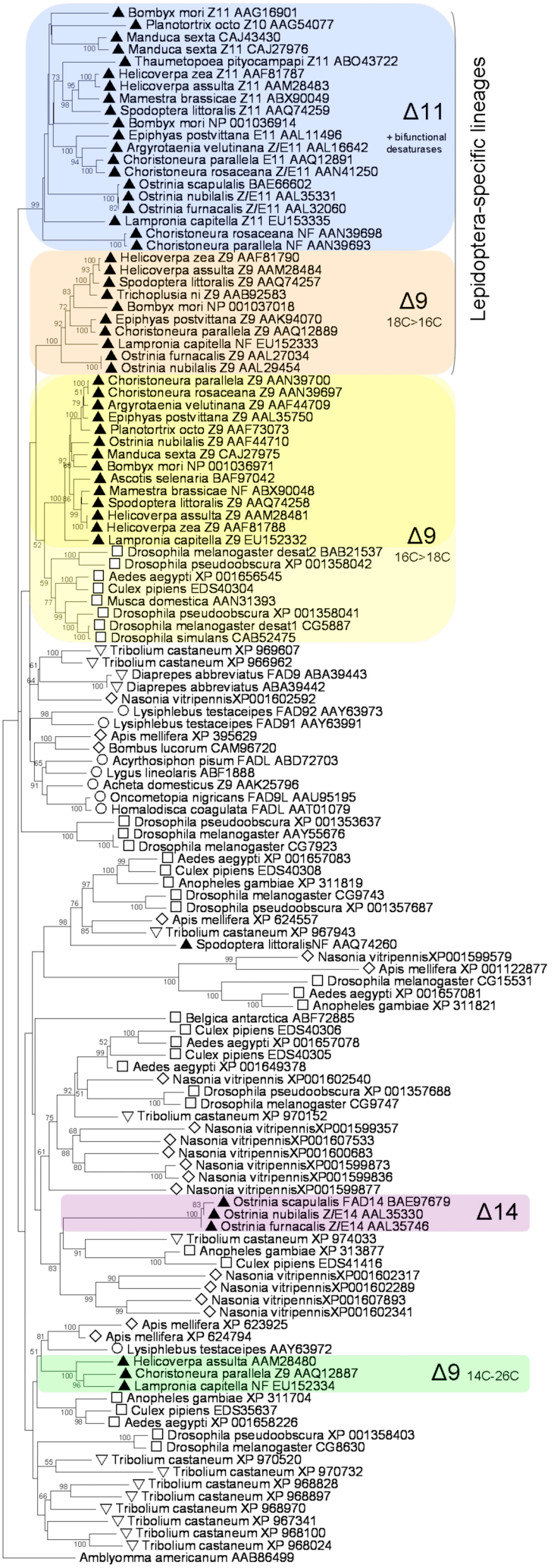
Lepidoptera-specific lineages
Δ11
+ bifunctional desaturases
Δ9
18C>16C
Δ9
16C>18C
Δ14
Δ9 14C-26C
▲ Bombyx mori Z11 AAG16901
▲ Planotortrix octo Z10 AAG54077
▲ Manduca sexta CAJ43430
▲ Manduca sexta Z11 CAJ27976
▲ Thaumetopoea pityocampapi Z11 ABO43722
▲ Helicoverpa zea Z11 AAF81787
▲ Helicoverpa assulta Z11 AAM28483
▲ Mamestra brassicae Z11 ABX90049
▲ Spodoptera littoralis Z11 AAQ74259
▲ Bombyx mori NP 001036914
▲ Epiphyas postvittana E11 AAL11496
▲ Argyrotaenia velutinana Z/E11 AAL16642
▲ Choristoneura parallela E11 AAQ12891
▲ Choristoneura rosaceana Z/E11 AAN41250
▲ Ostrinia scapulalis BAE66602
▲ Ostrinia nubilalis Z/E11 AAL35331
▲ Ostrinia furnacalis Z/E11 AAL32060
▲ Lampronia capitella Z11 EU153335
▲ Choristoneura rosaceana NF AAN39698
▲ Choristoneura parallela NF AAN39693
▲ Helicoverpa zea Z9 AAF81790
▲ Helicoverpa assulta Z9 AAM28484
▲ Spodoptera littoralis Z9 AAQ74257
▲ Trichoplusia ni Z9 AAB92583
▲ Bombyx mori NP 001037018
▲ Epiphyas postvittana Z9 AAK94070
▲ Choristoneura parallela Z9 AAQ12889
▲ Lampronia capitella NF EU152333
▲ Ostrinia furnacalis Z9 AAL27034
▲ Ostrinia nubilalis Z9 AAL29454
▲ Choristoneura parallela Z9 AAN39700
▲ Choristoneura rosaceana Z9 AAN39697
▲ Argyrotaenia velutinana Z9 AAF44709
▲ Epiphyas postvittana Z9 AAL35750
▲ Planotortrix octo Z9 AAF73073
▲ Ostrinia nubilalis Z9 AAF44710
▲ Manduca sexta Z9 CAJ27975
▲ Bombyx mori NP 001036971
▲ Ascotis selenaria BAF97042
▲ Mamestra brassicae NF ABX90048
▲ Spodoptera littoralis Z9 AAQ74258
▲ Helicoverpa assulta Z9 AAM28481
▲ Helicoverpa zea Z9 AAF81788
▲ Lampronia capitella Z9 EU152332
□ Drosophila melanogaster desat2 BAB21537
□ Drosophila pseudoobscura XP 001358042
□ Aedes aegypti XP 001656545
□ Culex pipiens EDS40304
□ Musca domestica AAN31393
□ Drosophila pseudoobscura XP 001358041
□ Drosophila melanogaster desat1 CG5887
□ Drosophila simulans CAB52475
▽ Tribolium castaneum XP 969607
▽ Tribolium castaneum XP 966962
▽ Diaprepes abbreviatus FAD9 ABA39443
▽ Diaprepes abbreviatus ABA39442
◇ Nasonia vitripennisXP001602592
○ Lysiphlebus testaceipes FAD92 AAY63973
○ Lysiphlebus testaceipes FAD91 AAY63991
◇ Apis mellifera XP 395629
◇ Bombus lucorum CAM96720
○ Acyrthosiphon pisum FADL ABD72703
○ Lygus lineolaris ABF1888
○ Acheta domesticus Z9 AAK25796
○ Oncometopia nigricans FAD9L AAU95195
○ Homalodisca coagulata FADL AAT01079
□ Drosophila pseudoobscura XP 001353637
□ Drosophila melanogaster AAY55676
□ Drosophila melanogaster CG7923
□ Aedes aegypti XP 001657083
□ Culex pipiens EDS40308
□ Anopheles gambiae XP 311819
□ Drosophila melanogaster CG9743
□ Drosophila pseudoobscura XP 001357687
◇ Apis mellifera XP 624557
▽ Tribolium castaneum XP 967943
▲ Spodoptera littoralisNF AAQ74260
◇ Nasonia vitripennisXP001599579
◇ Apis mellifera XP 001122877
□ Drosophila melanogaster CG15531
□ Aedes aegypti XP 001657081
□ Anopheles gambiae XP 311821
□ Belgica antarctica ABF72885
□ Culex pipiens EDS40306
□ Aedes aegypti XP 001657078
□ Culex pipiens EDS40305
□ Aedes aegypti XP 001649378
◇ Nasonia vitripennis XP001602540
□ Drosophila pseudoobscura XP 001357688
□ Drosophila melanogaster CG9747
▽ Tribolium castaneum XP 970152
◇ Nasonia vitripennisXP001599357
◇ Nasonia vitripennisXP001607533
◇ Nasonia vitripennisXP001600683
◇ Nasonia vitripennisXP001599873
◇ Nasonia vitripennisXP001599836
◇ Nasonia vitripennisXP001599877
▲ Ostrinia scapulalis FAD14 BAE97679
▲ Ostrinia nubilalis Z/E14 AAL35330
▲ Ostrinia furnacalis Z/E14 AAL35746
▽ Tribolium castaneum XP 974033
□ Anopheles gambiae XP 313877
□ Culex pipiens EDS41416
◇ Nasonia vitripennisXP001602317
◇ Nasonia vitripennisXP001602289
◇ Nasonia vitripennisXP001607893
◇ Nasonia vitripennisXP001602341
◇ Apis mellifera XP 623925
◇ Apis mellifera XP 624794
○ Lysiphlebus testaceipes AAY63972
▲ Helicoverpa assulta AAM28480
▲ Choristoneura parallela Z9 AAQ12887
▲ Lampronia capitella NF EU152334
□ Anopheles gambiae XP 311704
□ Culex pipiens EDS35637
□ Aedes aegypti XP 001658226
□ Drosophila pseudoobscura XP 001358403
□ Drosophila melanogaster CG8630
▽ Tribolium castaneum XP 970520
▽ Tribolium castaneum XP 970732
▽ Tribolium castaneum XP 968828
▽ Tribolium castaneum XP 968897
▽ Tribolium castaneum XP 968970
▽ Tribolium castaneum XP 967341
▽ Tribolium castaneum XP 968100
▽ Tribolium castaneum XP 968024
Amblyomma americanum AAB86499
0.2
▲Lepidoptera, □ Diptera,
○Hemiptera, ◇ Hymenoptera,
▽ Coleoptera