp.</i>	AY165665
	Braconidae	<i>Chelonus sp.</i>	AY165727
	Vespidae	<i>Polistes fuscatus</i>	AY165664
	Halictidae	<i>Augochlorella sp.</i>	AY165666
	Apidae	<i>Apis mellifera</i>	NC001566
	Anthophoridae	<i>Xylocopa sp.</i>	AY165667
(Test)	Formicidae	<i>Oecophylla smaragdina</i>	AY165697
	Apidae	<i>Bombus sp.</i>	AY165702
	Megachilidae	<i>Osmia taurus</i>	AF250939
Diptera (Profile)	Ptychopteridae	<i>Bittacomorpha clavipes</i>	AY165638
	Simuliidae	<i>Simulium venustum</i>	AY165663
	Bombyliidae	<i>Bombylius validus</i>	AY165655
	Tabanidae	<i>Chrysops sp.</i>	AY165640
	Pelecorhynchidae	<i>Glutops rossi</i>	AY165651
	Athericidae	<i>Atherix sp.</i>	AY165650
	Rhagionidae	<i>Symphoromyia sp.</i>	AY165652
	Syrphidae	<i>Scaeva pyrastris</i>	AY165733
	Tipulidae	<i>Tipula sp.</i>	AY165639
	Culicidae	<i>Anopheles gambiae</i>	NC002084
	Asilidae	<i>Efferia aestuans</i>	AY165641
	Tephritidae	<i>Ceratitis capitata</i>	NC000857
	Sphaeroceridae	<i>Sphaerocera curvipes</i>	AY165653
	Drosophilidae	<i>Drosophila yakuba</i>	NC001322
	Calliphoridae	<i>Phormia regina</i>	AF295550
(Test)	Empidae	<i>Empis sp.</i>	AY165709
	Asilidae	<i>Asilus sp.</i>	AY165713
	Rhagionidae	<i>Chryopilus sp.</i>	AY165706
	Stratiomyidae	<i>Stratiomys sp.</i>	AY165721
	Syrphidae	<i>Chrysotoxum sp.</i>	AY165714
	Heliomyzidae	<i>Suillia sp.</i>	AY165737
	Asilidae	<i>Lasiopogon sp.</i>	AY165732
	Xylomyidae	<i>Macroceromys sp.</i>	AY165711
	Xylophagidae	<i>Xylophagus sp.</i>	AY165704
		<i>Scathophaga</i>	
	Scathophagidae	<i>stercoraria</i>	AY165710
	Pyrgotidae	<i>Sphecomyiella valida</i>	AY165717
	Bombyliidae	<i>Anthrax sp.</i>	AY165731
	Calliphoridae	<i>Chrysoma chloropyga</i>	NC002967
Orthoptera (Profile)	Gryllidae	<i>Gryllus pennsylvanicus</i>	AY165657
	Tettigoniidae	<i>Orchelimum gladiator</i>	AY165738

	Gryllotalpidae	<i>Gryllotalpa sp.</i>	AY165658	
	Eumastacidae	<i>Warramunga sp.</i>	AY165630	
	Acrididae	<i>Locusta migratoria</i>	NC001712	
(Test)	Acrididae	<i>Chorohippes parallelus</i>	X95574	
Plecoptera (Profile)	Leuctridae	<i>Leuctra sp.</i>	AY165660	
	Capniidae	<i>Allocapnia sp.</i>	AY165662	
	Notonemouridae	<i>Aphanicerca capensis</i>	AY058904	
	Peltoperlidae	<i>Peltoperla arcuata</i>	AY165654	
	Perlidae	<i>Acroneuria carolinensis</i>	AY165629	
	Chloroperlidae	<i>Sweltsa sp.</i>	AY165659	
(Test)	Perlodidae	<i>Isogenoides frontalis</i>	AY165725	
	Perlodidae	<i>Megarcys signata</i>	AY165726	
Blattaria (Profile)	Blattellidae	<i>Blatella germanica</i>	S72627	
	Cryptocercidae	<i>Cryptocercus sp.</i>	AY165647	
	Blattidae	<i>Periplaneta americana</i>	AY165646	
		<i>Gromphadorhina portentosa</i>	AY165661	
(Test)	Blattellidae	<i>Parcoblatta pennsylvanica</i>	AY165718	
Ephemeroptera (Profile)	Baetiscidae	<i>Baetisca laurentina</i>	AY165636	
	Caenidae	<i>Caenis sp.</i>	AY165689	
	Ameletidae	<i>Ameletus lineatus</i>	AY165637	
	Ephemerellidae	<i>Ephemerella invaria</i>	AY165635	
	Ephemeridae	<i>Ephemerella simulans</i>	AY165685	
		<i>Leptophlebia intermedia</i>	AY165686	
	Leptophlebiidae	<i>Siphonurus quebecensis</i>	AY165633	
	Siphonuridae	<i>Metretopus borealis</i>	AY165687	
	Metretopodidae	<i>Stenonema femoratum</i>	AY165634	
	Heptageniidae	<i>Isonychia sp.</i>	AY165688	
	(Test)	Ameletidae	<i>Ameletus andersoni</i>	AY165698
			<i>Eurylophella prudentalis</i>	AY165736
		Ephemerellidae	<i>Hexagenia c.f. rigida</i>	AY165699
Ephemeridae		<i>Heptagenia adaequata</i>	AY165700	
Heptageniidae		<i>Leptophlebia nebulosa</i>	AY165701	
Leptophlebiidae		<i>Nesameletus wainuimetea</i>	AY165735	
Ameletidae				

APPENDIX C:

Family	Species	GenBank Accession #
Arctiidae	<i>Cisseps fulvicollis</i>	AF549624
	<i>Ctenucha virginica</i>	AF549625
	<i>Cycnia oregonensis</i>	AF549610
	<i>Cycnia tenera</i>	AF549611
	<i>Euchaetes egle</i>	AF549609
	<i>Grammia arge</i>	AF549622
	<i>Grammia virgo</i>	AF549621
	<i>Grammia virguncula</i>	AF549620
	<i>Halysidota tessellaris</i>	AF549613
	<i>Haploa confusa</i>	AF549616
	<i>Hyphantria cunea</i>	AF549608
	<i>Hypoprepia fucosa</i>	AF549615
	<i>Hypoprepia miniata</i>	AF549614
	<i>Lophocampa maculata</i>	AF549612
	<i>Phragmatobia fuliginosa</i>	AF549623
	<i>Pyrrharctia isabella</i>	AF549617
	<i>Spilosoma congrua</i>	AF549619
	<i>Spilosoma virginica</i>	AF549618
	Geometridae	<i>Aethalura intertexta</i>
<i>Anacamptodes vellivolata</i>		AF549678
<i>Anavitrinella pampinaria</i>		AF549654
<i>Besma quercivoraria</i>		AF549675
<i>Biston betularia</i>		AF549663
<i>Campaea perlata</i>		AF549649
<i>Caripeta divisata</i>		AF549633
<i>Cepphis armataria</i>		AF549634
<i>Cepphis decoloraria</i>		AF549635
<i>Chlorochlamys chloroleucaria</i>		AF549645
<i>Chloroclysta hersiliata</i>		AF549684
<i>Cladara limitaria</i>		AF549648
<i>Cyclophora pendulinaria</i>		AF549653
<i>Dyspteris abortivaria</i>		AF549686
<i>Ennomos subsignaria</i>		AF549628
<i>Euchlaena johnsonaria</i>		AF549676
<i>Eulithis diversilineata</i>		AF549682
<i>Eulithis molliculata</i>		AF549683
<i>Eumacaria latiferrugata</i>		AF549666
<i>Euphyia unangulata</i>		AF549639
<i>Eupithecia annulata</i>		AF549656
<i>Eupithecia assimilata</i>		AF549658

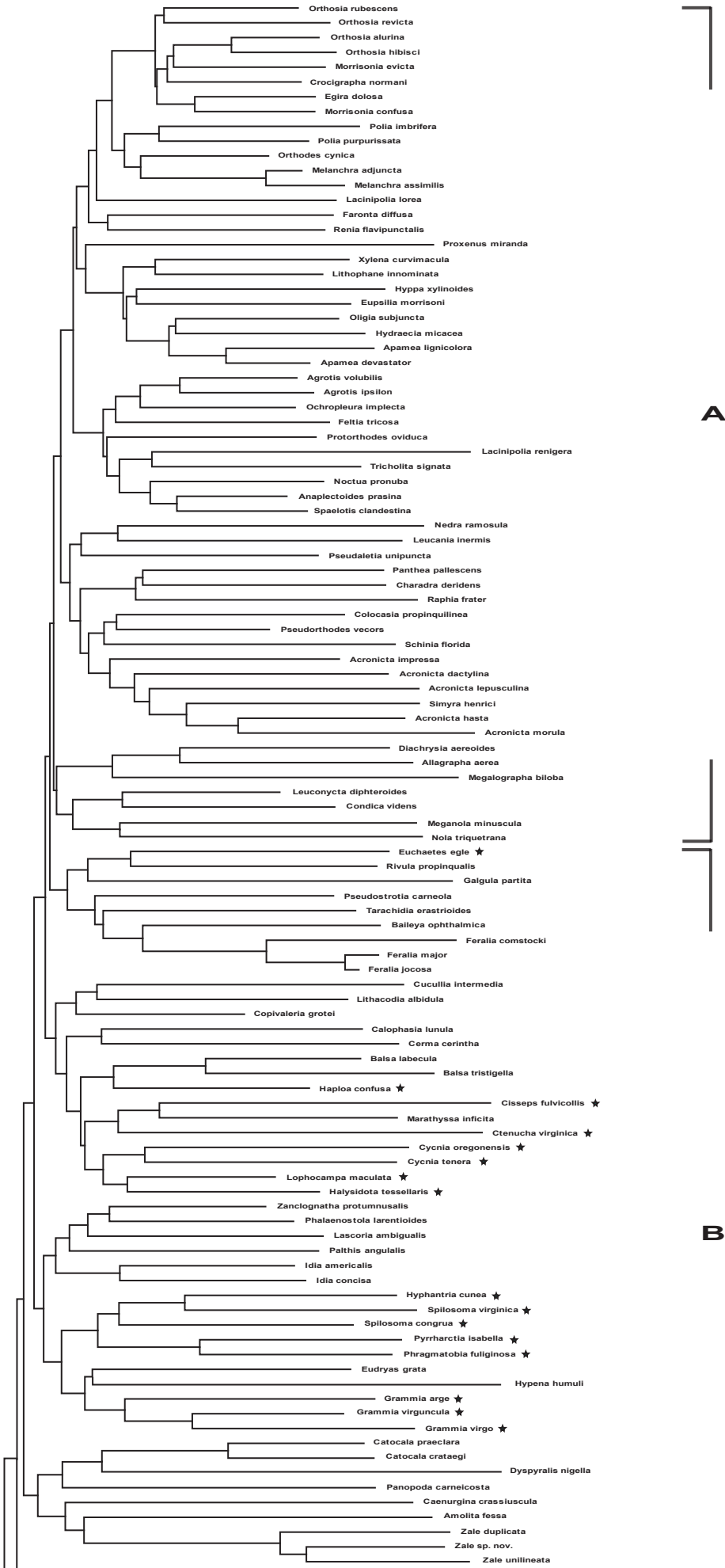
	<i>Eupithecia mutata</i>	AF549660
	<i>Eupithecia palpata</i>	AF549655
	<i>Eupithecia</i>	
	<i>ravocostaliata</i>	AF549657
	<i>Eupithecia subfuscata</i>	AF549659
	<i>Eutrapela clemataria</i>	AF549626
	<i>Heterophleps triguttaria</i>	AF549674
	<i>Hydriomena perfracta</i>	AF549661
	<i>Hydriomena</i>	
	<i>transfigurata</i>	AF549638
	<i>Itame pustularia</i>	AF549652
	<i>Lobophora nivigerata</i>	AF549636
	<i>Lomographa vestaliata</i>	AF549637
	<i>Lytrosis unitaria</i>	AF549681
	<i>Melanolophia canadaria</i>	AF549668
	<i>Melanolophia signataria</i>	AF549664
	<i>Metanema inatomaria</i>	AF549677
	<i>Metarranthis indeclinata</i>	AF549631
	<i>Nemoria mimosaria</i>	AF549679
	<i>Nemoria rubrifrontaria</i>	AF549647
	<i>Orthonama</i>	
	<i>centrostrigaria</i>	AF549643
	<i>Orthonama obstipata</i>	AF549642
	<i>Pero honestaria</i>	AF549630
	<i>Pero morrisonaria</i>	AF549629
	<i>Plagodis phlogosaria</i>	AF549640
	<i>Prochoerodes</i>	
	<i>transversata</i>	AF549685
	<i>Scopula inductata</i>	AF549651
	<i>Scopula limboundata</i>	AF549650
	<i>Semiothisa aemulataria</i>	AF549673
	<i>Semiothisa bisignata</i>	AF549672
	<i>Semiothisa granitata</i>	AF549669
	<i>Semiothisa minorata</i>	AF549670
	<i>Semiothisa orillata</i>	AF549667
	<i>Semiothisa</i>	
	<i>submarmorata</i>	AF549671
	<i>Synchlora aerata</i>	AF549646
	<i>Tetracis cachexiata</i>	AF549627
	<i>Trichodezia albovittata</i>	AF549662
	<i>Xanthorhoe ferrugata</i>	AF549641
	<i>Xanthorhoe munitata</i>	AF549665
	<i>Xanthorhoe packardata</i>	AF549644
	<i>Xanthotype urticaria</i>	AF549632
Hepialidae	<i>Korscheltellus lupulina</i>	AF549607
Noctuidae	<i>Acronicta dactylina</i>	AF549746
	<i>Acronicta hasta</i>	AF549730
	<i>Acronicta impressa</i>	AF549729
	<i>Acronicta lepusculina</i>	AF549728
	<i>Acronicta morula</i>	AF549731

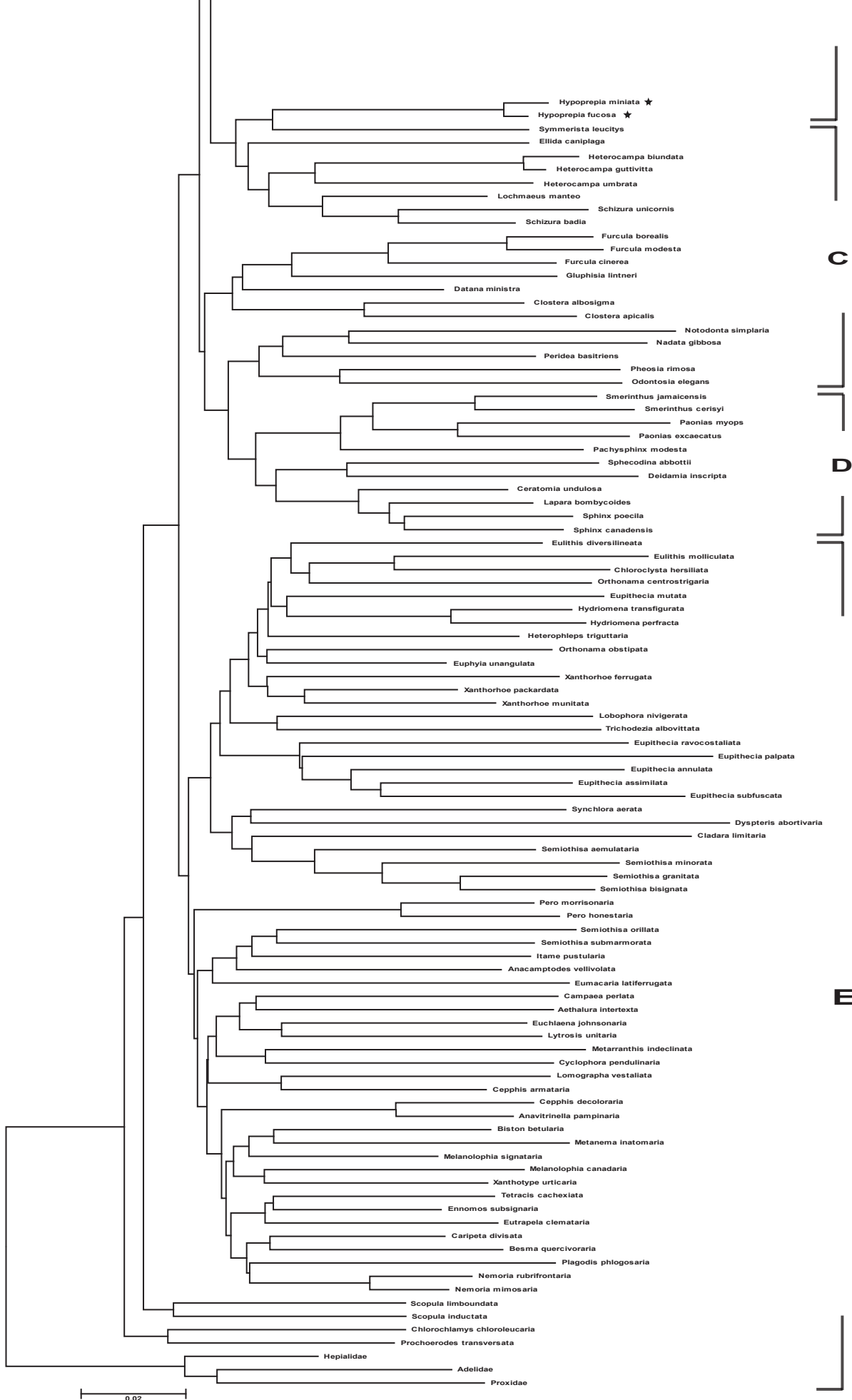
<i>Agrotis ipsilon</i>	AF549736
<i>Agrotis volubilis</i>	AF549702
<i>Allagrapha aerea</i>	AF549755
<i>Amolita fessa</i>	AF549771
<i>Anaplectoides prasina</i>	AF549765
<i>Apamea devastator</i>	AF549774
<i>Apamea lignicolora</i>	AF549764
<i>Baileya ophthalmica</i>	AF549760
<i>Balsa labecula</i>	AF549712
<i>Balsa tristigella</i>	AF549750
<i>Caenurgina crassiuscula</i>	AF549721
<i>Calophasia lunula</i>	AF549705
<i>Catocala crataegi</i>	AF549770
<i>Catocala praeclara</i>	AF549737
<i>Cerma cerintha</i>	AF549745
<i>Charadra deridens</i>	AF549748
<i>Colocasia</i>	
<i>propinquilinea</i>	AF549699
<i>Condica videns</i>	AF549768
<i>Copivaleria grotei</i>	AF549754
<i>Crocigrapha normani</i>	AF549726
<i>Cucullia intermedia</i>	AF549704
<i>Diachrysia aereoides</i>	AF549732
<i>Dyspyralis nigella</i>	AF549710
<i>Egira dolosa</i>	AF549693
<i>Eudryas grata</i>	AF549701
<i>Eupsilia morrisoni</i>	AF549696
<i>Faronta diffusa</i>	AF549716
<i>Feltia tricola</i>	AF549766
<i>Feralia comstocki</i>	AF549688
<i>Feralia jocosa</i>	AF549689
<i>Feralia major</i>	AF549687
<i>Galgula partita</i>	AF549719
<i>Hydraecia micacea</i>	AF549775
<i>Hypena humuli</i>	AF549743
<i>Hyppa xylinoides</i>	AF549692
<i>Idia americalis</i>	AF549723
<i>Idia concisa</i>	AF549761
<i>Lacinipolia lorea</i>	AF549758
<i>Lacinipolia renigera</i>	AF549739
<i>Lascoria ambigualis</i>	AF549734
<i>Leucania inermis</i>	AF549772
<i>Leuconycta diphteroides</i>	AF549720
<i>Lithacodia albidula</i>	AF549756
<i>Lithophane innominata</i>	AF549744
<i>Marathyssa inficita</i>	AF549724
<i>Megalographa biloba</i>	AF549706
<i>Meganola minuscula</i>	AF549759
<i>Melanchra adjuncta</i>	AF549690
<i>Melanchra assimilis</i>	AF549691
<i>Morrisonia confusa</i>	AF549708
<i>Morrisonia evicta</i>	AF549707

	<i>Nedra ramosula</i>	AF549711
	<i>Noctua pronuba</i>	AF549752
	<i>Nola triquetrana</i>	AF549776
	<i>Ochropleura implecta</i>	AF549751
	<i>Oligia subjuncta</i>	AF549763
	<i>Orthodes cynica</i>	AF549733
	<i>Orthosia alurina</i>	AF549703
	<i>Orthosia hibisci</i>	AF549725
	<i>Orthosia revicta</i>	AF549727
	<i>Orthosia rubescens</i>	AF549695
	<i>Palthis angulalis</i>	AF549722
	<i>Panopoda carneicosta</i>	AF549767
	<i>Panthea pallescens</i>	AF549697
	<i>Phalaenostola</i>	
	<i>larentioides</i>	AF549769
	<i>Polia imbrifera</i>	AF549735
	<i>Polia purpurissata</i>	AF549753
	<i>Protorthodes oviduca</i>	AF549694
	<i>Proxenus miranda</i>	AF549757
	<i>Pseudaletia unipuncta</i>	AF549698
	<i>Pseudorthodes vecors</i>	AF549762
	<i>Pseudostrotia carneola</i>	AF549718
	<i>Raphia frater</i>	AF549747
	<i>Renia flavipunctalis</i>	AF549741
	<i>Rivula propinqualis</i>	AF549749
	<i>Schinia florida</i>	AF549738
	<i>Simyra henrici</i>	AF549709
	<i>Spaelotis clandestina</i>	AF549773
	<i>Tarachidia erastrionides</i>	AF549717
	<i>Tricholita signata</i>	AF549740
	<i>Xylena curvimacula</i>	AF549700
	<i>Zale duplicata</i>	AF549714
	<i>Zale sp.nov.</i>	AF549713
	<i>Zale unilineata</i>	AF549715
	<i>Zanclognatha</i>	
	<i>protumnusalis</i>	AF549742
Notodontidae	<i>Clostera albosigma</i>	AF549781
	<i>Clostera apicalis</i>	AF549782
	<i>Datana ministra</i>	AF549792
	<i>Ellida caniplaga</i>	AF549779
	<i>Furcula borealis</i>	AF549785
	<i>Furcula cinerea</i>	AF549786
	<i>Furcula modesta</i>	AF549787
	<i>Gluphisia lintneri</i>	AF549780
	<i>Heterocampa biundata</i>	AF549778
	<i>Heterocampa guttivitta</i>	AF549784
	<i>Heterocampa umbrata</i>	AF549793
	<i>Lochmaeus manteo</i>	AF549795
	<i>Nadata gibbosa</i>	AF549788
	<i>Notodonta simplaria</i>	AF549783
	<i>Odontosia elegans</i>	AF549789

	<i>Peridea basitriens</i>	AF549791
	<i>Pheosia rimosa</i>	AF549777
	<i>Schizura badia</i>	AF549794
	<i>Schizura unicornis</i>	AF549790
	<i>Symmerista leucitys</i>	AF549796
Sphingidae	<i>Ceratonia undulosa</i>	AF549807
	<i>Deidamia inscripta</i>	AF549805
	<i>Lapara bombycoides</i>	AF549802
	<i>Pachysphinx modesta</i>	AF549803
	<i>Paonias excaecatus</i>	AF549800
	<i>Paonias myops</i>	AF549798
	<i>Smerinthus cerisyi</i>	AF549799
	<i>Smerinthus jamaicensis</i>	AF549797
	<i>Sphecodina abbottii</i>	AF549804
	<i>Sphinx canadensis</i>	AF549806
	<i>Sphinx poecila</i>	AF549801

APPENDIX D

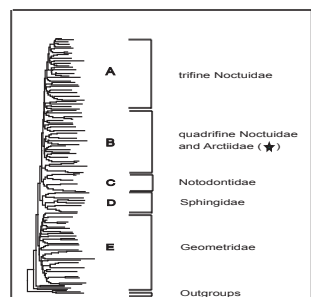




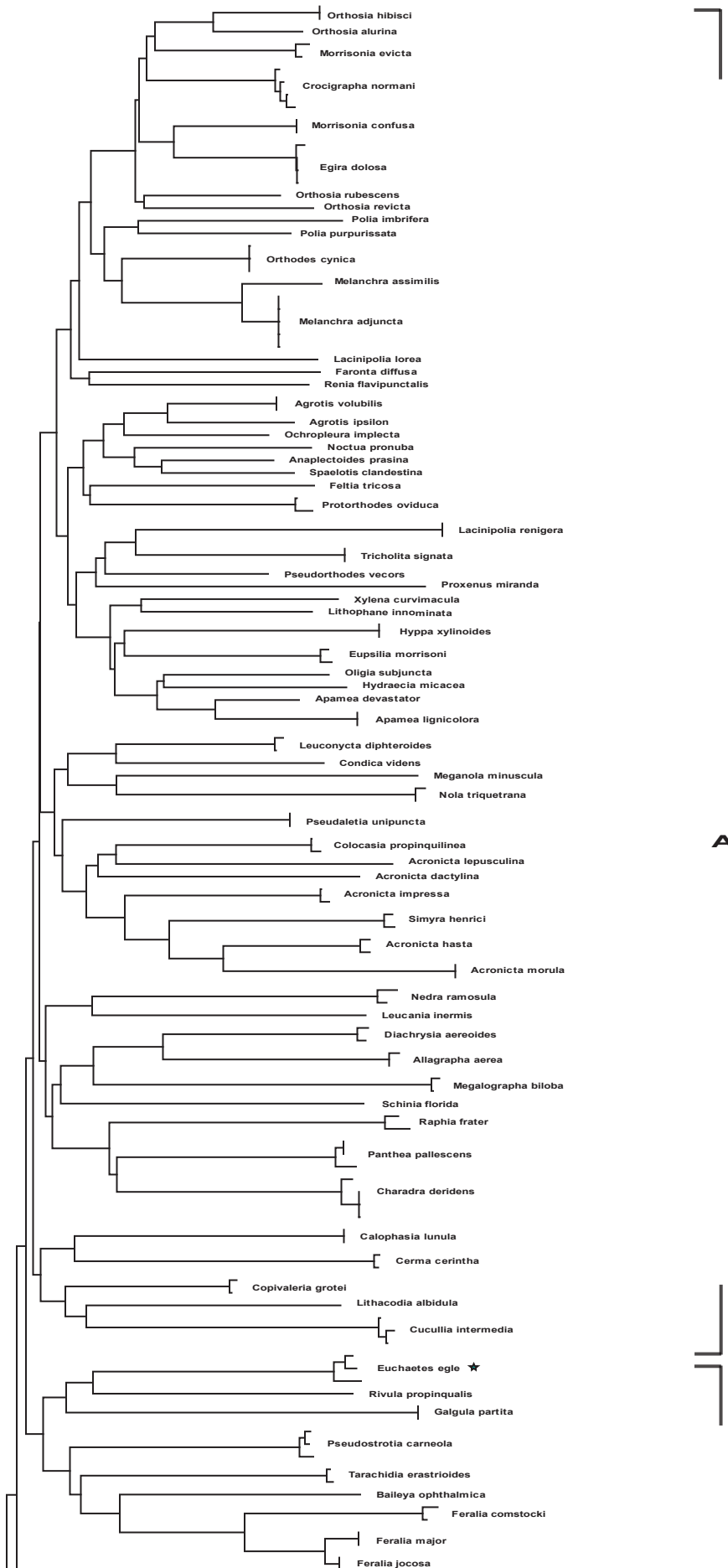
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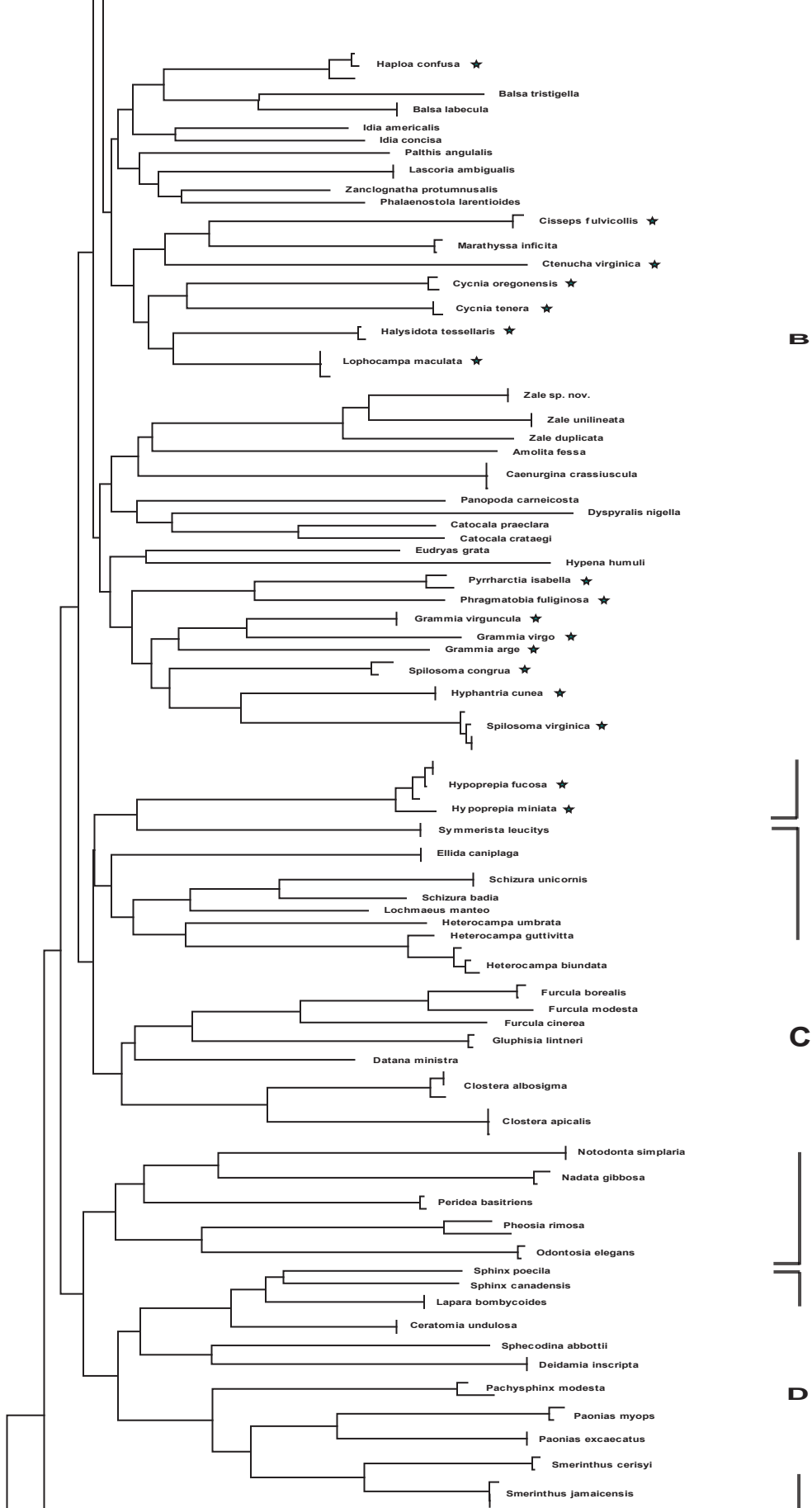
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APPENDIX E







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