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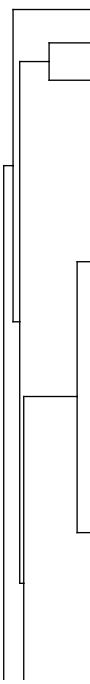
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Phylogenetic tree showing relationships between various species. The tree is rooted on the left and branches out to the right. Species names and their corresponding accession numbers are listed on the right side of the tree. The species names are often followed by their NCBI accession numbers. The tree shows a complex branching pattern, with many species having multiple accessions. The species names are often followed by their NCBI accession numbers. The tree shows a complex branching pattern, with many species having multiple accessions. The species names are often followed by their NCBI accession numbers. The tree shows a complex branching pattern, with many species having multiple accessions. The species names are often followed by their NCBI accession numbers.

Species names and accession numbers listed on the right side of the tree:

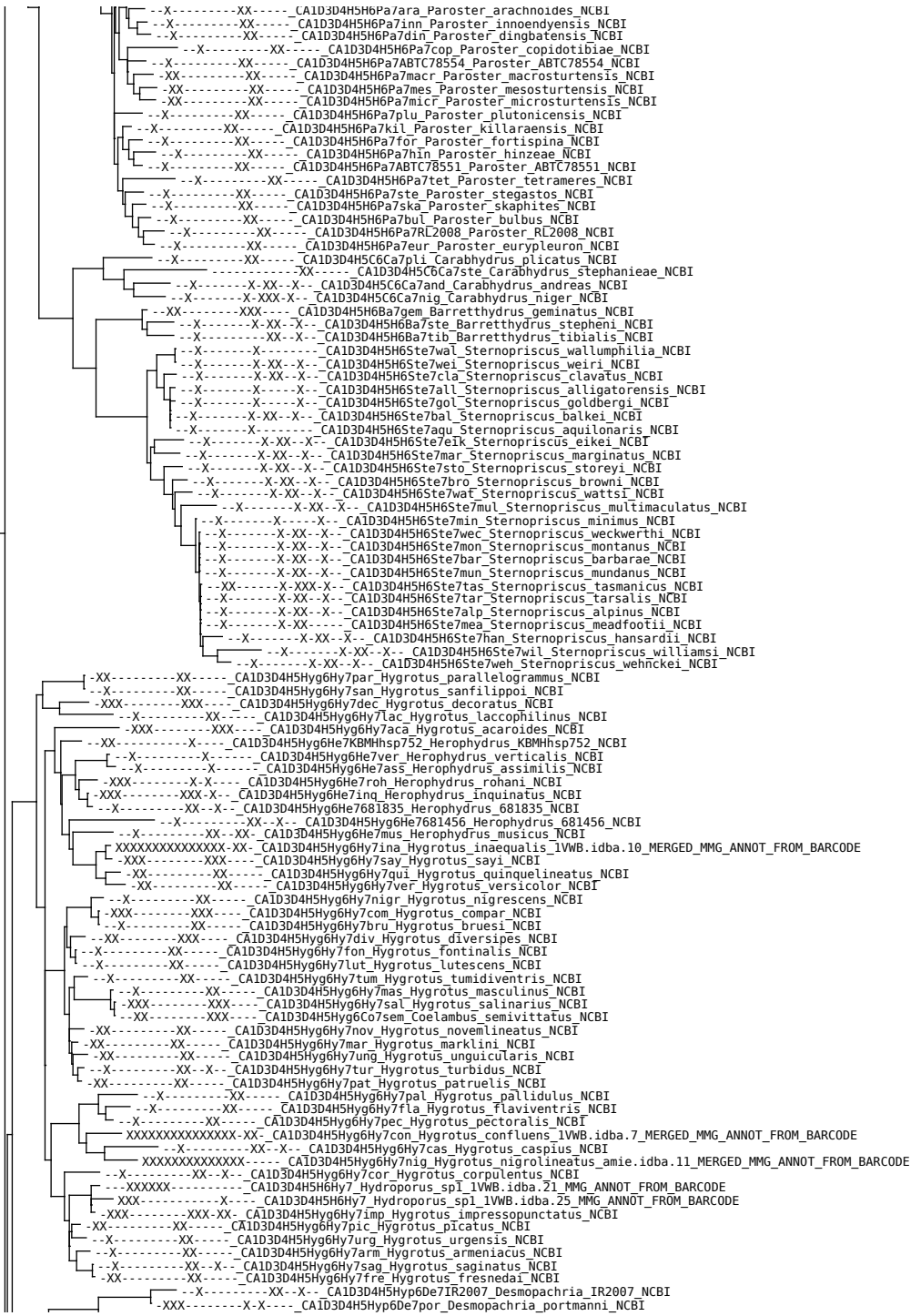
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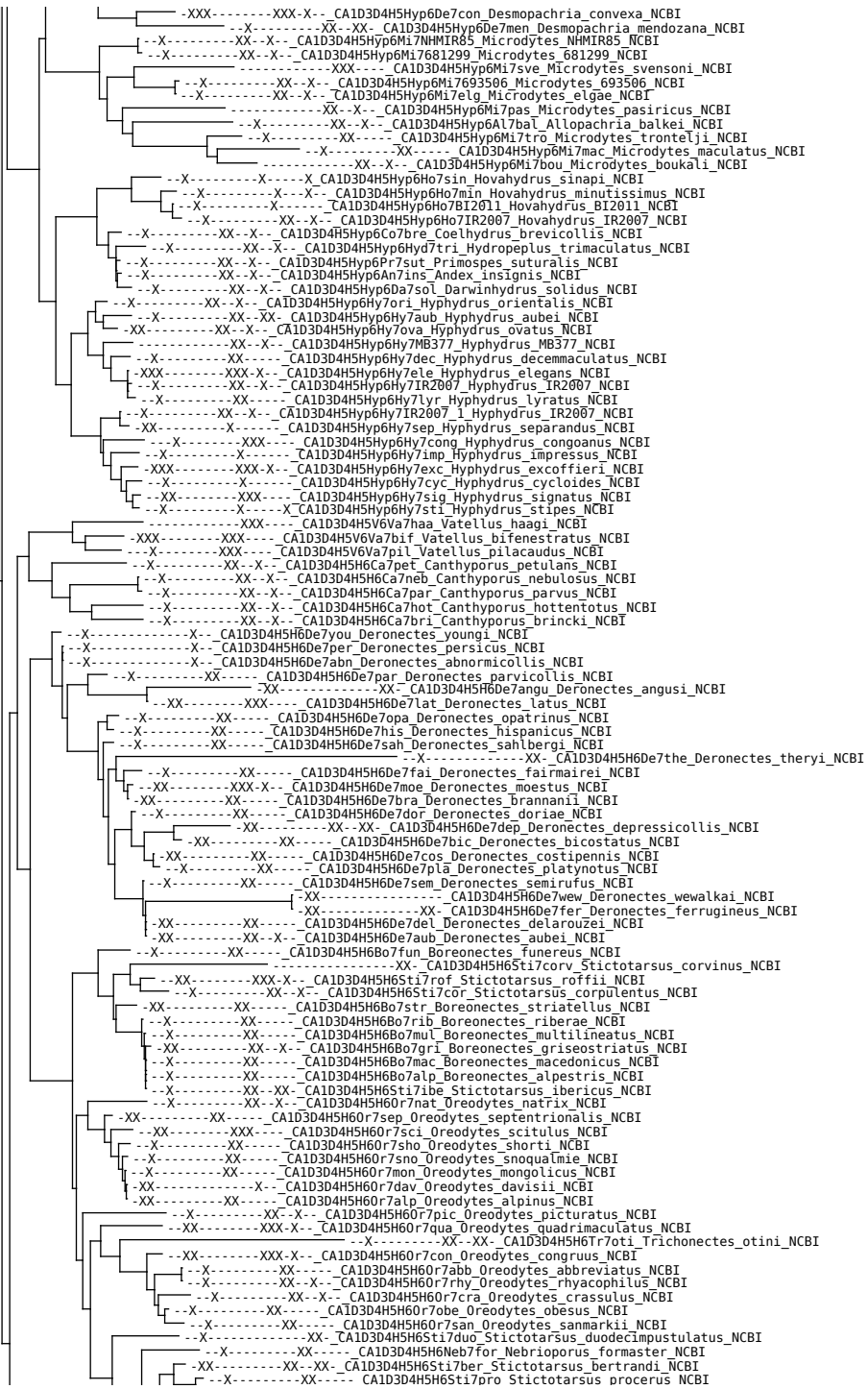
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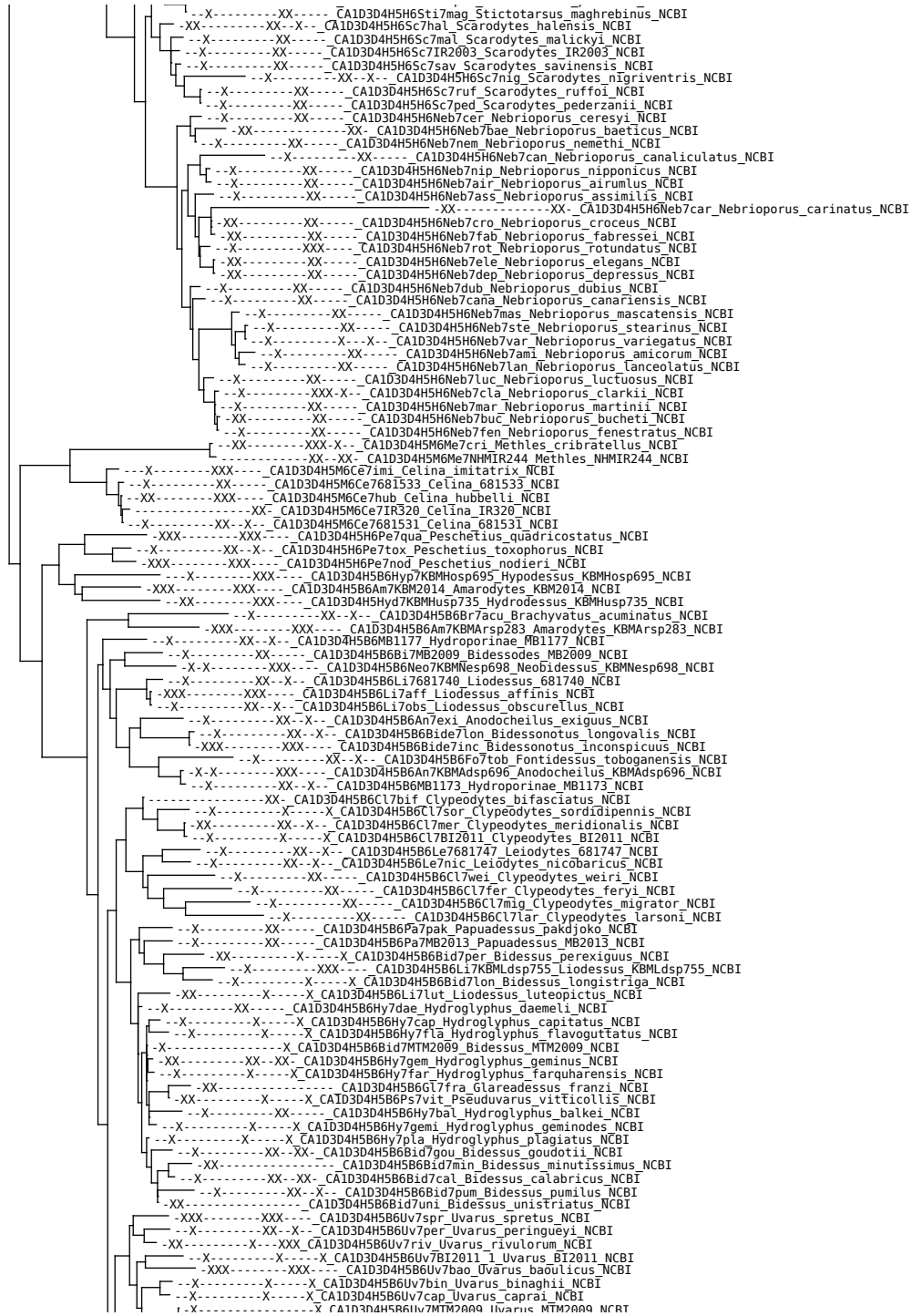
Phylogenetic tree showing relationships between various species, with bootstrap values indicated by 'X' marks. The tree is rooted on the left and branches out to the right. The species names are listed on the right side of the tree, often followed by their NCBI accession numbers. The bootstrap values are represented by 'X' marks at the nodes of the tree.

Species listed include:

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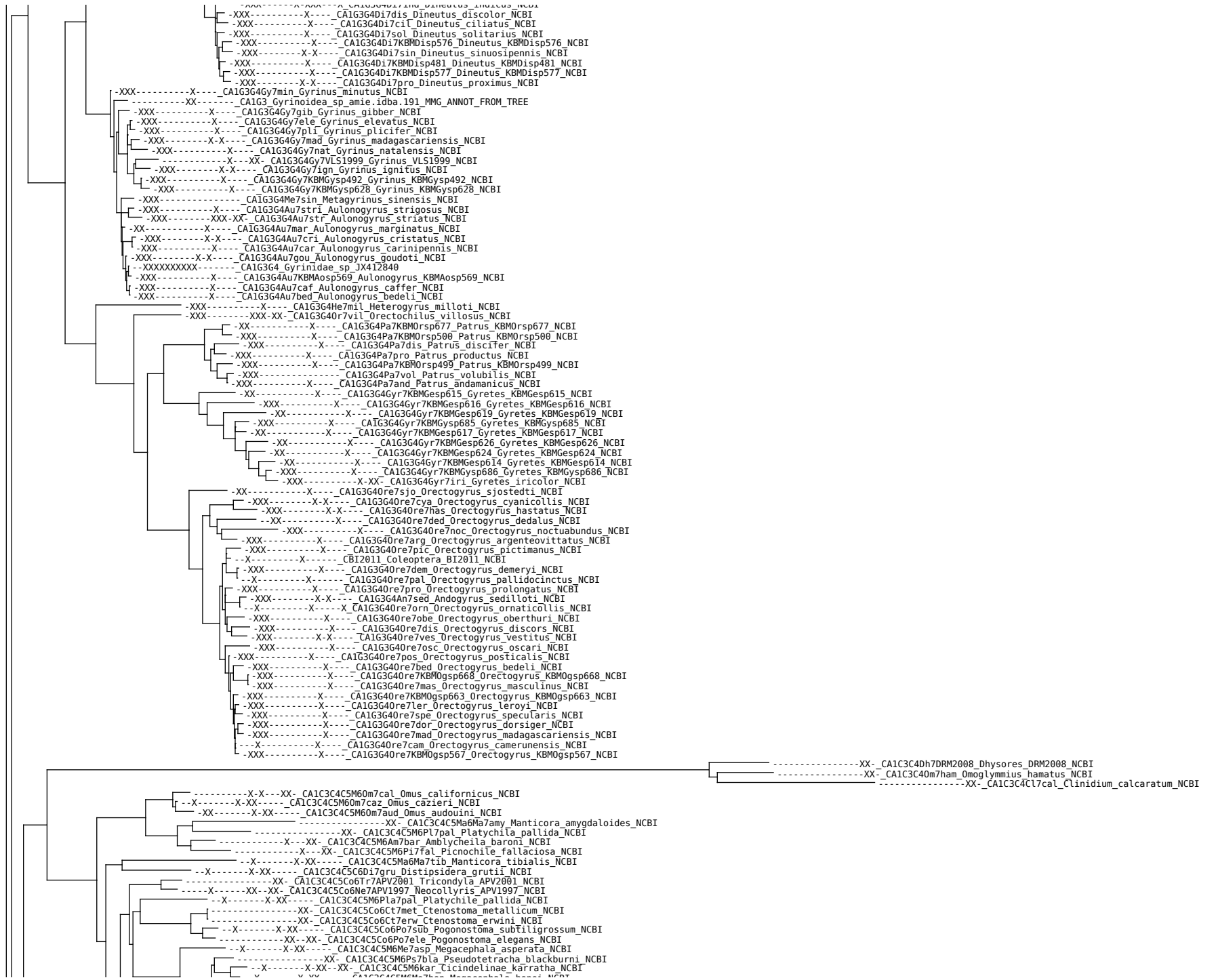










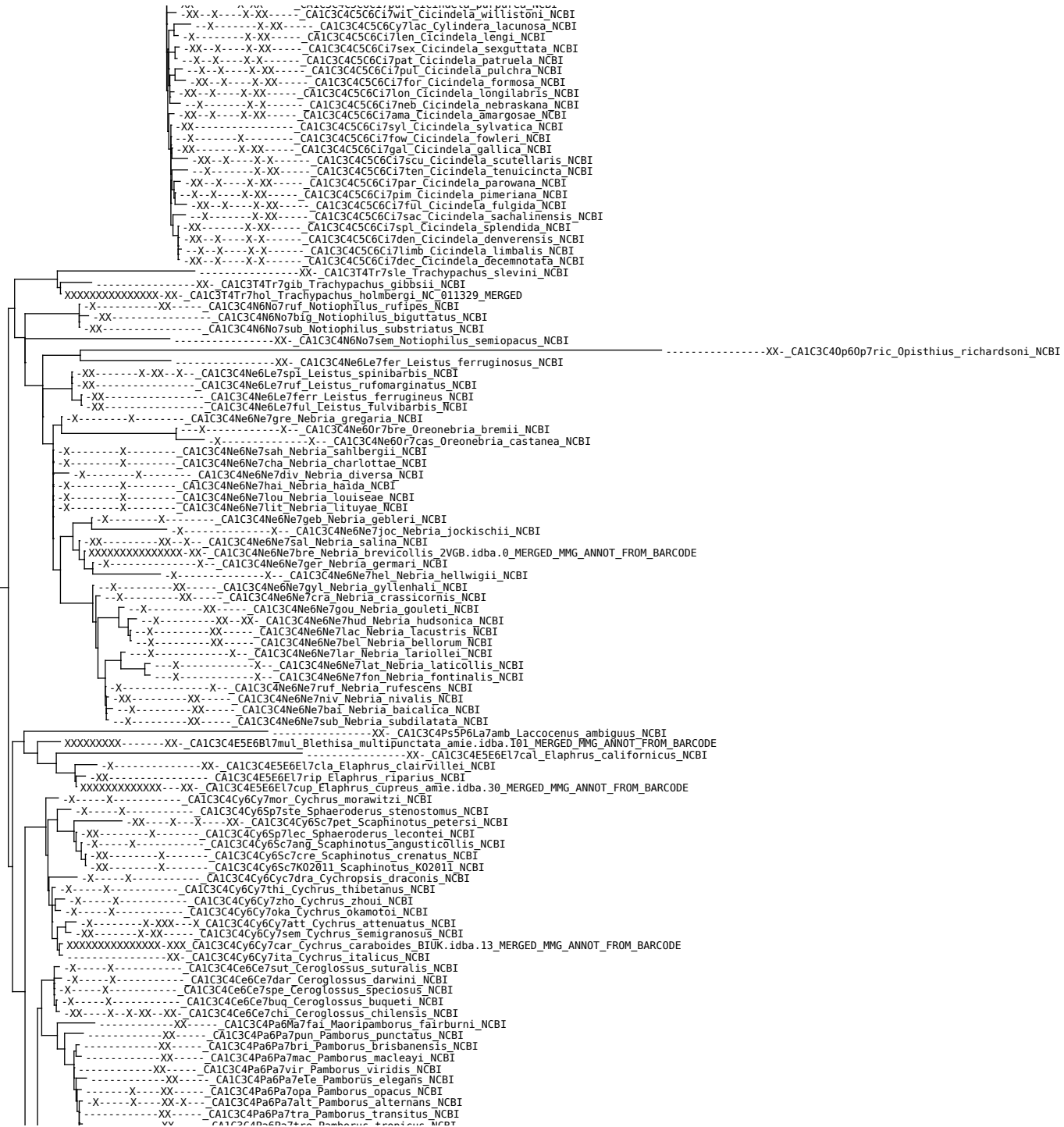


Phylogenetic tree showing relationships among various species, primarily from the genus *Cicindela* and related genera. The tree is rooted on the left and branches out to the right. Each terminal node is labeled with a taxon name and a source code (e.g., NCBI). The labels include accession numbers (e.g., CA13C4C5M6Me7bos) and species names (e.g., *Megacephala bostockii*, *Cicindela regalis*, *Zecicindela hamiltoni*). The tree shows a complex branching pattern, indicating evolutionary relationships and clades within the group.

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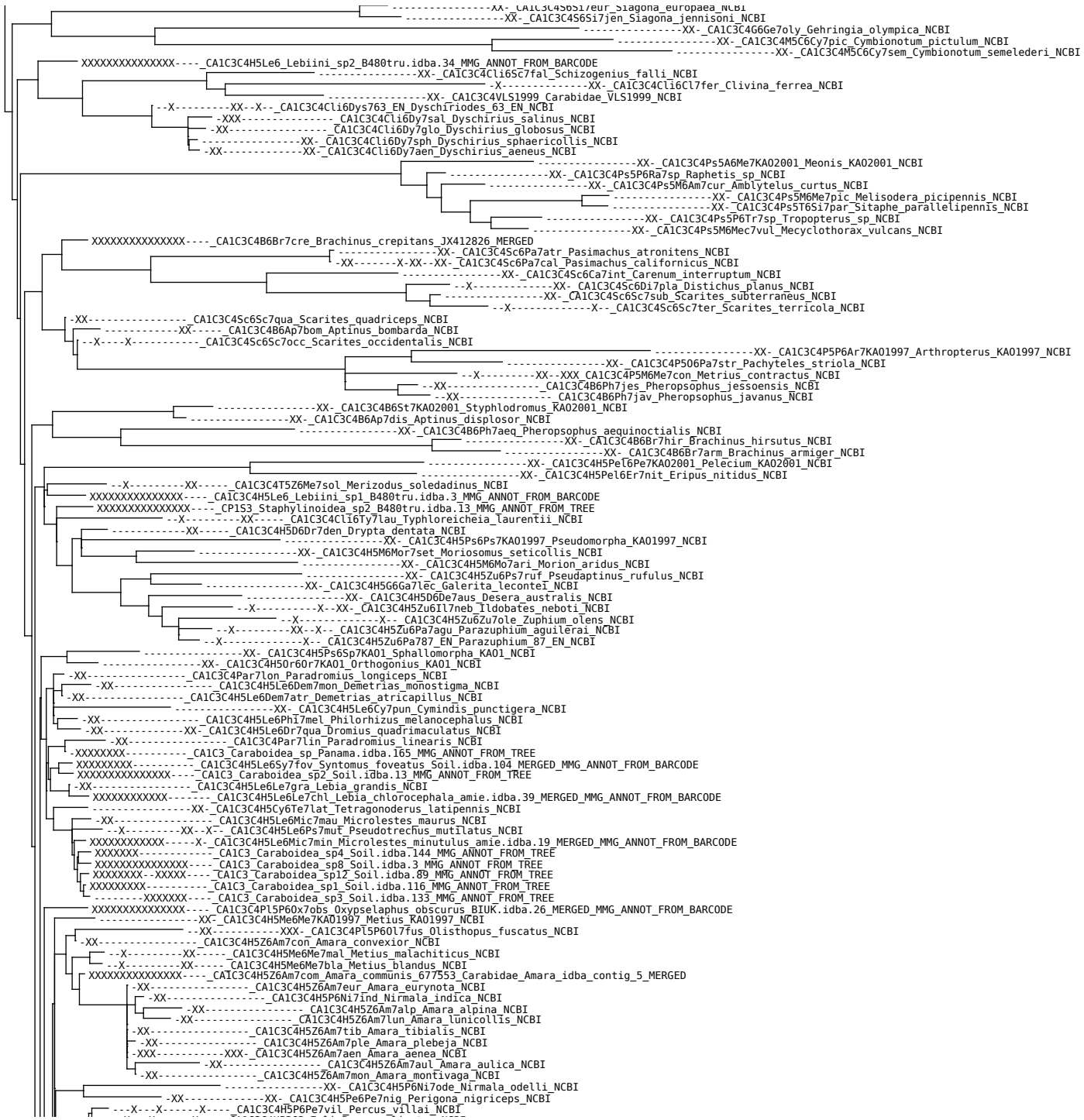


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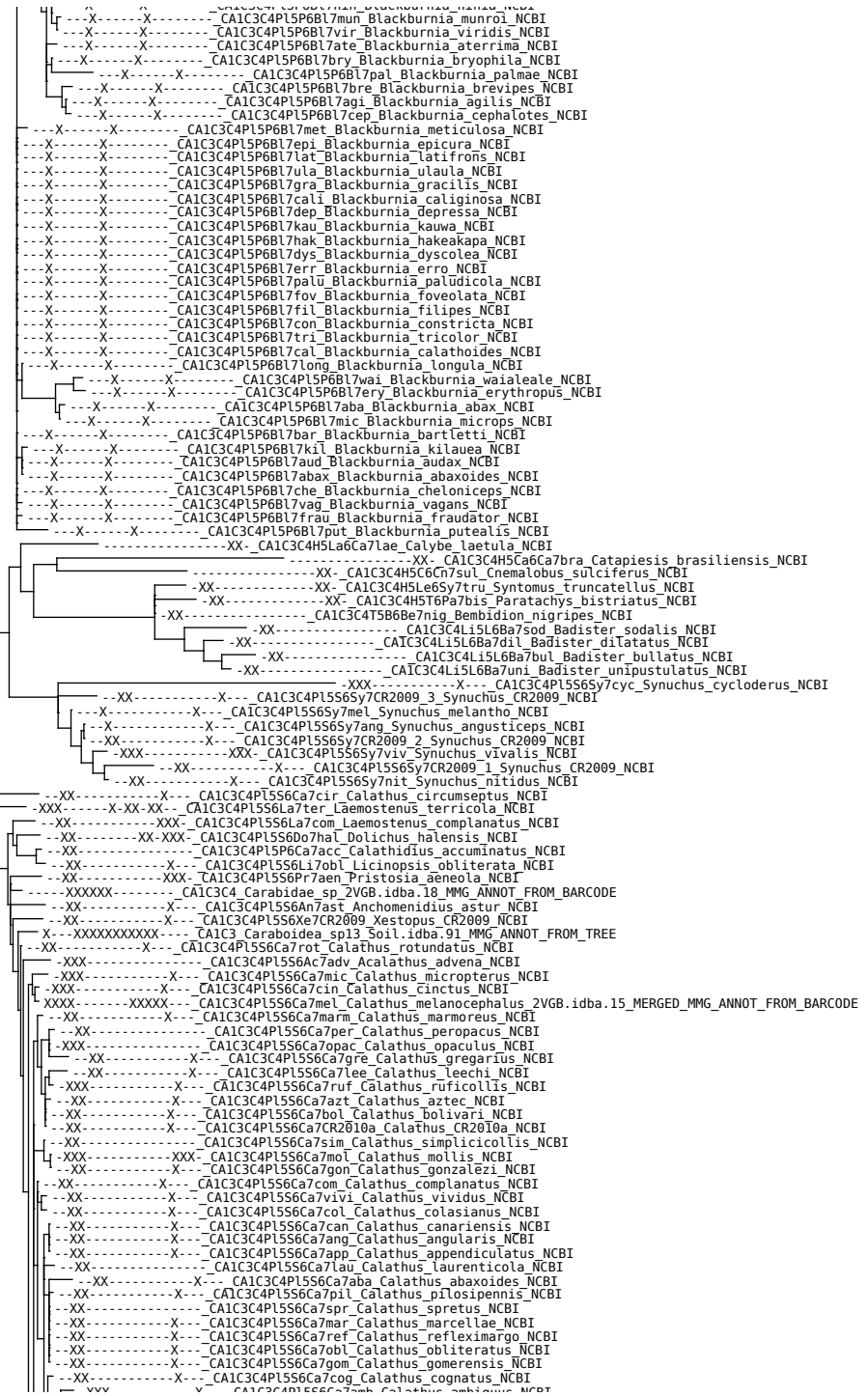


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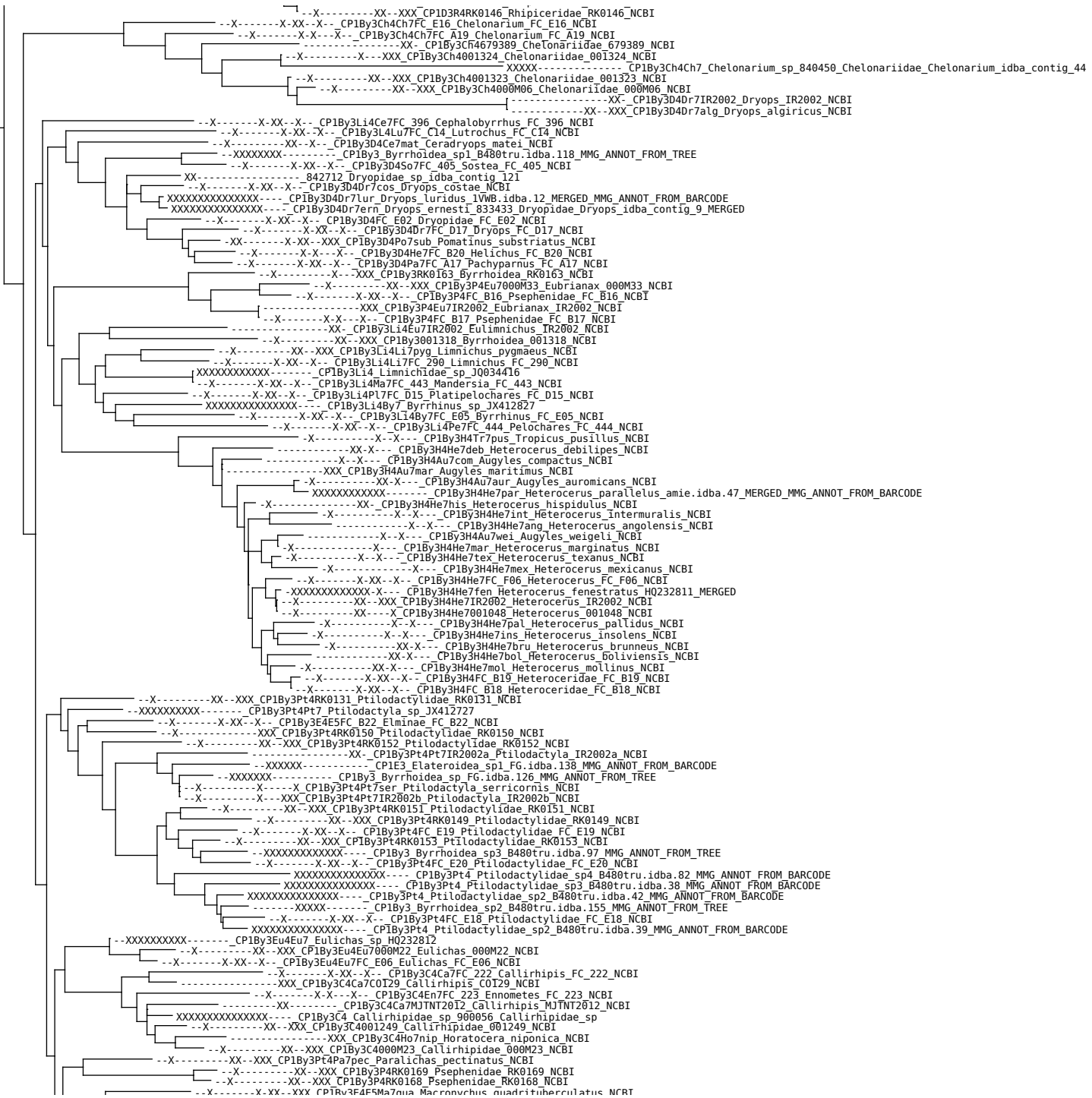


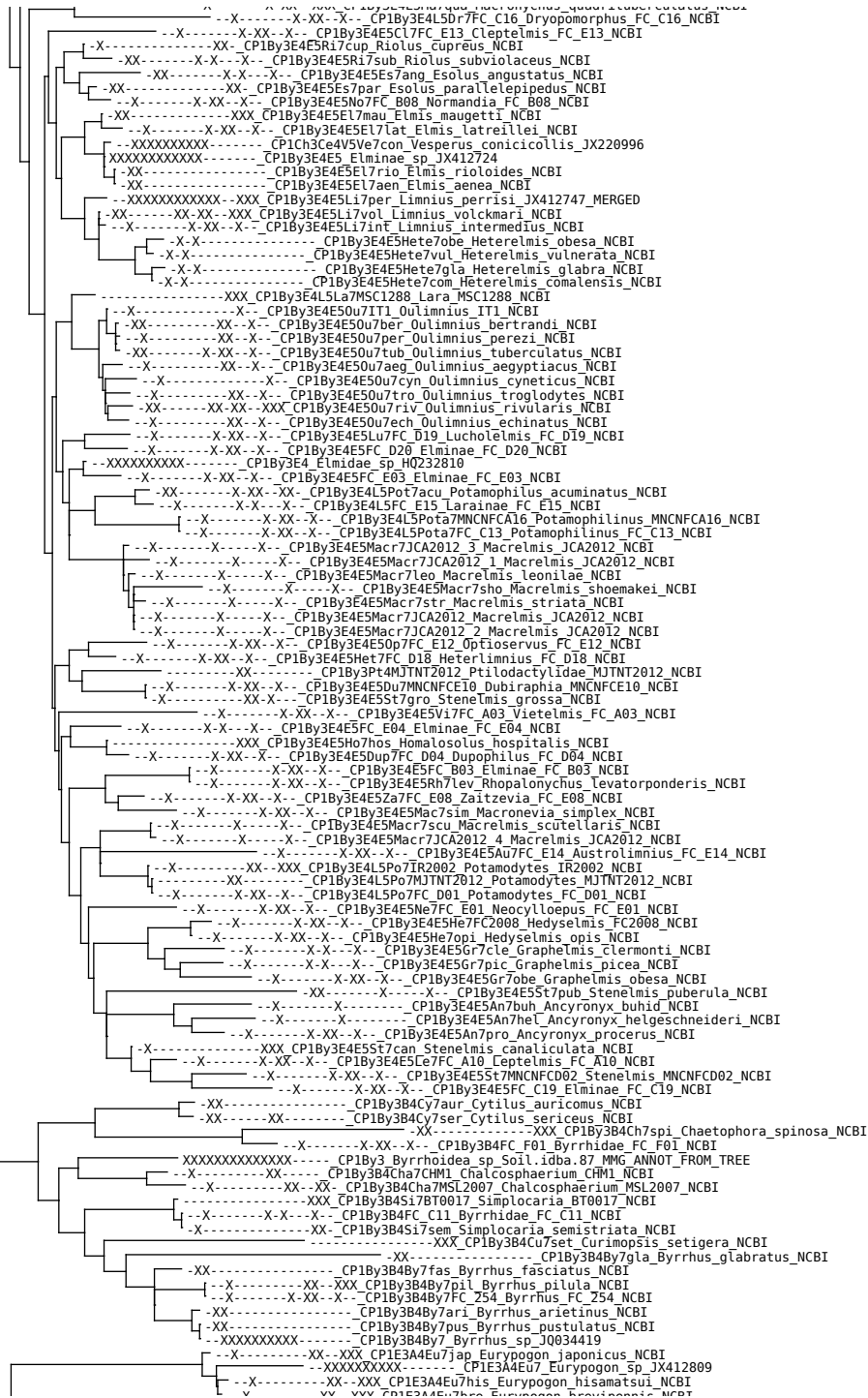
Phylogenetic tree showing relationships between various species, primarily in the order Scirtida. The tree is rooted on the left and branches out to the right. Species names are listed on the right side of the tree, often followed by their NCBI accession number. The tree is annotated with 'X' and 'XX' at various nodes, indicating specific characteristics or clades. The species names include:

- CP1Sci354RK0162 Scirtidae RK0162 NCBI
- CP1Sci354RK0165 Scirtidae RK0165 NCBI
- CP1Sci354RK0159 Scirtidae RK0159 NCBI
- CP1Sci354Sc7pin Scirtes pinjarraensis NCBI
- CP1Sci35407f10 Ora floccosa NCBI
- CP1Sci354Sc7ex0 Scirtes exoletus NCBI
- CP1Sci354Sc7mic Scirtes microrotundus NCBI
- CP1Sci354Sc7int Scirtes interstinctus NCBI
- CP1Sci354Sc7bri Scirtes brisbanensis NCBI
- CP1Sci354Ex7ruf Exochomoscirtes ruforotundus NCBI
- CP1Sci354Ps7cin Pseudomicrocara cincta NCBI
- CP1Sci354Ps7New Pseudomicrocara Newenhami NCBI
- CP1Sci354Ps7han Pseudomicrocara hangayi NCBI
- CP1Sci354Ps7par Pseudomicrocara parva NCBI
- CP1Sci354Ps7CW227 Pseudomicrocara CW227 NCBI
- CP1Sci354Ps7vari Pseudomicrocara variegata NCBI
- CP1Sci354Ps7CW231 Pseudomicrocara CW231 NCBI
- CP1Sci354Ma7cra Macrohelodes crassus NCBI
- CP1Sci354Pr7dis Prionocyphon discoideus NCBI
- CP1Sci354Pr7sex Prionocyphon sexmaculatus NCBI
- CP1Sci354Ps7dav Pseudomicrocara davidsoni NCBI
- CP1Sci354Ps7des Pseudomicrocara desraeae NCBI
- CP1Sci354Ps7ori Pseudomicrocara orientalis NCBI
- CP1Sci354Ps7str Pseudomicrocara Strathblane NCBI
- CP1Sci354Ps7spi Pseudomicrocara spilita NCBI
- CP1Sci354Ps7ant Pseudomicrocara anthophilia NCBI
- CP1Sci354Pr7ser Prionocyphon serricornis NCBI
- CP1Sci354 Scirtidae sp. JX412728
- CP1Sci354Het7aus Heterocyphon australis NCBI
- CP1Sci354Ma7thu Macrohelodes thunguttiensis NCBI
- CP1Sci354Ma7spi Macrohelodes spinapennis NCBI
- CP1Sci354Ma7luc Macrohelodes lucidis NCBI
- CP1Sci354Pe7CW400 Peneveronatus CW400 NCBI
- CP1Sci354Pe7mac Peneveronatus macedonensis NCBI
- CP1Sci354Ps7ang Pseudomicrocara angulata NCBI
- CP1Sci354Het7mon Heterocyphon montanus NCBI
- CP1Sci354Het7dec Heterocyphon decussatus NCBI
- CP1Sci354Het7tri Heterocyphon triangularis NCBI
- CP1Sci354Het7kei Heterocyphon keiraensis NCBI
- CP1Sci354Het7elo Heterocyphon elongatus NCBI
- CP1Sci354He7obs Herthania obscurata NCBI
- CP1Sci354Ps7min Pseudomicrocara minor NCBI
- CP1Sci354Ac7mac Accolabass maculatus NCBI
- CP1Sci354Ac7vic Accolabass victoriensis NCBI
- CP1Sci354Het7spe Heterocyphon spencei NCBI
- CP1Sci354Ps7ruf Pseudomicrocara rufusensis NCBI
- CP1Sci354Ac7par Accolabass parvus NCBI
- CP1Sci354Ps7atk Pseudomicrocara atkinsoni NCBI
- CP1Sci354Ps7occ Pseudomicrocara occidentalis NCBI
- CP1Sci354JH2010 Scirtidae JH2010 NCBI
- CP1Sci354Ps7pic Pseudomicrocara picta NCBI
- CP1Sci354RK0166 Scirtidae RK0166 NCBI
- CP1Sci354Ps7Sty Pseudomicrocara StyxForest NCBI
- CP1Sci354Ps7var Pseudomicrocara variabilis NCBI
- CP1Sci354Ps7unc Pseudomicrocara uncata NCBI
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- CP1Sci354Cy7var Cyphon variabilis 2VGB.idba.12\_MMG\_ANNOT\_FROM\_BARCODE
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- CP1Sci354Co7var Contacyphon variabilis NCBI
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- CP1Sci354Mac7sca Macroscyllus scalaris NCBI
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- CP1Sci354Pr7lam Prionocyphon lamingtonensis NCBI
- CP1Sci354Pr7lat Prionocyphon latummandibularis NCBI
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- CP1Sci354Co7Rd Contacyphon Rd NCBI
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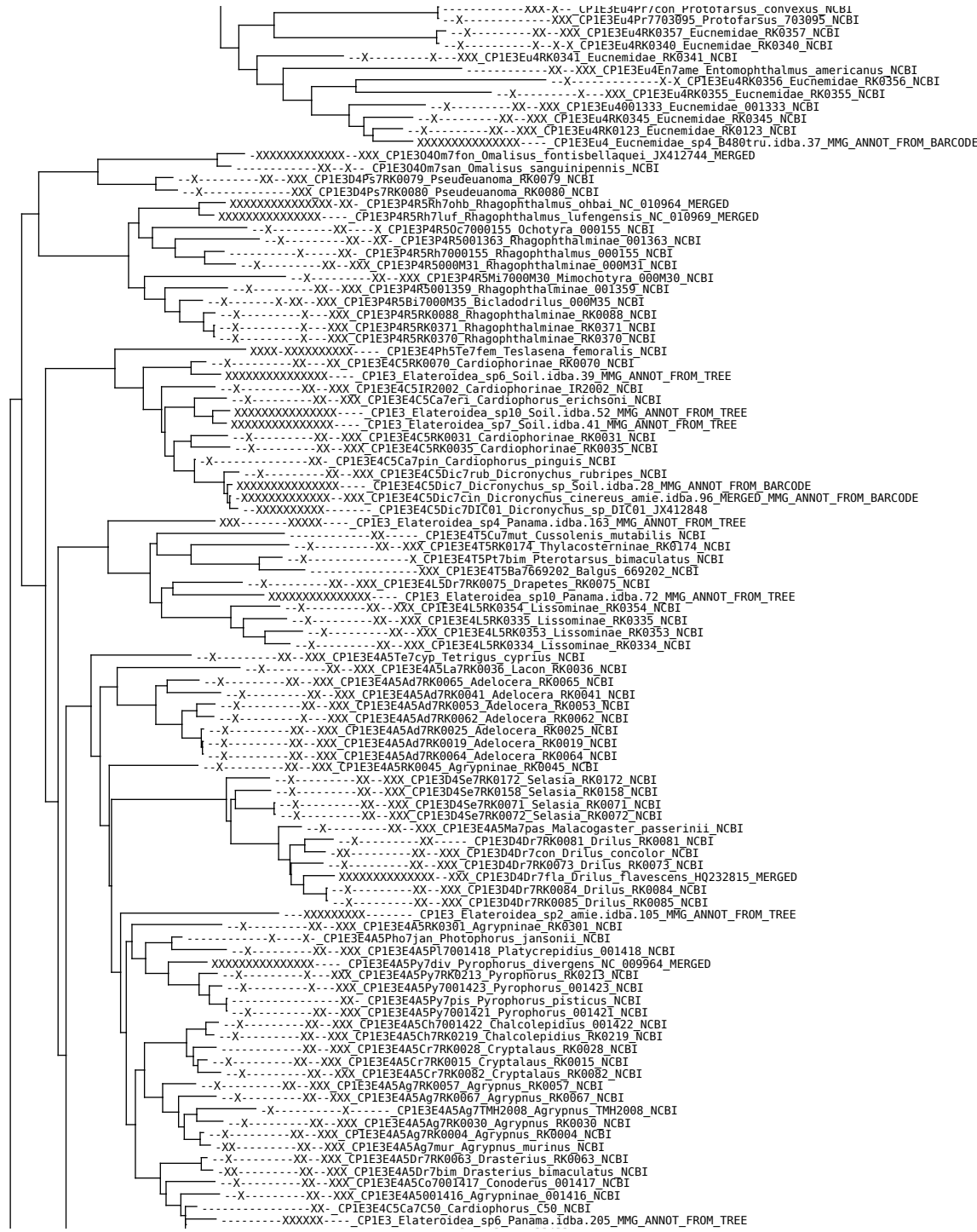




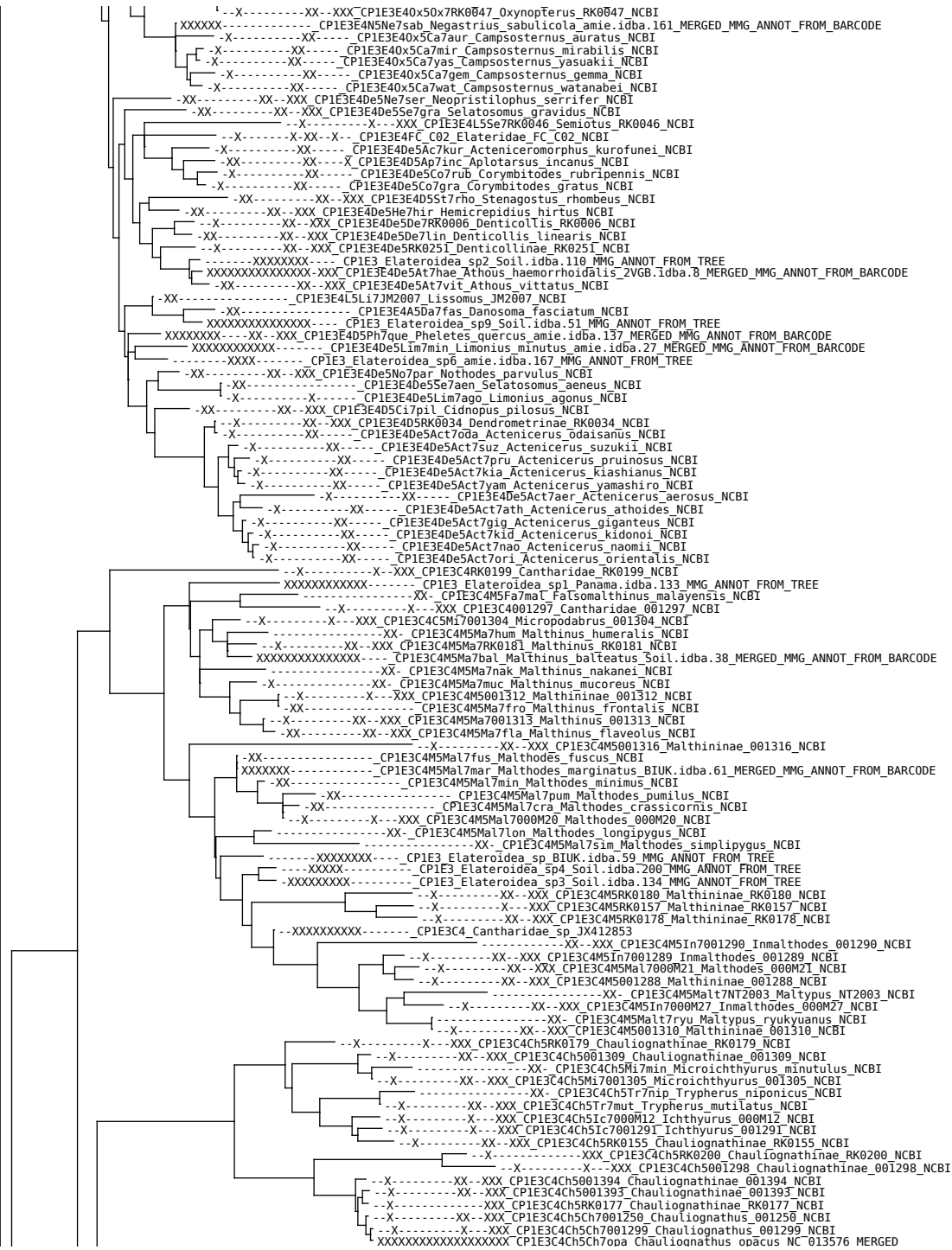


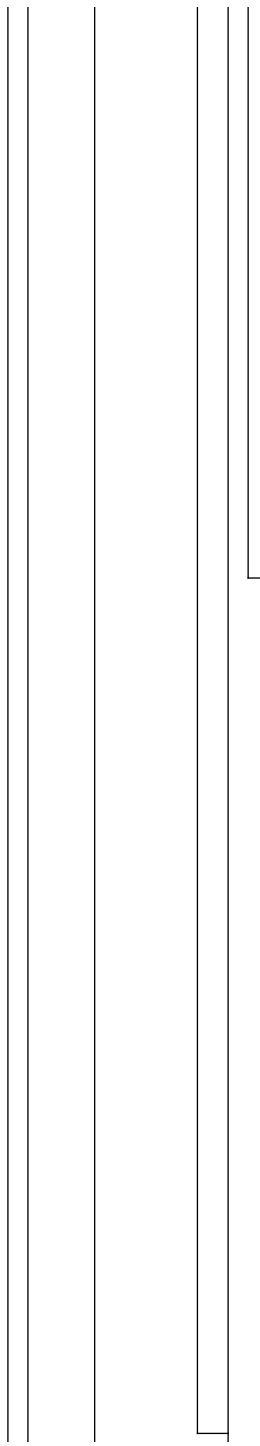




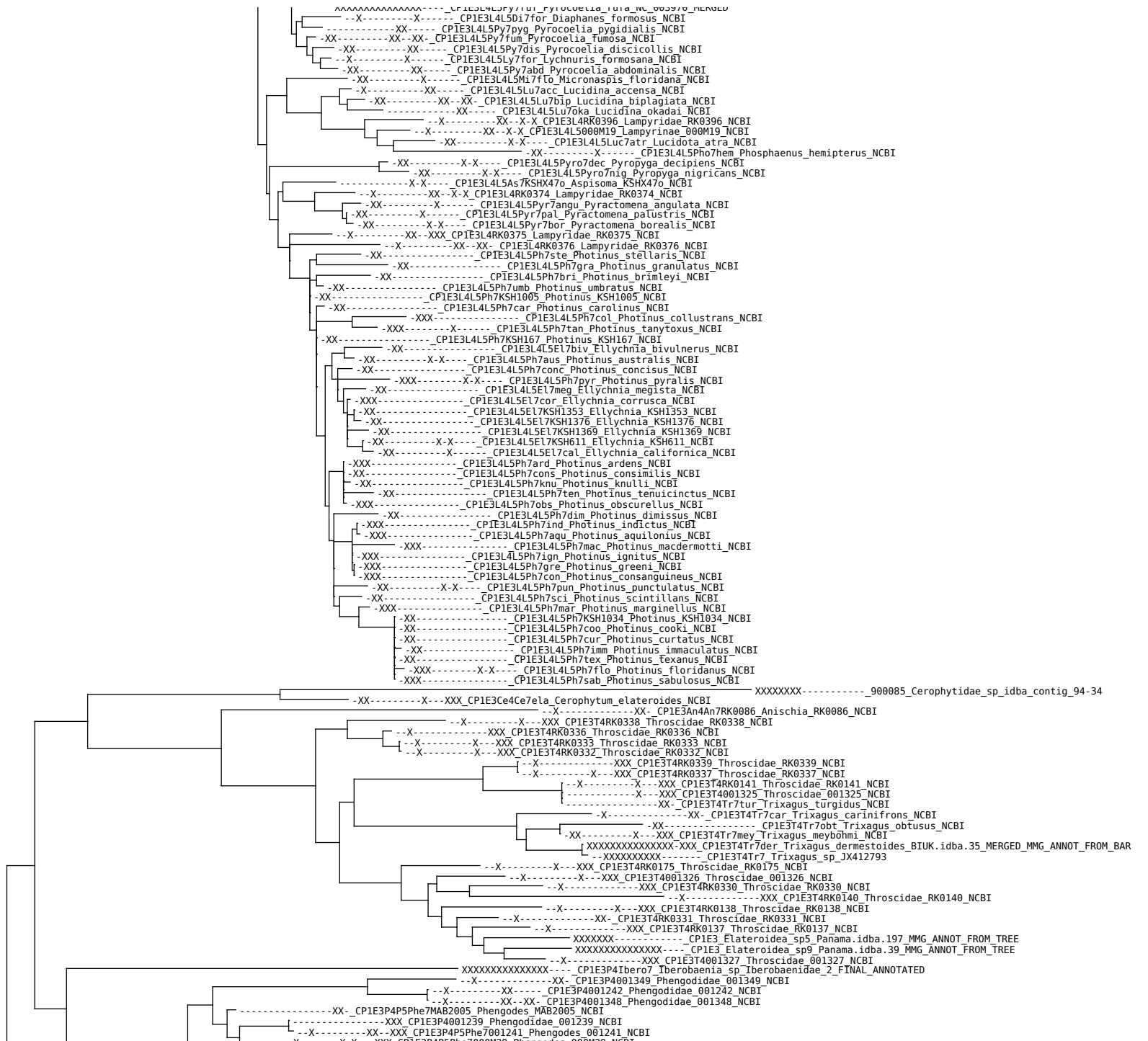


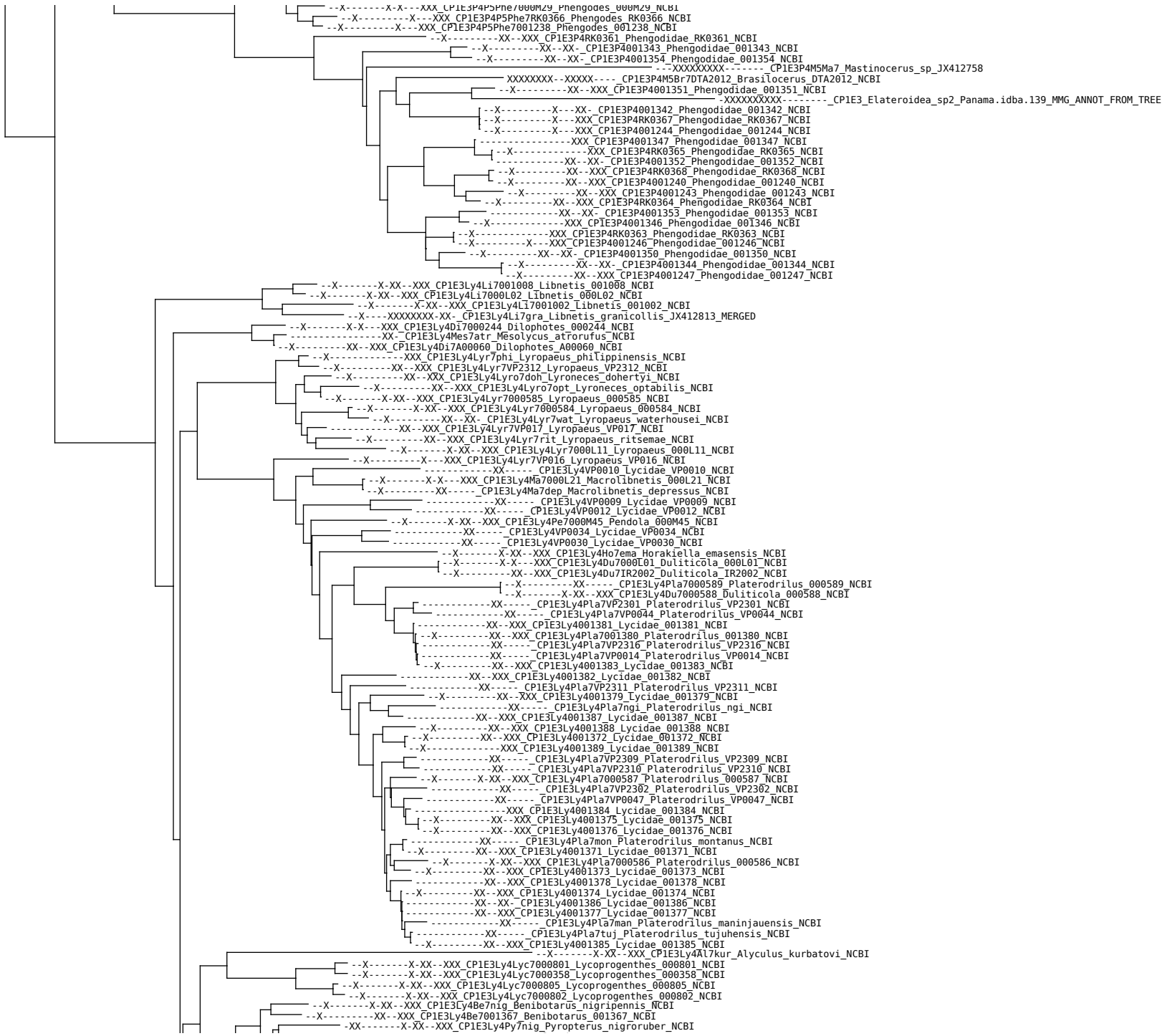
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XXXXXXXXXXXX CP1E3E4De5An7cas\_Anostirus castaneus amie.idba.28 MERGED\_MMG\_ANNOT\_FROM\_BARCODE  
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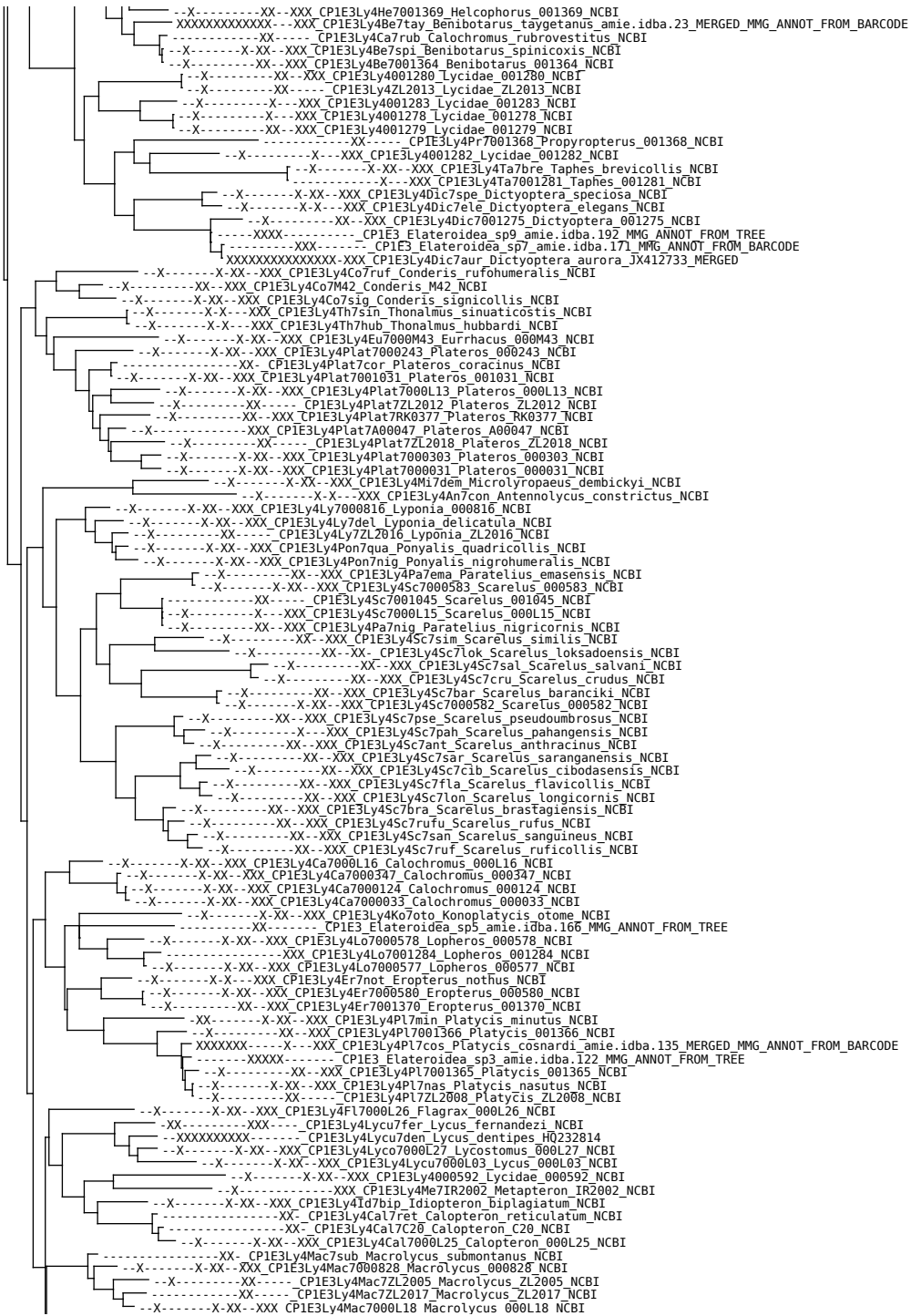


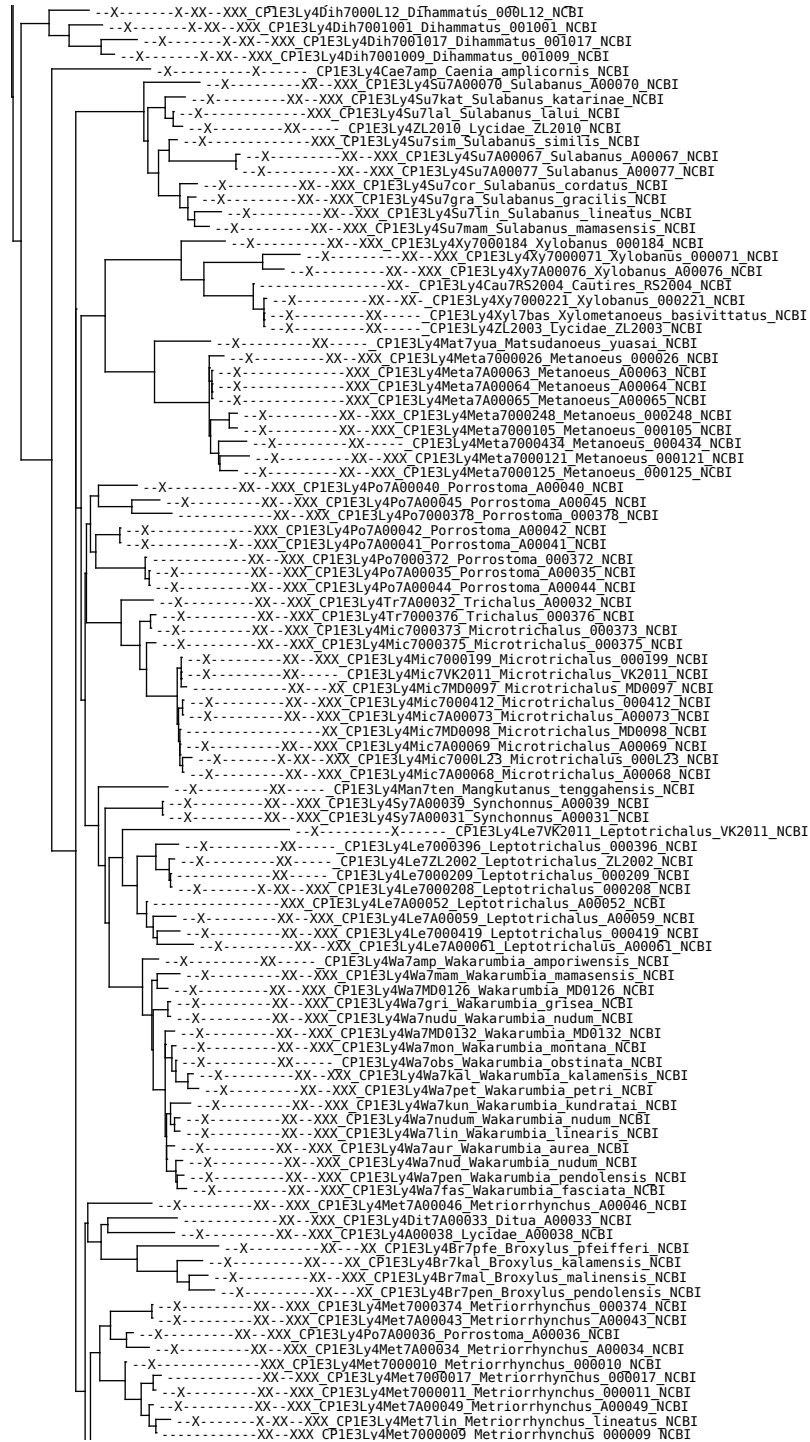


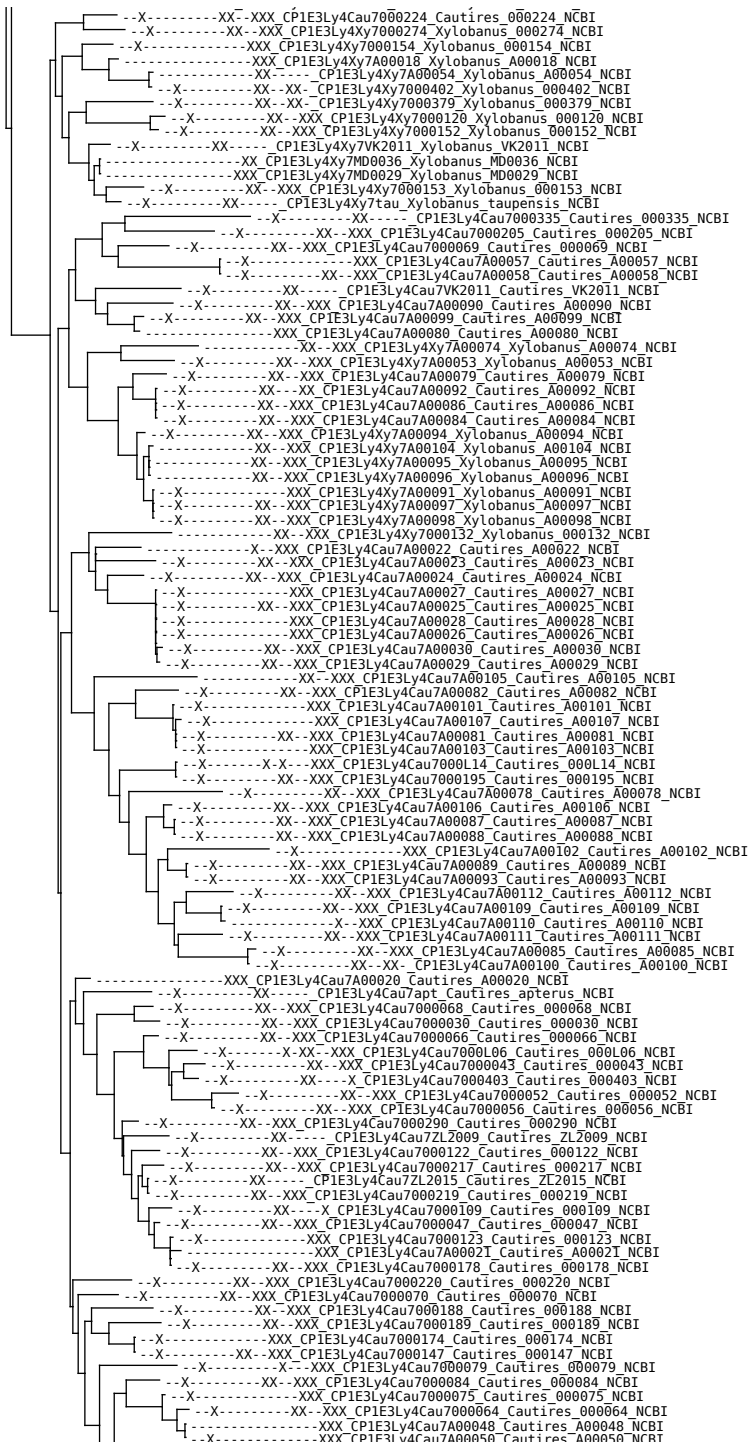


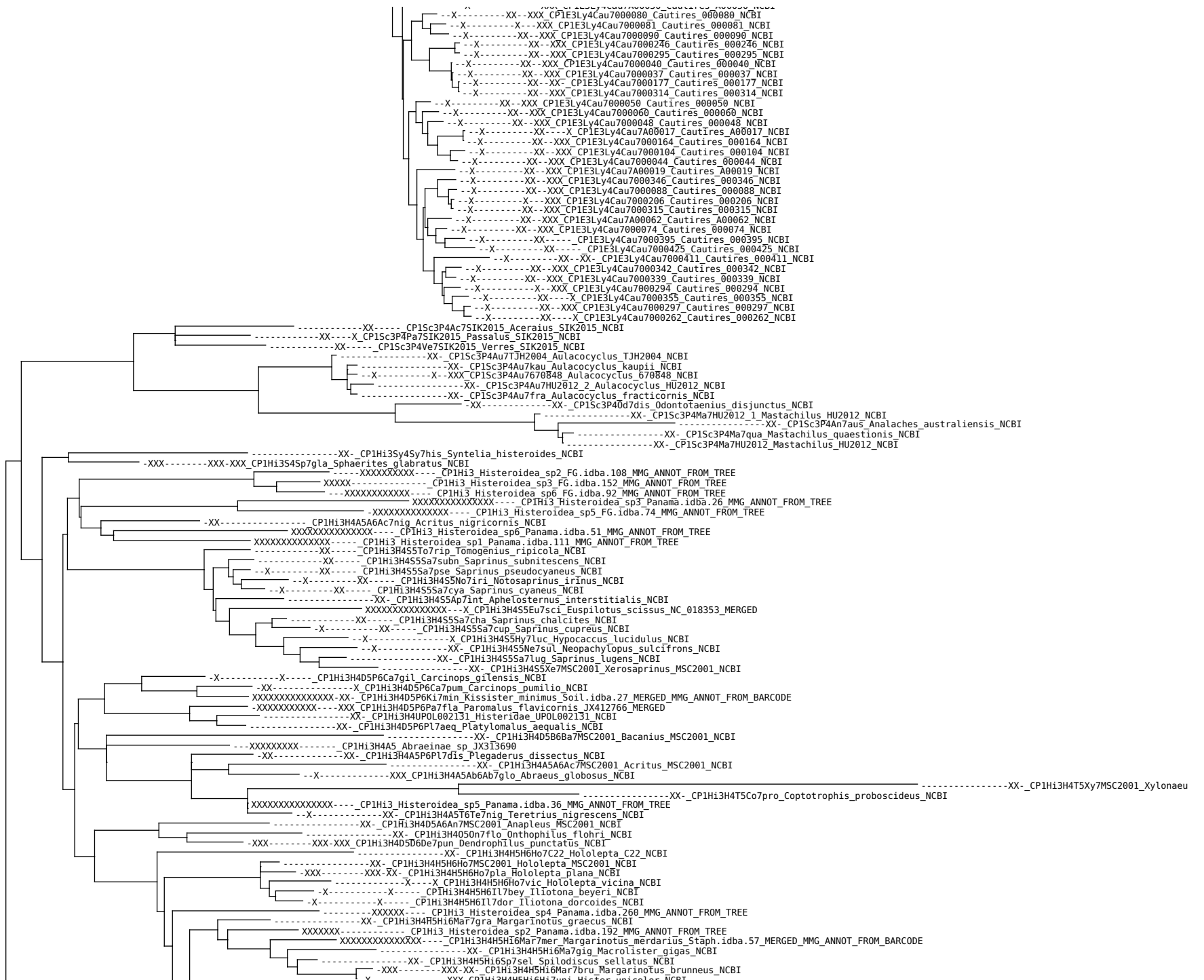


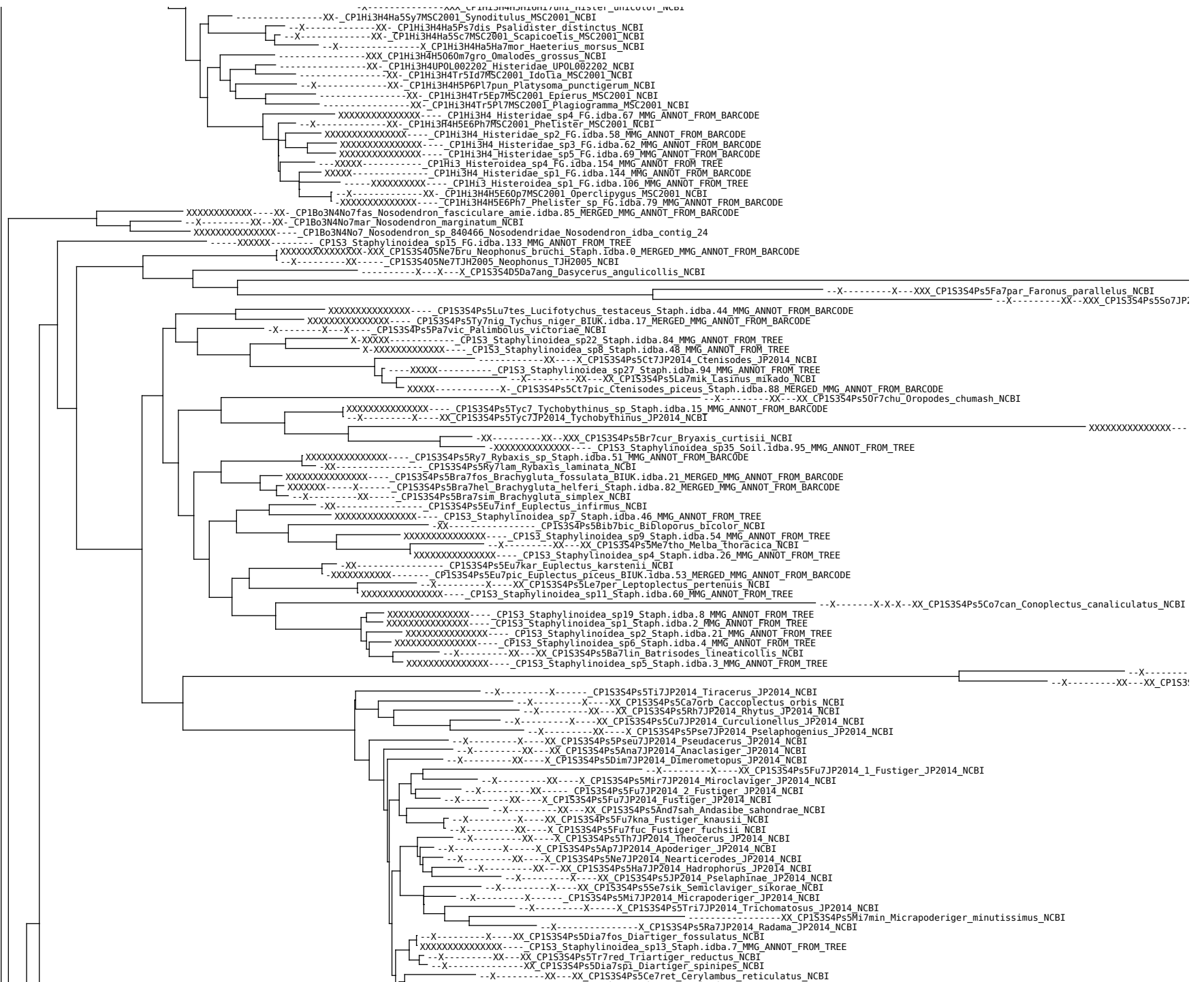


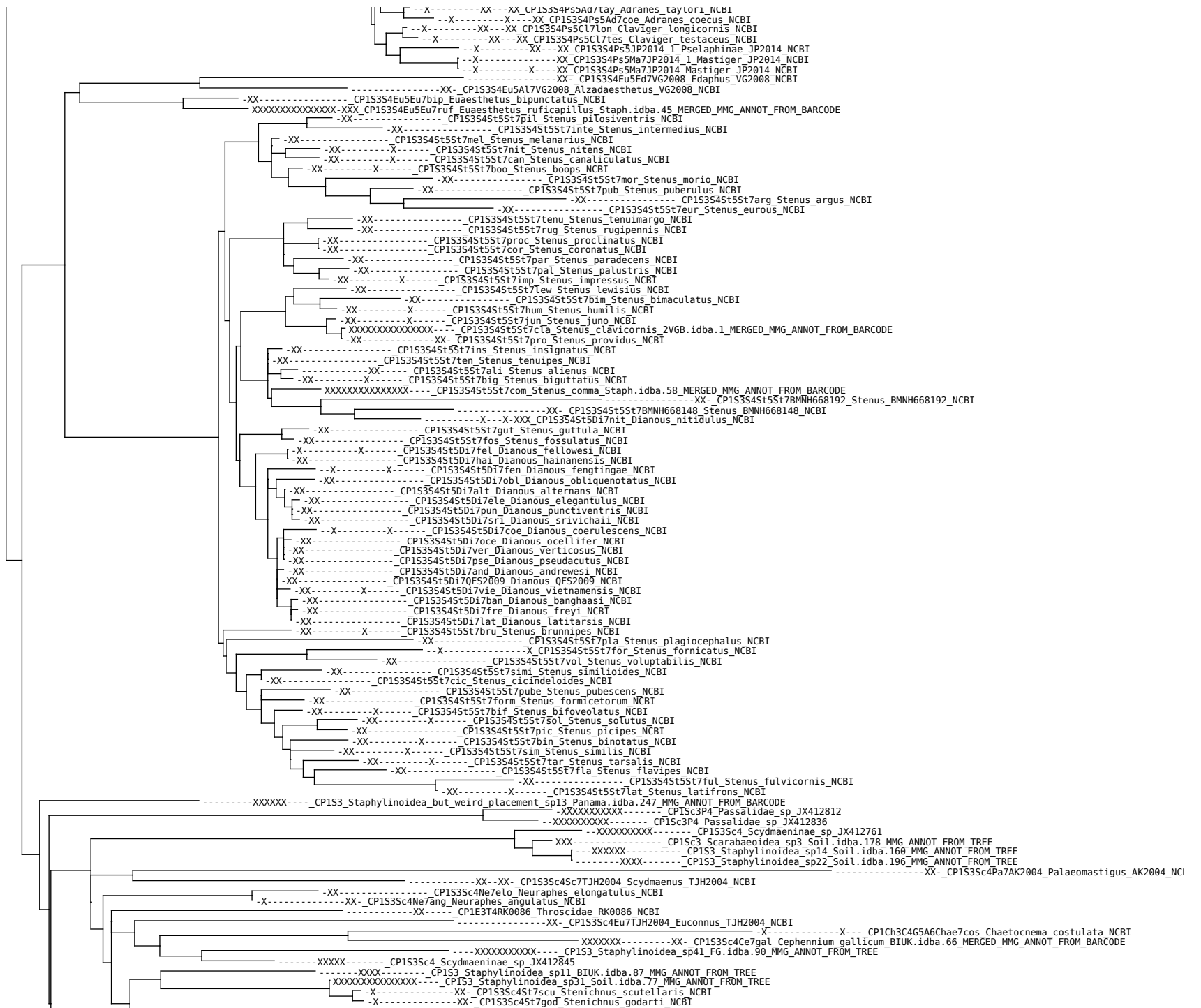


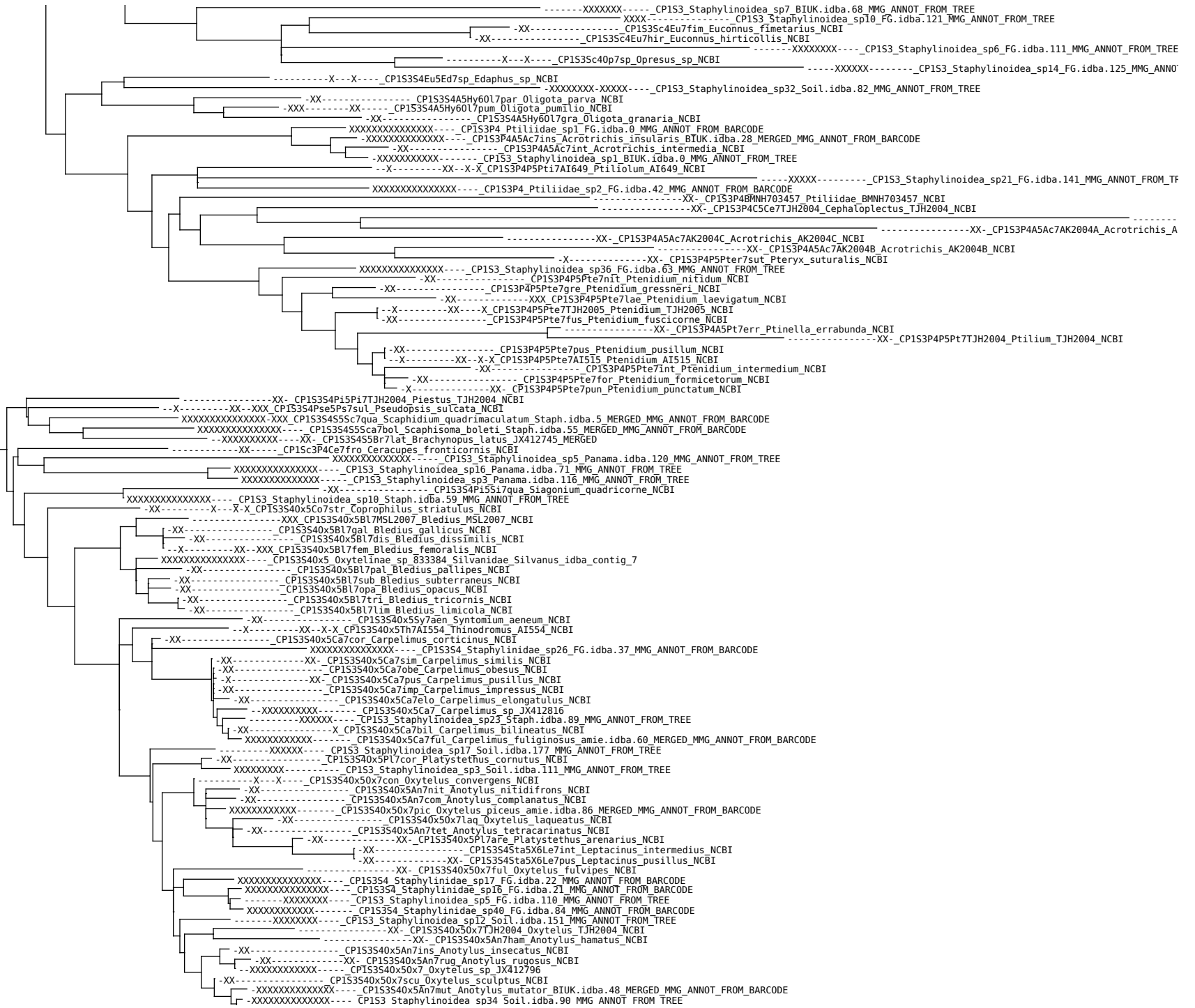


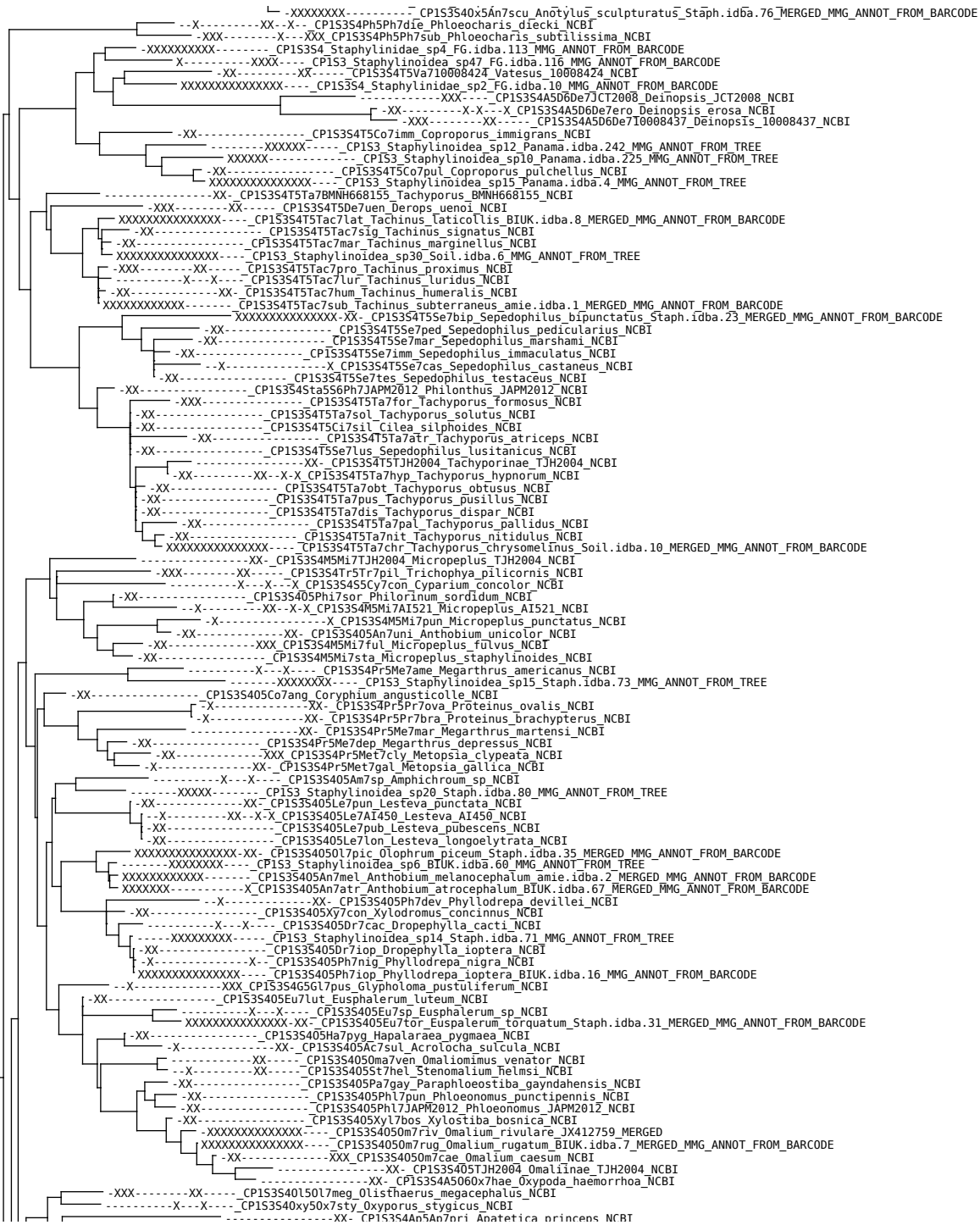






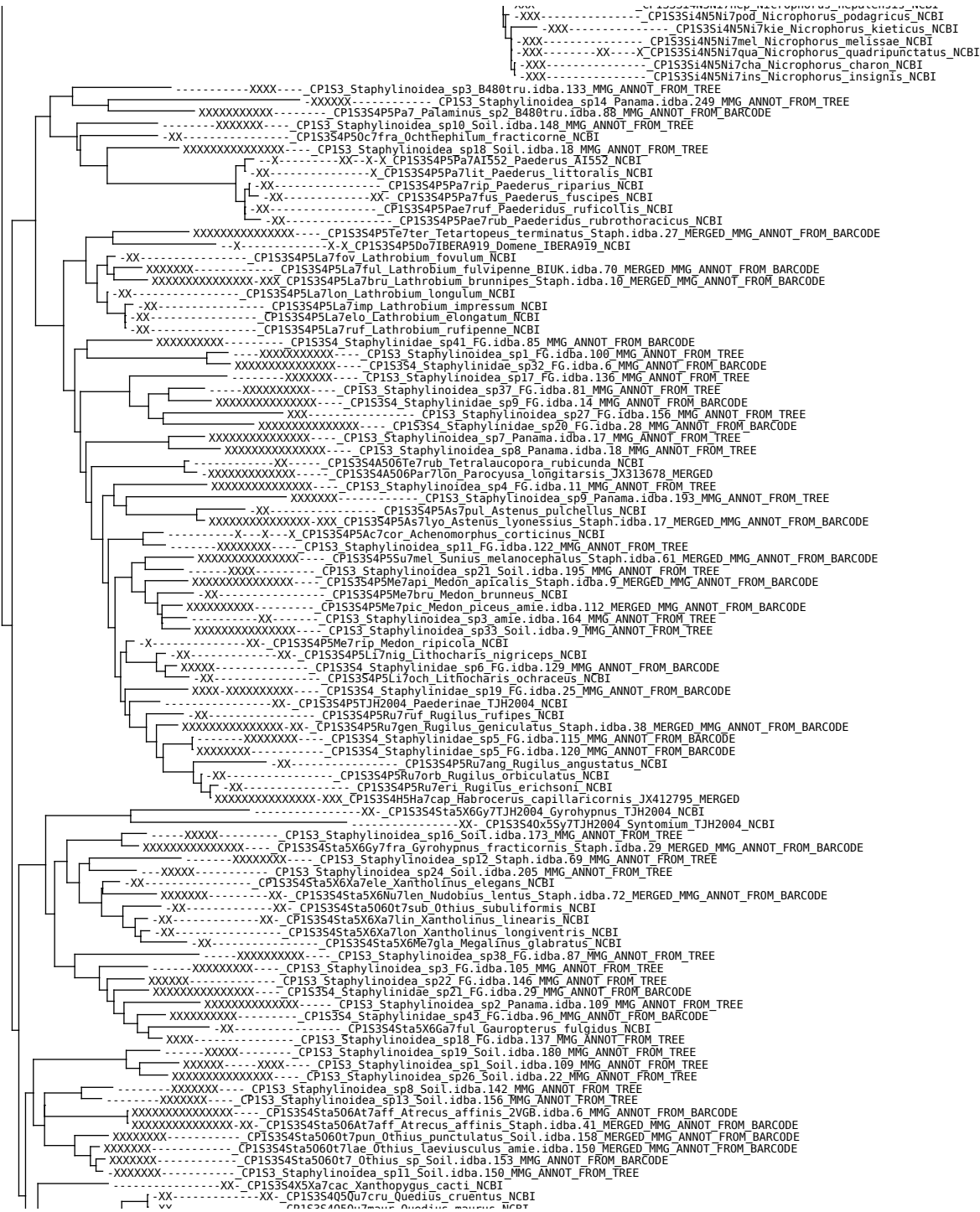


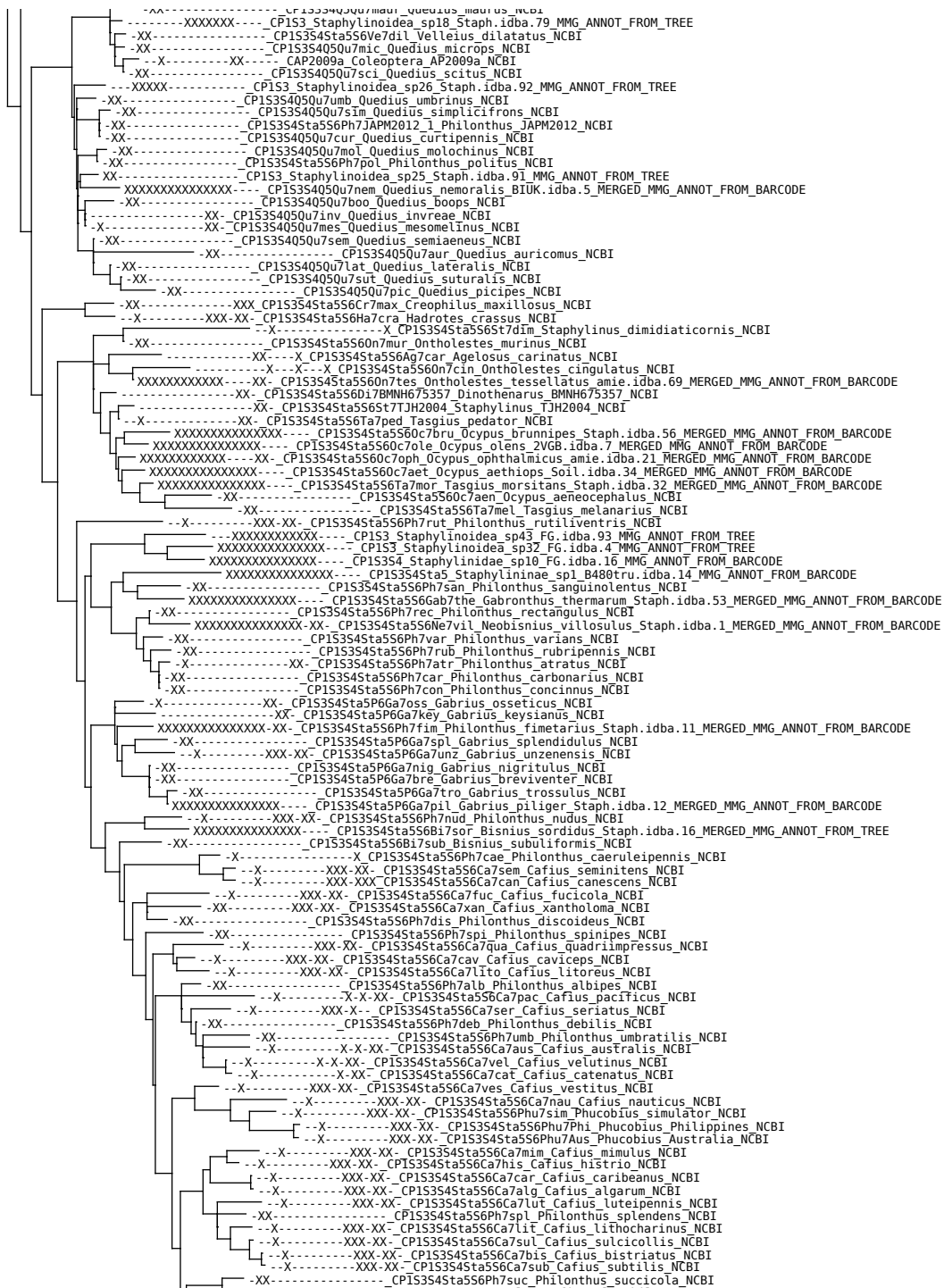


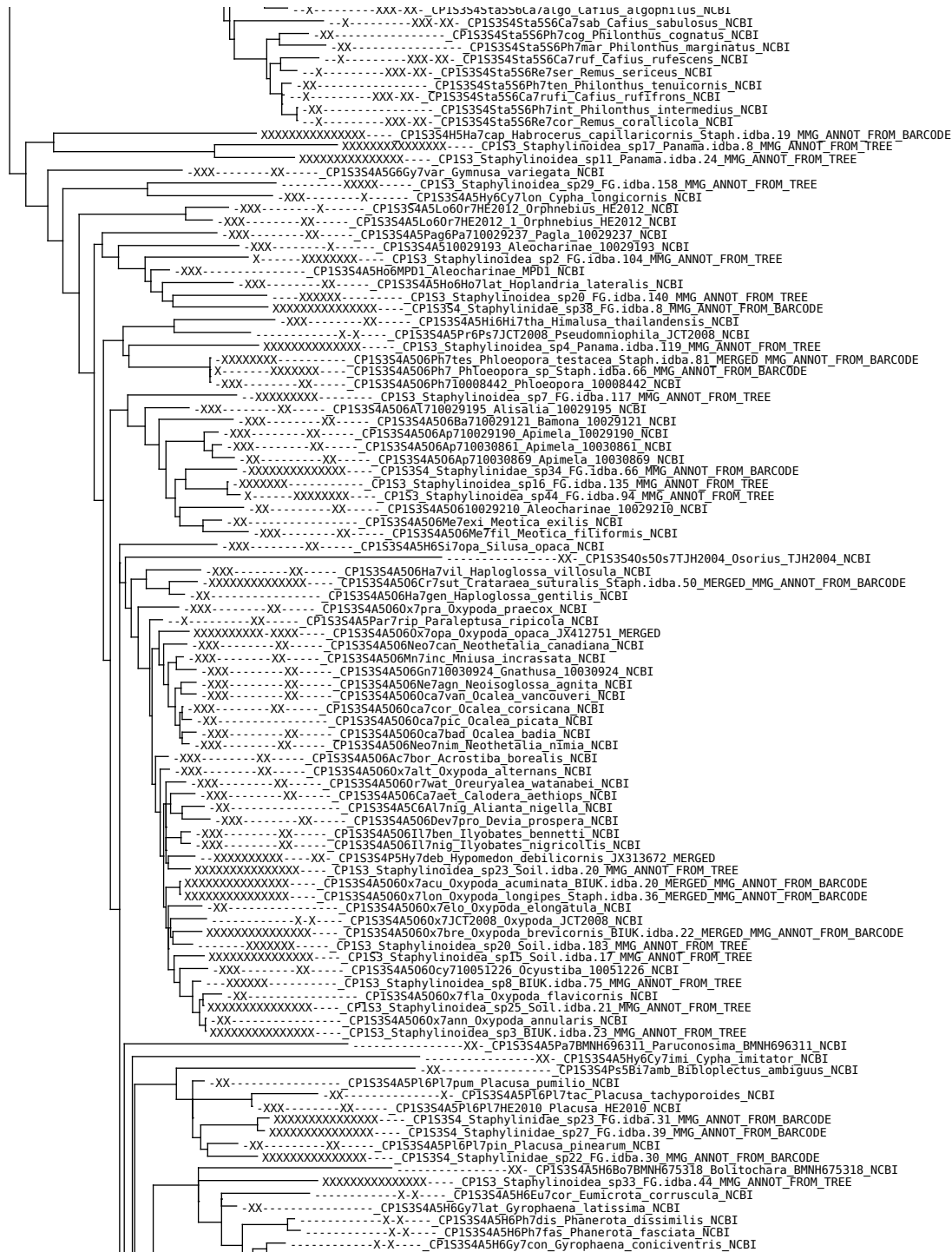


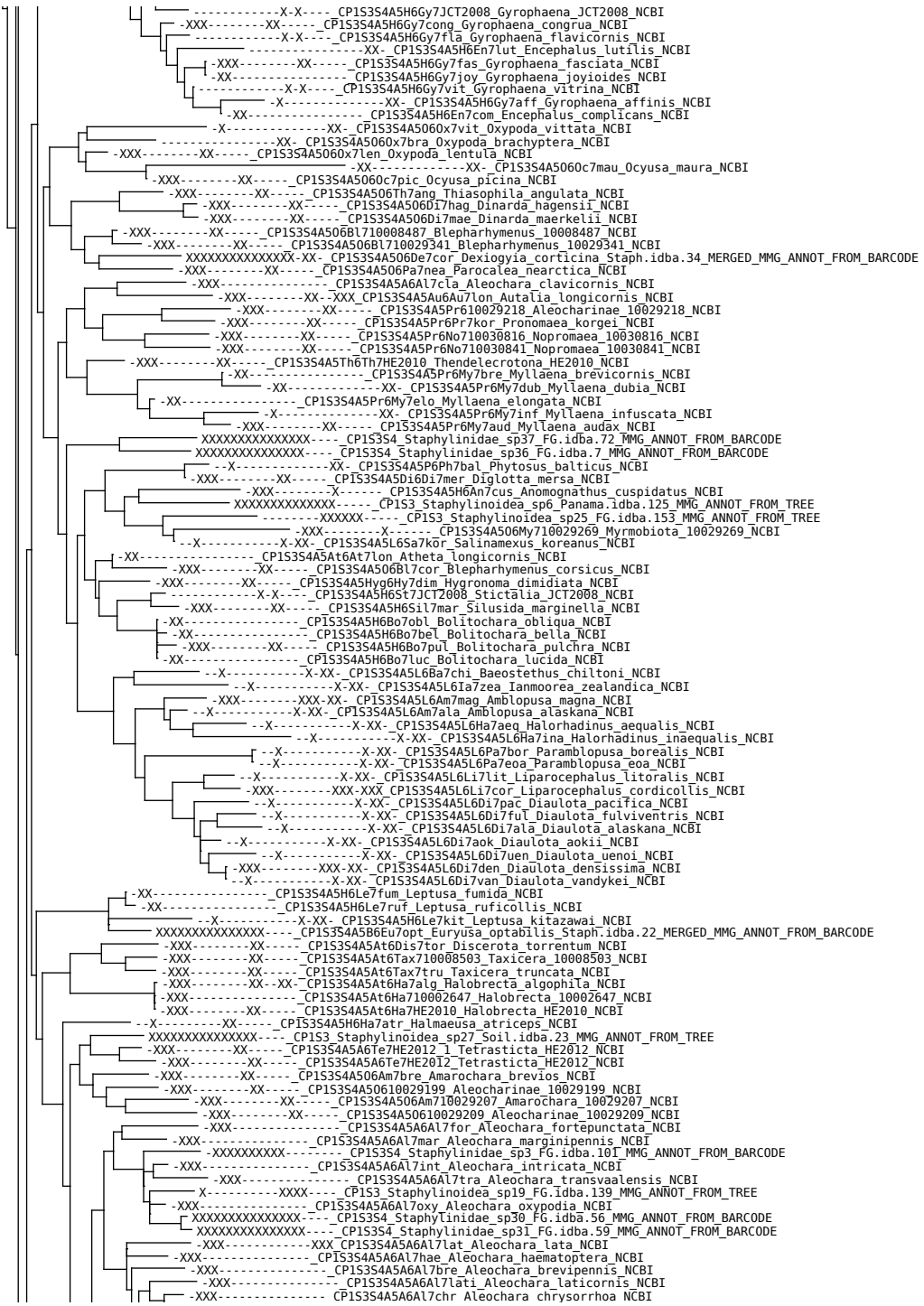


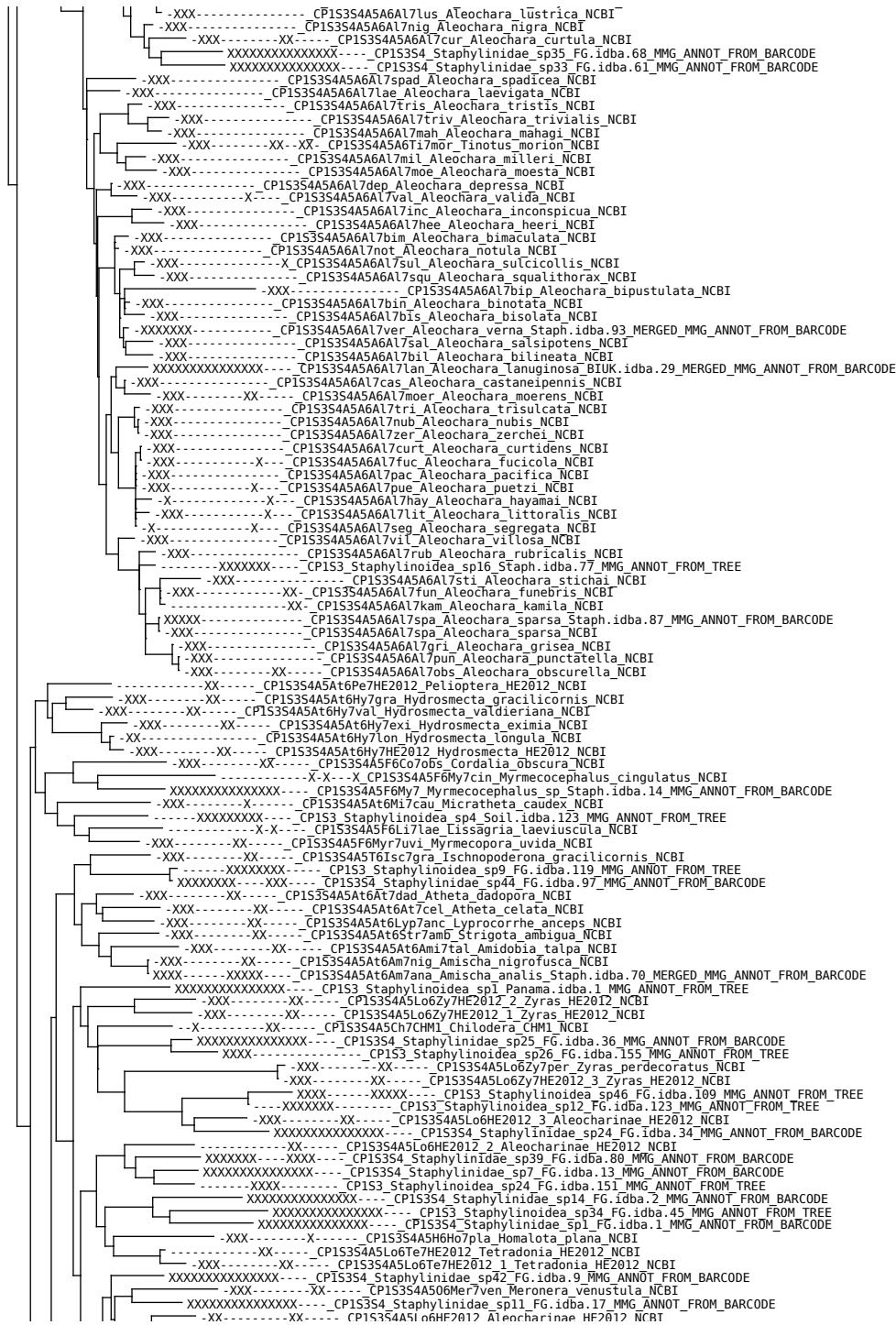












Phylogenetic tree showing relationships between various species, with labels such as CP153545Lo6HE2012\_1\_Aleocharinae\_HE2012\_NCBI, CP15354 Staphylinidae\_sp15\_FG.idba.19\_MMG\_ANNOT\_FROM\_BARCODE, and CP153545Lo6Eci7HE2012\_Ecitolonia\_HE2012\_NCBI. The tree is rooted on the left and branches out to the right, with species names listed next to the branches. Some labels include accession numbers and identifiers like 'HE2012' or 'JAPM2012'. The tree is a cladogram with bootstrap values indicated by 'X' marks at the nodes.

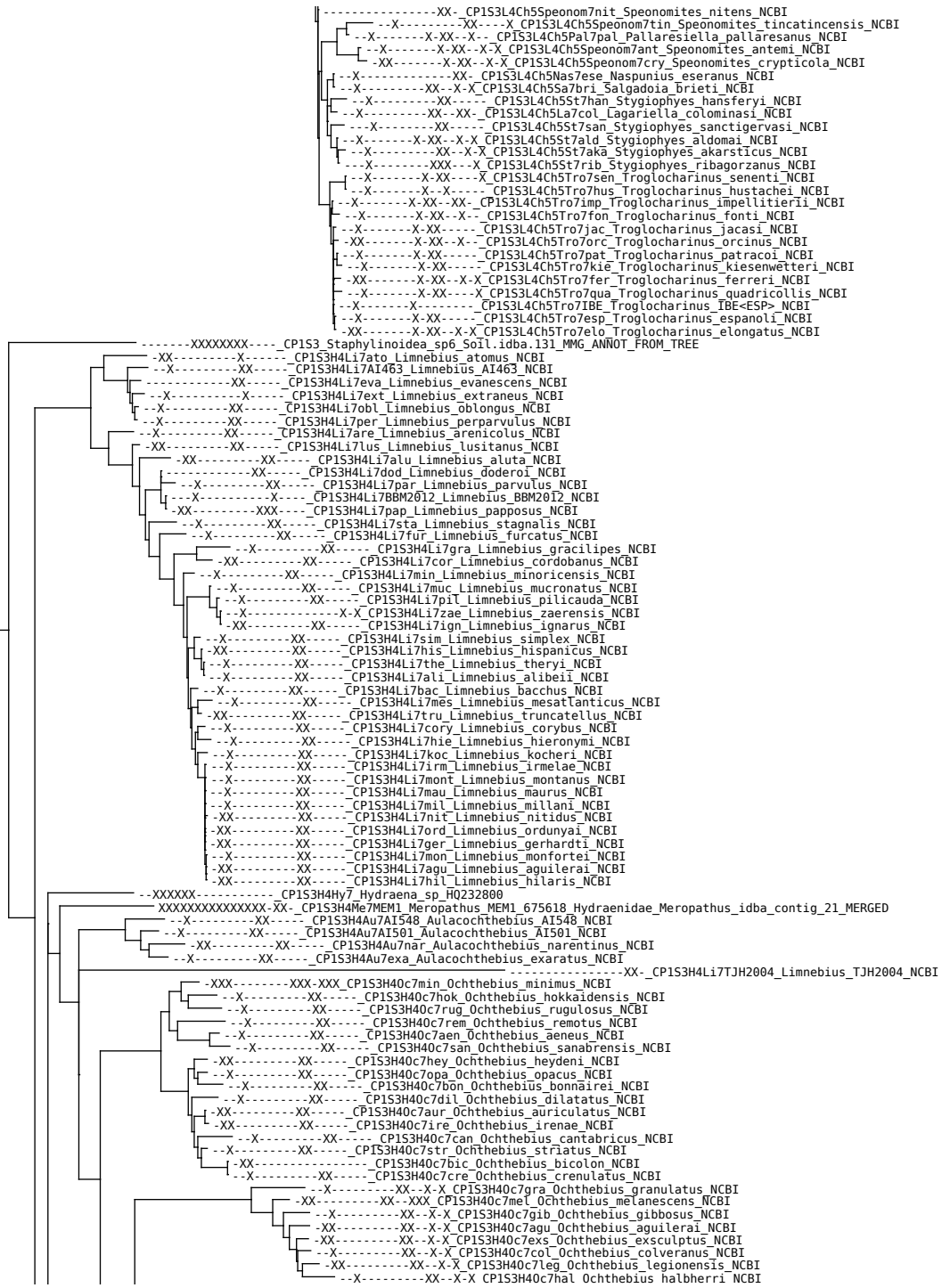
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-XXX-XX- CP153S4A5At6Mo7sco Mocyta scopula NCBI  
XXXXXXXXXXXXXXXXX CP153S4A5At6At7fun Atheta fungi Soil.idba.12 MERGED\_MMG\_ANNOT\_FROM\_BARCODE  
XXXXXXXXXXXXXXXXX CP153 Staphyloidea\_sp7 Soil.idba.14 MMG\_ANNOT\_FROM\_TREE  
-XXX- CP153S4A5At6Mo7 Mocyta\_sp BIUK.idba.62 MMG\_ANNOT\_FROM\_BARCODE  
-XXX-XXXXXXXX CP153S4A5At6Mo7fun Mocyta\_fungi BIUK.idba.80 MERGED\_MMG\_ANNOT\_FROM\_BARCODE  
-XX- CP153S4A5At6At7elo Atheta elongatula NCBI  
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-XXX-XX- CP153S4A5At6Bo7hyp Boreophilina hyperborea NCBI  
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-XX- CP153S4A5At6At7ben Atheta benicKiella NCBI  
XXXXXXXXXXXXXXXXX CP153S4A5At6At7ami Atheta amacula Staph.idba.42 MERGED\_MMG\_ANNOT\_FROM\_BARCODE  
-XXX-XX- CP153S4A5At6At7pas Atheta pasadenae NCBI  
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XXXXXXXXXXXXXXXXX CP153S4A5At6At7 Atheta\_sp BIUK.idba.9 MMG\_ANNOT\_FROM\_BARCODE  
-XXX-XX- CP153S4A5At6At7vag Atheta vaga NCBI  
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-XX- CP153S4A5At6At7cor Atheta corvina NCBI  
-XX-XX- CP153S4A5At6At7rav Atheta ravilla NCBI  
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-XXX-XX- CP153S4A5C6Br7mer Brundinia meridionalis NCBI  
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-XXX-XX- CP153S4A5At6At7pal Atheta pallidicornis NCBI  
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-XXX-XX- CP153S4A5T6Br7con Brachyusa concolor NCBI  
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-XXX-XX- CP153S4A5T6I0029142 Aleocharinae\_10029142 NCBI  
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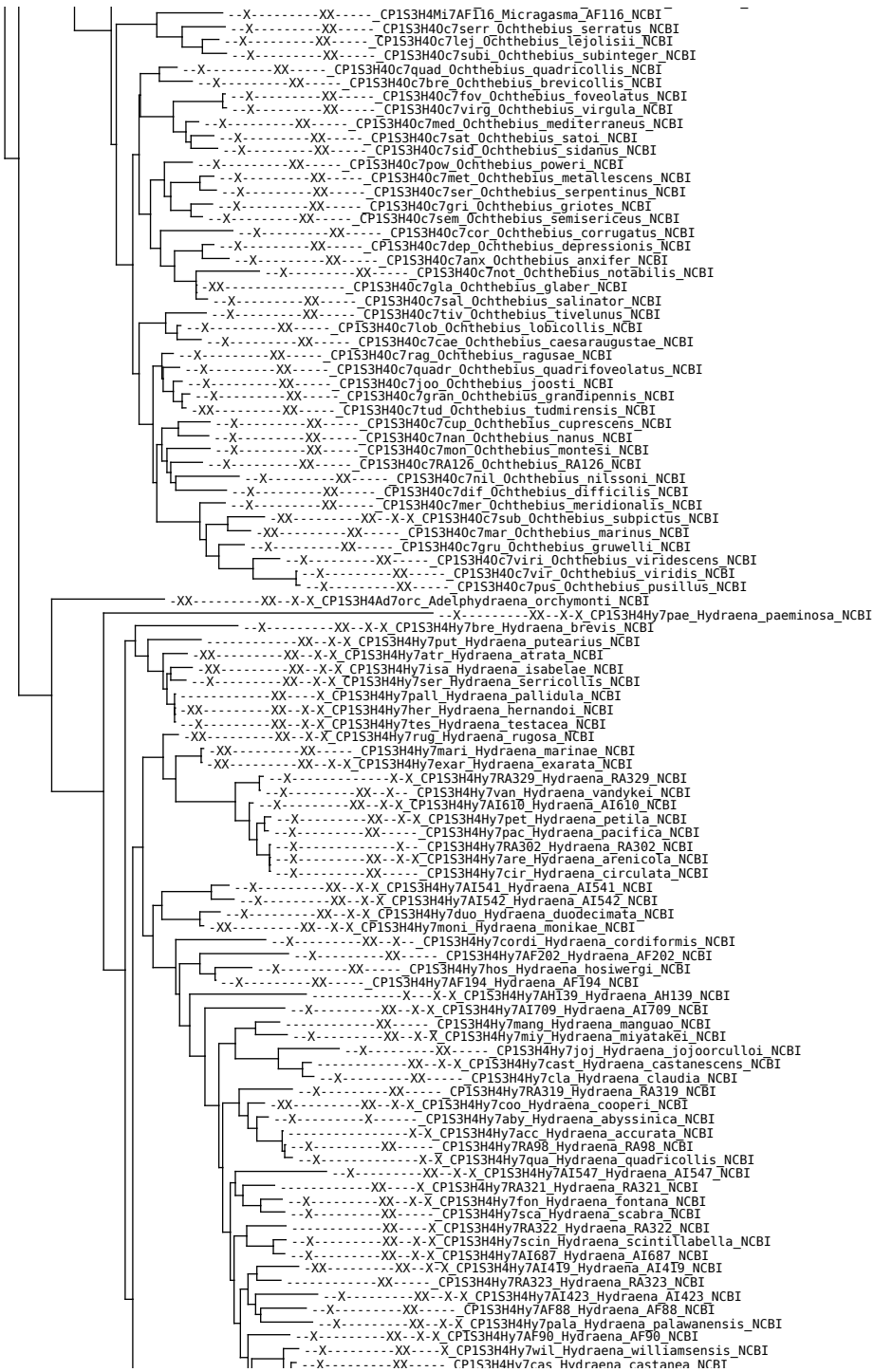


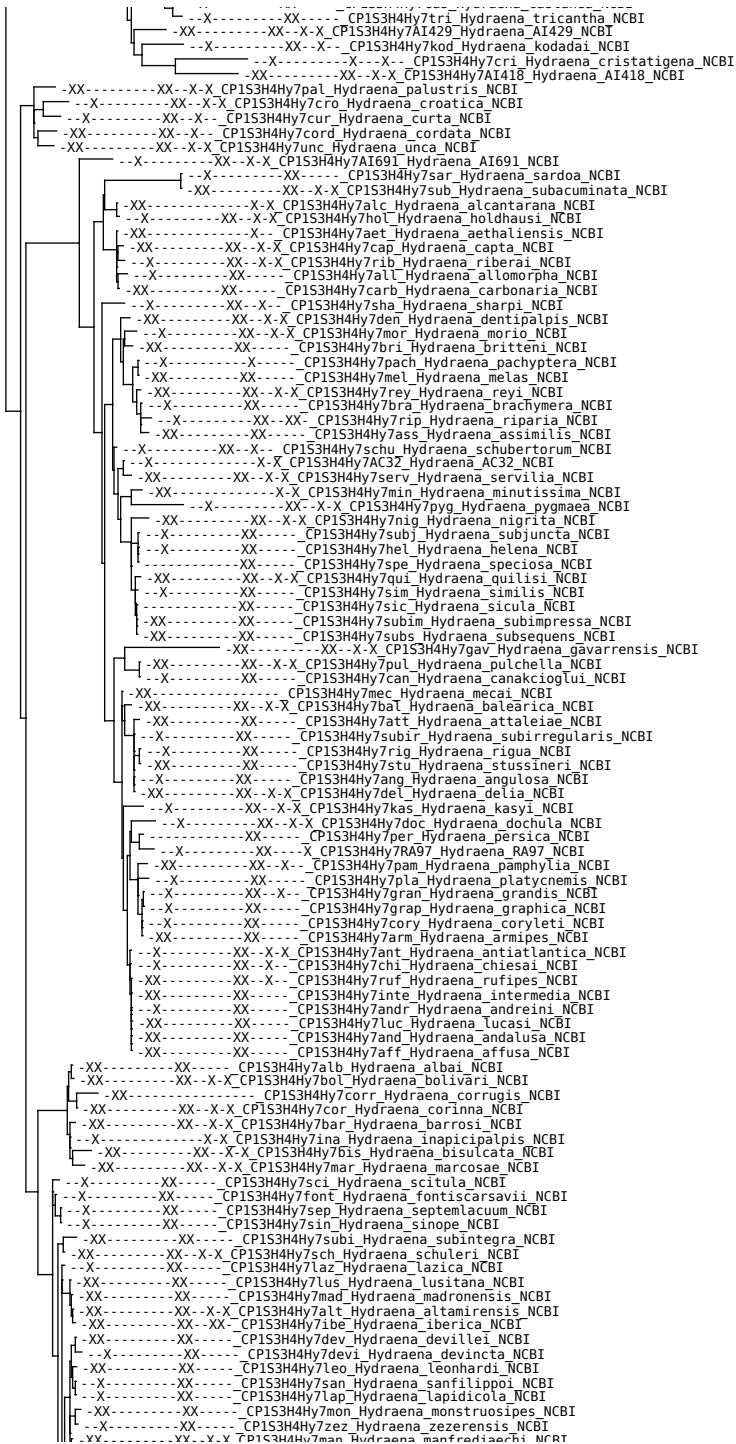


Phylogenetic tree showing relationships among various species, with bootstrap values indicated by 'X' marks. The tree is rooted on the left and branches out to the right. Species names are listed on the right side of the tree, often followed by 'NCBI'. Some species names are truncated. Bootstrap values are represented by 'X' marks of varying lengths and positions along the branches. Some nodes are marked with 'XXXXXX' or 'XXXXXXXXXXXXXXXXXX'. The tree shows a complex branching pattern, with many species having high bootstrap support (indicated by multiple 'X's).

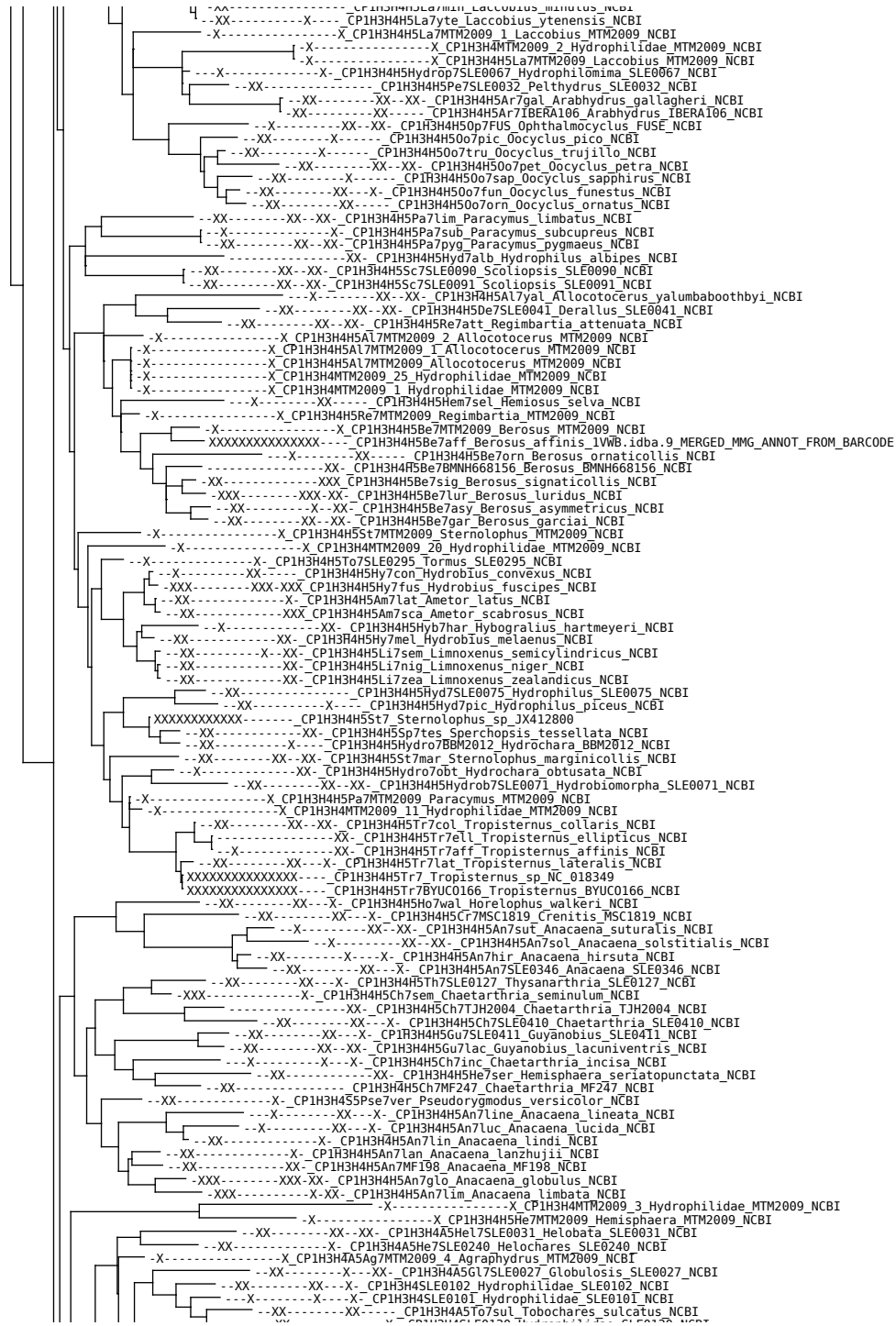
Species names include: CP153L4Ch5An7cul, Anillochlamys\_cultelli, Anillochlamys\_subtruncatus, CP153L4Ch5An7aur, Anillochlamys\_aurouxii, CP153L4Ch5An7mor, Anillochlamys\_moroderi, CP153L4Ch5Leo7ber, Leonesiella\_bergidi, CP153L4Ch5Ou7pac, Quaestus\_pachecoi, CP153L4Ch5Ou7jea, Quaestus\_jeannei, CP153L4Ch5Ou7ami, Quaestus\_amicalis, CP153L4Ch5Ou7arc, Quaestus\_arcanus, CP153L4Ch5Or7jas, Oresigenus\_jaspei, CP153L4Ch5Ou7adn, Quaestus\_adnexus, CP153L4Ch5Ou7aur, Quaestus\_aummalis, CP153L4Ch5Br7etri, Breuilia\_triaugulum, CP153L4Ch5Br7elo, Breuiliites\_elyoi, CP153L4Ch5Es7luq, Espanoliella\_luquei, CP153L4Ch5Ou7sha, Quaestus\_sharpi, CP153L4Ch5Ou7esc, Quaestus\_escalerai, CP153L4Ch5Es7cun, Espanoliella\_cuneus, CP153L4Ch5Es7jea, Espanoliella\_jeanneli, Staph.idba.86\_MERGED\_MMG\_ANNOT\_FROM\_BARCODE, CP153L4Ch5Es7urd, Espanoliella\_urdialensis, CP153L4Ch5Ou7nol, Quaestus\_noltei, CP153L4Ch5Ou7can, Quaestus\_cantabricus, CP153L4Ch5Ou7cic, Quaestus\_cisnerosi, CP153L4Ch5Ou7pas, Quaestus\_pasensis, CP153L4Ch5Fr7luc, Fresnedaelia\_lucius, CP153L4Ch5Can7cul, Cantabrogeus\_cultellus, CP153L4Ch5Can7ant, Cantabrogeus\_antimachus, CP153L4Ch5Can7luq, Cantabrogeus\_luquei, CP153L4Ch5Can7nad, Cantabrogeus\_nadali, CP153L4Ch5Can7fre, Cantabrogeus\_fresnedai, CP153L4Ch5Bathy7bys, Bathyscimorphus\_byssinus, CP153L4Ch5Parap7ser, Parapropus\_sericeus, CP153L4Ch5Bat7khe, Bathysciotes\_khevenhulleri, CP153L4Ch5As7ang, Astagobius\_astagobius, CP153L4Ch5Le7noc, Leptodirus\_hochenwarti, CP153L4Ch5Troc7mes, Trocharanis\_mestrei, CP153L4Ch5Ph7pro, Pholeuon\_proserpinae, CP153L4Ch5Ph7gra, Pholeuon\_gracile, CP153L4Ch5Bat7IR2014\_1, Bathysciola\_IR2014, CP153L4Ch5Bat7lar, Bathysciola\_larcennei, CP153L4Ch5Bat7con, Bathysciola\_convena, CP153L4Ch5Bat7liq, Bathysciola\_liqueana, CP153L4Ch5Bat7me, Bathysciola\_meridionalis, CP153L4Ch5Bat7asp, Bathysciola\_asperuta, CP153L4Ch5Bat7fin, Bathysciola\_finismillennii, CP153L4Ch5Naf7sor, Nafarroa\_sorogainensis, CP153L4Ch5Ar7Lei, Aranzadiella\_leizaola, CP153L4Ch5Speo7gal, Speocharidius\_galani, CP153L4Ch5Speo7bre, Speocharidius\_breuili, CP153L4Ch5Eu7ber, Euryspeonomus\_beruetei, CP153L4Ch5Jo7men, Josettekia\_mendizabali, CP153L4Ch5Eu7cia, Euryspeonomus\_ciaurrizi, CP153L4Ch5Eu7bre, Euryspeonomus\_breuilli, CP153L4Ch5Bat7sch, Bathysciola\_schiodtei, CP153L4Ch5Bat7mys, Bathysciola\_mystica, CP153L4Ch5Bat7par, Bathysciola\_parallela, CP153L4Ch5Bat7gra, Bathysciola\_grandis, CP153L4Ch5Bat7obe, Bathysciola\_obermaieri, CP153L4Ch5Bat7bre, Bathysciola\_breuili, CP153L4Ch5Sp7bru, Speonomus\_bruckii, CP153L4Ch5Sp7gau, Speonomus\_gaudini, CP153L4Ch5Sp7spe, Speonomus\_speluncarum, CP153L4Ch5Sp7IR2014, Speonomus\_IR2014, CP153L4Ch5Sp7alb, Speonomus\_alberti, CP153L4Ch5Sp7bas, Speonomus\_bastideus, CP153L4Ch5Sp7bou, Speonomus\_bourgoini, CP153L4Ch5Sp7org, Speonomus\_orgibetensis, CP153L4Ch5Bar7del, Baronniesia\_delioti, CP153L4Ch5Be7esp, Bellesia\_espalyoti, CP153L4Ch5Sp7inf, Speonomus\_infernus, CP153L4Ch5Pha7sio, Phacomorphus\_sioberi, CP153L4Ch5Pha7fra, Phacomorphus\_fratyi, Staph.idba.18\_MERGED\_MMG\_ANNOT\_FROM\_BARCODE, CP153L4Ch5Pha7ale, Phacomorphus\_atexinae, CP153L4Ch5Par7jea, Bathysciella\_jeanneli, CP153L4Ch5Par7de, Parvospeonomus\_delarouzei, CP153L4Ch5Par7can, Parvospeonomus\_pareillesi, CP153L4Ch5Ps7rah, Pseudospeonomus\_rahola, CP153L4Ch5Trogl7gav, Troglomyces\_gavoyi, CP153L4Ch5Trogl7lud, Troglomyces\_ludovici, CP153L4Ch5Pe7bof, Perriniella\_bofilli, CP153L4Ch5Ce7rib, Ceretophyes\_riberai, CP153L4Ch5Ce7cen, Ceretophyes\_cenarroi, CP153L4Ch5Ant7que, Antrocharis\_querilhaci, CP153L4Ch5Ge7del, Gesciella\_delioti, CP153L4Ch5Parat7car, Paratroglophyes\_carrerei, CP153L4Ch5Sp7car, Speonomus\_carrerei, CP153L4Ch5Paras7van, Parvospeonomus\_vandeli, CP153L4Ch5Sp7zop, Speonomus\_zophosinus, CP153L4Ch5Sp7nor, Speonomus\_normandi, CP153L4Ch5Sp7hyd, Speonomus\_hydrophilus, CP153L4Ch5Sp7sty, Speonomus\_stygius, CP153L4Ch5Sp7lon, Speonomus\_longicornis, CP153L4Ch5Sp7cur, Speonomus\_curvipes, CP153L4Ch5Sp7fag, Speonomus\_fagniezi, CP153L4Ch5Sp7pyr, Speonomus\_pyreneus, CP153L4Ch5Sp7die, Speonomus\_diecki, CP153L4Ch5Sp7hyg, Speonomus\_hygrophilus, CP153L4Ch5Tr7oro, Trapezodirus\_robios, Staph.idba.25\_MERGED\_MMG\_ANNOT\_FROM\_BARCODE, CP153L4Ch5Tr7cer, Trapezodirus\_cerberus, CP153L4Ch5Tr7car, Trapezodirus\_carrodilTae.







XX-----XX-----CP153H4Hy7gad\_Hydraena\_gaditana\_NCB1  
XX-----XX-----CP153H4Hy7tat\_Hydraena\_tatii\_NCB1  
-X-----XX-----CP153H4Hy7dis\_Hydraena\_discreta\_NCB1  
-X-----XX-----CP153H4Hy7dec\_Hydraena\_decolor\_NCB1  
-X-----XX-----CP153H4Hy7occ\_Hydraena\_occitana\_NCB1  
-X-----XX-----CP153H4Hy7bon\_Hydraena\_bononiensis\_NCB1  
-X-----XX-----CP153H4Hy7sol\_Hydraena\_solaris\_NCB1  
-X-----XX-----CP153H4Hy7dent\_Hydraena\_dentipes\_NCB1  
-X-----XX-----CP153H4Hy7pro\_Hydraena\_producta\_NCB1  
-X-----XX-----CP153H4Hy7mue\_Hydraena\_muelleri\_NCB1  
XX-----XX-X-X-CP153H4Hy7eva\_Hydraena\_evanesens\_NCB1  
-X-----XX-----CP153H4Hy7tyr\_Hydraena\_tyrrhena\_NCB1  
-X-----XX-----CP153H4Hy7ros\_Hydraena\_rosannae\_NCB1  
-X-----XX-----CP153H4Hy7plu\_Hydraena\_plumipes\_NCB1  
XX-----XX-X-X-CP153H4Hy7tru\_Hydraena\_truncata\_NCB1  
-X-----XX-----CP153H4Hy7cze\_Hydraena\_czernohorskyi\_NCB1  
XX-----XX-----CP153H4Hy7het\_Hydraena\_heterogyna\_NCB1  
-X-----XX-X-X-CP153H4Hy7ben\_Hydraena\_bensae\_NCB1  
-X-----XX-----CP153H4Hy7pol\_Hydraena\_pollta\_NCB1  
-X-----XX-----CP153H4Hy7bic\_Hydraena\_bicuspidata\_NCB1  
-X-----XX-----CP153H4Hy7cat\_Hydraena\_catalonica\_NCB1  
-X-----XX-----CP153H4Hy7bit\_Hydraena\_bitruncata\_NCB1  
-X-----XX-X-X-CP153H4Hy7car\_Hydraena\_Carniolica\_NCB1  
XX-----XX-----CP153H4Hy7cau\_Hydraena\_caucasica\_NCB1  
-X-----XX-----CP153H4Hy7epe\_Hydraena\_epeirosi\_NCB1  
-X-----XX-----CP153H4Hy7ved\_Hydraena\_vedraasi\_NCB1  
XX-----XX-XXX-CP153H4Hy7gra\_Hydraena\_gracilis\_NCB1  
-X-----XX-----CP153H4Hy7grac\_Hydraena\_graciloides\_NCB1  
-X-----XX-X-X-CP153H4Hy7cre\_Hydraena\_Crepidoptera\_NCB1  
-X-----XX-----CP153H4Hy7tar\_Hydraena\_tarvisina\_NCB1  
-X-----XX-----CP153H4Hy7lar\_Hydraena\_larissae\_NCB1  
XX-----XX-X-X-CP153H4Hy7exa\_Hydraena\_exasperata\_NCB1  
-X-----XX-----CP153H4Hy7chr\_Hydraena\_christinae\_NCB1  
XX-----XX-----CP153H4Hy7bel\_Hydraena\_belgica\_NCB1  
-X-----XX-----CP153H4Hy7exc\_Hydraena\_excisa\_NCB1  
-X-----XX-----CP153H4Hy7AI391\_Hydraena\_AI391\_NCB1  
-X-----XX-----CP153H4Hy7int\_Hydraena\_integra\_NCB1  
-X-----XX-----CP153H4Hy7akb\_Hydraena\_akbesiana\_NCB1  
-X-----XX-----CP153H4Hy7ana\_Hydraena\_anatolica\_NCB1  
-X-----XX-X-X-CP153H4Hy7ema\_Hydraena\_emarginata\_NCB1  
-X-----XX-----CP153H4Hy7his\_Hydraena\_hispanica\_NCB1  
-X-----XX-----CP153H4Hy7dia\_Hydraena\_diazi\_NCB1  
XX-----XX-----CP153H4Hy7fos\_Hydraena\_fosterorum\_NCB1  
XX-----XX-----CP153H4Hy7alp\_Hydraena\_alpicola\_NCB1  
-X-----XX-----CP153H4Hy7jae\_Hydraena\_jaechiana\_NCB1  
-X-----XX-----CP153H4Hy7sam\_Hydraena\_samnitica\_NCB1  
-X-----XX-----CP153H4Hy7pan\_Hydraena\_pangaei\_NCB1  
-XXX-----XXX-XX-CP1H3E4Ep7AK2004\_Epimetopus\_AK2004\_NCB1  
-XX-----XX-----CP1H3E4Ep7SLE0069\_Epimetopus\_SLE0069\_NCB1  
-XXX-----XXX-XX-CP1H3He4He7\_Helophorus\_aquaticus\_NCB1  
-XXXXXXXXXXXXXXXX-CP1H3\_Hydrophiloides\_sp\_5011\_idba\_106\_MMG\_ANNOT\_FROM\_TREE  
-XX-----X-----CP1H3He4He7BBM2012\_Helophorus\_BBM2012\_NCB1  
-XXX-----XXX-XX-CP1H3He4He7gut\_Helophorus\_guttulus\_NCB1  
XXXXXXXXXXXXXXXX-CP1H3He4He7\_Helophorus\_sp\_724835\_Helophoridae\_Helophorus\_idba\_contig\_13  
-XXX-----XXX-XX-CP1H3He4He7arv\_Helophorus\_arvensis\_NCB1  
-XXX-----XXX-XX-CP1H3He4He7niv\_Helophorus\_nivalis\_NCB1  
-X-----XX-X-X-CP1H3G4Ge7can\_Georissus\_canalifer\_NCB1  
-XXX-----XXX-XX-CP1H3G4Ge7AK2004\_Georissus\_AK2004\_NCB1  
-XX-----XX-XXX-CP1H3G4Ge7cre\_Georissus\_crenulatus\_NCB1  
-X-----X-X-X-CP1H3H4Hy7bre\_Hydrochus\_brevis\_NCB1  
-X-----X-X-X-CP1H3H4Hy7spa\_Hydrochus\_spangleri\_NCB1  
-XX-----X-X-X-X-CP1H3H4Hy7meg\_Hydrochus\_megaphallus\_NCB1  
-X-----X-X-X-X-CP1H3H4Hy7AHG2011\_I\_Hydrochus\_AHG2011\_NCB1  
-X-----X-X-X-CP1H3H4Hy7sto\_Hydrochus\_stolpi\_NCB1  
-X-----X-X-X-CP1H3H4Hy7var\_Hydrochus\_variolatus\_NCB1  
-X-----X-X-X-CP1H3H4Hy7squ\_Hydrochus\_squamifer\_NCB1  
-X-----X-X-X-CP1H3H4Hy7AHG2011\_Hydrochus\_AHG2011\_NCB1  
XXXXXXXXXXXX-CP1H3H4Hy7\_Hydrochus\_sp\_H0232801  
-X-----X-X-X-X-CP1H3H4Hy7sma\_Hydrochus\_smaragdineus\_NCB1  
-X-----X-X-X-X-CP1H3H4Hy7gra\_Hydrochus\_grandicollis\_NCB1  
-XX-----X-X-X-X-CP1H3H4Hy7int\_Hydrochus\_interruptus\_NCB1  
-X-----X-X-X-X-CP1H3H4Hy7nit\_Hydrochus\_nitidicollis\_NCB1  
-X-----X-X-X-X-CP1H3H4Hy7alj\_Hydrochus\_aljibensis\_NCB1  
-X-----X-X-X-XXX-CP1H3H4Hy7eto\_Hydrochus\_elongatus\_NCB1  
-X-----X-X-X-X-CP1H3H4Hy7cre\_Hydrochus\_crenatus\_NCB1  
XXXXXXXXXXXXXXXX-CP1H3H4Hy7car\_Hydrochus\_carinatus\_729517\_Hydrochidae\_Hydrochus\_idba\_contig\_25\_MERGED  
-X-----X-X-X-X-CP1H3H4Hy7tar\_Hydrochus\_tariqi\_NCB1  
XX-----X-X-X-X-CP1H3H4Hy7noo\_Hydrochus\_nooreinus\_NCB1  
XX-----X-X-X-X-CP1H3H4Hy7angu\_Hydrochus\_angusi\_NCB1  
XX-----X-X-X-X-CP1H3H4Hy7ibe\_Hydrochus\_ibericus\_NCB1  
-X-----X-X-X-X-CP1H3H4Hy7fTa\_Hydrochus\_flavipennis\_NCB1  
-X-----X-X-X-X-CP1H3H4Hy7rob\_Hydrochus\_roberti\_NCB1  
XXXXXXXXXXXXXXXX-CP1H3H4Hy7\_Hydrochus\_sp\_1VWB\_idba\_8\_MMG\_ANNOT\_FROM\_BARCODE  
-X-----X-X-XXX-CP1H3H4Hy7ang\_Hydrochus\_angustatus\_NCB1  
-XXX-----XXX-XXX-CP1H3S4Sp7ema\_Spercheus\_emarginatus\_NCB1  
-X-----XX-CP1H3H4H5An7par\_Anacaena\_parvula\_NCB1  
XXXXXXXXXXXXXXXX-CP1H3H4H5Amp7glo\_Amphips\_globus\_JX412726  
-XX-----XX-X-CP1H3H4H5Amp7SLE0408\_Amphips\_SLE0408\_NCB1  
-XX-----XX-----CP1H3H4H5Amp7mat\_Amphips\_mater\_NCB1  
XX-----XX-----CMG2011\_Coleoptera\_MG2011\_NCB1  
-XX-----XX-X-CP1H3H4H5Amp7SLE0407\_Amphips\_SLE0407\_NCB1  
-XX-----XX-CP1H3H4H507mad\_Oocyclus\_madidus\_NCB1  
-XX-----XX-CP1H3H4H507SLE0086\_Oocyclus\_SLE0086\_NCB1  
-XX-----XX-CP1H3H4H507SLE0085\_Oocyclus\_SLE0085\_NCB1  
-XX-----XX-XX-CP1H3H4H5La7ref\_Laccobius\_reflexipennis\_NCB1  
-XXX-----X-----CP1H3H4H5La7bip\_Laccobius\_bipunctatus\_NCB1  
-XX-----XX-----CP1H3H4H5La7sin\_Laccobius\_sinuatus\_NCB1  
XX-----XX-CP1H3H4H5La7ser\_Laccobius\_serratus\_NCB1  
-XXX-----X-----CP1H3H4H5La7str\_Laccobius\_striatus\_NCB1  
-XX-----XX-----CP1H3H4H5La7ser\_Laccobius\_serratus\_NCB1



Phylogenetic tree showing relationships between various species, primarily from the Hydrophilidae and Enochrus genera. The tree is rooted on the left and branches out to the right. Species names are listed on the right side of the tree, often followed by their NCBI accession numbers. The tree is annotated with 'X' and 'XX' symbols, likely indicating specific characteristics or data points for each species. The species names include:

- CP1H3H4A5Lew159 Hydrophilidae SLE0159 NCBI
- CP1H3H4A5Ch7SLE0080 Chasmogenus SLE0080 NCBI
- CP1H3H4A5Ch7SLE0077 Chasmogenus SLE0077 NCBI
- CP1H3H4A5Ch7SLE0078 Chasmogenus SLE0078 NCBI
- CP1H3H4A5Ch7rui Chasmogenus ruidus NCBI
- CP1H3H4MTM2009\_23 Hydrophilidae MTM2009 NCBI
- CP1H3H4A5H67han Horelophopsis hanseni NCBI
- CP1H3H4A5Ag7SLE0252 Agraphydrus SLE0252 NCBI
- CP1H3H4MTM2009\_21 Hydrophilidae MTM2009 NCBI
- CP1H3H4MTM2009\_22 Hydrophilidae MTM2009 NCBI
- CP1H3H4A5Ag7MTM2009\_2 Agraphydrus MTM2009 NCBI
- CP1H3H4A5Ag7MTM2009 Agraphydrus MTM2009 NCBI
- CP1H3H4A5Ag7MTM2009\_1 Agraphydrus MTM2009 NCBI
- CP1H3H4H5An7lut Anaecaena lutescens NCBI
- CP1H3H4H5min Helophorus minutus NCBI
- CP1H3H4H5bre Helophorus brevipalpis NCBI
- CP1H3H4A5He7SLE0034 Helochares SLE0034 NCBI
- CP1H3H4A5He7MTM2009\_3 Helochares MTM2009 NCBI
- CP1H3H4A5He7MTM2009\_2 Helochares MTM2009 NCBI
- CP1H3H4A5He7MTM2009\_1 Helochares MTM2009 NCBI
- CP1H3H4MTM2009\_24 Hydrophilidae MTM2009 NCBI
- CP1H3H4H5Ob5 Helochares obscurus NCBI
- CP1H3H4A5He7 Helochares sp. lVNB.idba.18 MMG\_ANNOT\_FROM\_BARCODE
- CP1H3H4A5He7liv Helochares lividus NCBI
- CP1H3H4A5He7MTM2009\_4 Helochares MTM2009 NCBI
- CP1H3H4A5He7MTM2009\_6 Helochares MTM2009 NCBI
- CP1H3H4MTM2009\_5 Hydrophilidae MTM2009 NCBI
- CP1H3H4A5He7MTM2009\_5 Helochares MTM2009 NCBI
- CP1H3H4MTM2009\_18 Hydrophilidae MTM2009 NCBI
- CP1H3H4MTM2009\_17 Hydrophilidae MTM2009 NCBI
- CP1H3H4MTM2009\_14 Hydrophilidae MTM2009 NCBI
- CP1H3H4MTM2009\_10 Hydrophilidae MTM2009 NCBI
- CP1H3H4H5An7MTM2009\_5 Anacaena MTM2009 NCBI
- CP1H3H4MTM2009\_6 Hydrophilidae MTM2009 NCBI
- CP1H3H4H5An7MTM2009 Anacaena MTM2009 NCBI
- CP1H3H4MTM2009\_7 Hydrophilidae MTM2009 NCBI
- CP1H3H4MTM2009\_15 Hydrophilidae MTM2009 NCBI
- CP1H3H4H5An7MTM2009\_4 Anacaena MTM2009 NCBI
- CP1H3H4H5An7MTM2009\_7 Anacaena MTM2009 NCBI
- CP1H3H4H5An7MTM2009\_8 Anacaena MTM2009 NCBI
- CP1H3H4H5An7MTM2009\_1 Anacaena MTM2009 NCBI
- CP1H3H4H5An7MTM2009\_3 Anacaena MTM2009 NCBI
- CP1H3H4MTM2009\_9 Hydrophilidae MTM2009 NCBI
- CP1H3H4MTM2009\_12 Hydrophilidae MTM2009 NCBI
- CP1H3H4MTM2009\_8 Hydrophilidae MTM2009 NCBI
- CP1H3H4H5An7MTM2009\_2 Anacaena MTM2009 NCBI
- CP1H3H4H5An7MTM2009\_6 Anacaena MTM2009 NCBI
- CP1H3H4MTM2009\_13 Hydrophilidae MTM2009 NCBI
- CP1H3H4H5C7mar Cymbiodyta margineella amie.idba.89\_MERGED\_MMG\_ANNOT\_FROM\_BARCODE
- CP1H3H4H5No7lip Notionotus liparus NCBI
- CP1H3H4H5Hel7bif Helocombus bifidus NCBI
- CP1H3H4H5No7SLE0092 Notionotus SLE0092 NCBI
- CP1H3H4H5En7IBEA887 Enochrus IBEA887 NCBI
- CP1H3H4H5En7mas Enochrus mastersii NCBI
- CP1H3H4H5C7sem Cymbiodyta semistriata NCBI
- CP1H3H4H5En7IBEA895 Enochrus IBEA895 NCBI
- CP1H3H4H5En7SLE0241 Enochrus SLE0241 NCBI
- CP1H3H4H5En7tal Enochrus talamanca NCBI
- CP1H3H4H5En7IBEA326 Enochrus IBEA326 NCBI
- CP1H3H4H5En7IBEA889 Enochrus IBEA889 NCBI
- CP1H3H4H5En7IBEA888 Enochrus IBEA888 NCBI
- CP1H3H4H5En7fim Enochrus fimbriatus NCBI
- CP1H3H4H5En7mor Enochrus morenae NCBI
- CP1H3H4H5En7cin Enochrus cinctus NCBI
- CP1H3H4H5En7IBEA84 Enochrus IBEA84 NCBI
- CP1H3H4H5En7pic Enochrus piceus NCBI
- CP1H3H4H5En7nat Enochrus natalensis NCBI
- CP1H3H4H5En7IBEA310 Enochrus IBEA310 NCBI
- CP1H3H4H5En7coa Enochrus coarctatus NCBI
- CP1H3H4H5En7och Enochrus ochraceus NCBI
- CP1H3H4H5En7aff Enochrus affinis NCBI
- CP1H3H4H5En7nig Enochrus nigrinus NCBI
- CP1H3H4H5En7MTM2009\_3 Enochrus MTM2009 NCBI
- CP1H3H4H5En7MTM2009\_2 Enochrus MTM2009 NCBI
- CP1H3H4H5En7MTM2009\_1 Enochrus MTM2009 NCBI
- CP1H3H4MTM2009 Hydrophilidae MTM2009 NCBI
- CP1H3H4MTM2009\_4 Hydrophilidae MTM2009 NCBI
- CP1H3H4H5En7MTM2009\_4 Enochrus MTM2009 NCBI
- CP1H3H4H5En7fal Enochrus falcarius NCBI
- CP1H3H4H5En7hami Enochrus hamifer NCBI
- CP1H3H4H5En7dif Enochrus diffusus NCBI
- CP1H3H4H5En7ham Enochrus hamiltoni NCBI
- CP1H3H4H5En7ate Enochrus ater NCBI
- CP1H3H4H5En7pol Enochrus politus NCBI
- CP1H3H4H5En7hal Enochrus halophilus NCBI
- CP1H3H4H5En7fus Enochrus fuscipennis NCBI
- CP1H3H4H5En7qua Enochrus quadripunctatus NCBI
- CP1H3H4H5En7tes Enochrus testaceus NCBI
- CP1H3H4H5En7IBEA55 Enochrus IBEA55 NCBI
- CP1H3H4H5En7ochr Enochrus ochropterus NCBI
- CP1H3H4H5En7sal Enochrus salomonis NCBI
- CP1H3H4H5En7IBERA490 Enochrus IBERA490 NCBI
- CP1H3H4H5En7bic Enochrus bicolor NCBI
- CP1H3H4H5En7IBERA194 Enochrus IBERA194 NCBI
- CP1H3H4H5En7seg Enochrus segmentinotatus NCBI
- CP1H3H4H5Bentap Badiolobus tapanti NCBI
- CP1H3H4H5Cy7gla Cylomissus glabratus NCBI
- CP1H3H4H5S5a7SLE0099 Saphydrus SLE0099 NCBI
- CP1H3H4H5Hy7fro Hydrostygnus frontalis NCBI











Phylogenetic tree showing relationships between various species, with labels such as CP1Sc354A5D17tru, CP1Sc354A5A7fri, and CP1Sc354A5A7ann. The tree is rooted on the left and branches out to the right. Species names are listed next to their corresponding branches, often preceded by a series of dashes (e.g., -X-, -XX-, -XXX-) indicating support or classification. Some labels include accession numbers and database identifiers like 'Soil.idba.32\_MERGED\_MMG\_ANNOT\_FROM\_BARCODE' or 'Soil.idba.115\_MERGED\_MMG\_ANNOT\_FROM\_TREE'. The tree shows a complex branching pattern, with many species having very similar labels, indicating close relationships. The labels are arranged in a roughly vertical column on the right side of the tree, with some species names appearing multiple times for different branches. The tree is a cladogram, with the root at the top left and branches extending downwards and to the right. The labels are aligned with the tips of the branches. The tree is a cladogram, with the root at the top left and branches extending downwards and to the right. The labels are aligned with the tips of the branches. The tree is a cladogram, with the root at the top left and branches extending downwards and to the right. The labels are aligned with the tips of the branches.



CP1Sc35455C6Epa7ran\_Epactoides\_ranagai\_NCBI

CP1Sc35455C6Epa7per\_Epactoides\_perrieri\_NCBI  
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Phylogenetic tree showing relationships between various species, primarily from the order Hymenoptera. The tree is rooted on the left and branches out to the right. Species names are listed on the right side of the tree, often followed by accession numbers and source information. The tree is divided into several major clades, including:

- Phaneroptera**: Includes species like *CP1Sc35455C6Me7can\_Megathoposoma candezei*, *CP1Sc35455C6Ha7aff\_Hansreia affinis*, *CP1Sc35455C6Eu7dyt\_Eudinopus dytiscoides*, *CP1Sc35455C6Ca7ind\_Canthon indigaeus*, *CP1Sc35455C6Ca7vir\_Canthon viridis*, *CP1Sc35455C6Ca7lut\_Canthon luteicollis*, *CP1Sc35455C6Ca7aeq\_Canthon aequinoctialis*, *CP1Sc35455C6Ca7doe\_Canthon doeseurii*, *CP1Sc35455C6Ca7mau\_Paragymnoleurus maus*, *CP1Sc35455C6Ca7gib\_Deltochilum gibbosum*, *CP1Sc35455C6De7ama\_Deltochilum amazonicum*, *CP1Sc35455C6De7car\_Deltochilum carinatum*, *CP1Sc35455C6De7bar\_Deltochilum barbipes*, *CP1Sc35455C6De7pse\_Deltochilum pseudoparile*, *CP1Sc35455C6Li7mut\_Litocopris muticus*, *CP1Sc35455C6Co7lun\_Copris lunaris*, *CP1Sc35455C6Co7agn\_Copris agnus*, *CP1Sc35455C6Co7tri\_Copris tripartitus*, *CP1Sc35455C6Co7lug\_Copris lugubris*, *CP1Sc35455C6Co7aen\_Copris aeneus*, *CP1Sc35455C6Co7amy\_Copris amyntor*, *CP1Sc35455C6Co7dgi1\_Copris dgi1*, *CP1Sc35455Cat7SM2012\_Catharsius SM2012*, *CP1Sc35455C6Co7cor\_Copris cornifrons*, *CP1Sc35455C6Co7his\_Copris hispanicus*, *CP1Sc35455C6Co7con\_Copris confucius*, *CP1Sc35455C6Co7sin\_Copris sinicus*, *CP1Sc35455A6At7dgi1\_Ateuchus dgi1*, *CP1Sc35455A6A7aur\_Canthidium aurifex*, *CP1Sc35455A6A7chr\_Chrysopyge*, *CP1Sc35455A6At7CWC2007\_Ateuchus CWC2007*, *CP1Sc35455A6At7ecu\_Ateuchus ecuadorensis*, *CP1Sc35455E6En7lob\_Ennearabdus lobocephalus*, *CP1Sc35455E6Eu7ara\_Eucranium arachnoides*, *CP1Sc35455E6G17ste\_Glyphoderus sterquilinus*, *CP1Sc35455E6An7bil\_Anomiopsoides biloba*, *CP1Sc35455E6An7het\_Anomiopsoides heteroclyta*, *CP1Sc35455Pha7sal\_Phanaeus sallei*, *CP1Sc35455Pha7cam\_Phanaeus cambeforti*, *CP1Sc35455Dx7con\_Oxyteron conspiciatum*, *CP1Sc35455Dla7mim\_Diabroctis mias*, *CP1Sc35455Pha7dem\_Phanaeus demon*, *CP1Sc35455Pha7CWC2007\_Phanaeus CWC2007*, *CP1Sc35455Cop7lan\_Coprophanaeus lancifer*, *CP1Sc35455Den7bah\_Dendropaemon bahianum*, *CP1Sc35455Pha7end\_Phanaeus endymion*, *CP1Sc35455Cop7tel\_Coprophanaeus telamon*, *CP1Sc35455Cop7dgi1\_Coprophanaeus dgi1*, *CP1Sc35455Cop7Gromphas aerguginosa*, *CP1Sc35455Jat7SM2013\_Janssensantus SM2013*, *CP1Sc35455C6Ta7SM2013\_Tanzanelus SM2013*, *CP1Sc35455A6Ca7har\_Canthidium haroldi*, *CP1Sc35455A6Ca7ruf\_Canthidium rufinum*, *CP1Sc35455A6Ca7gua\_Canthidium guanacaste*, *CP1Sc35455A6Ca7tha\_Canthidium thalassinum*, *CP1Sc35455Di7sat\_Dichotomius satanas*, *CP1Sc35455Di7dgi1\_Dichotomius dgi1*, *CP1Sc35455Di7bor\_Dichotomius boreus*, *CP1Sc35455Di7yuc\_Dichotomius yucatanus*, *CP1Sc35455Di7par\_Dichotomius parcepunctatus*, *CP1Ch3485B6Ac7pall\_Acanthoscelides pallidipennis*, *CP1Sc35455Di7nis\_Dichotomius nisus*, *CP1Sc35455Di7lae\_Dichotomius laeivcollis*, *CP1Sc35455Di7bos\_Dichotomius bos*, *CP1Sc35455Di7sem\_Dichotomius semisquamosus*, *CP1Sc35455Di7ser\_Dichotomius sericeus*, *CP1Sc35455Di7gem\_Dichotomius geminatus*, *CP1Sc35455C6Ar7mor1\_Arachnoides morio*, *CP1Sc35455C6Ar7cup\_Arachnoides cuparius*, *CP1Sc35455C6Ar7MTM2009\_10\_Arachnoides MTM2009*, *CP1Sc35455C6Ar7kel\_Arachnoides kelifelyi*, *CP1Sc35455C6Ar7MTM2009\_9\_Arachnoides MTM2009*, *CP1Sc35455C6Ar7HKW2010\_Arachnoides HKW2010*, *CP1Sc35455C6Ar7mah\_Arachnoides mahafalyensis*, *CP1Sc35455C6Ar7sap\_Arachnoides saprinoides*, *CP1Sc35455C6Ar7MTM2009\_2\_Arachnoides MTM2009*, *CP1Sc35455C6Ar7MTM2009\_5\_Arachnoides MTM2009*, *CP1Sc35455C6Ar7pus\_Arachnoides pusillus*, *CP1Sc35455C6Ar7MTM2009\_4\_Arachnoides MTM2009*, *CP1Sc35455C6Ar7and\_Arachnoides andrei*, *CP1Sc35455P57sem\_Pseudoarachnoides semichalceus*

The tree shows a complex branching pattern, with many nodes supported by bootstrap values (indicated by 'X' or 'XX'). The species names are often followed by accession numbers and source information, such as 'NCBI' or 'MMG\_ANNOT\_FROM\_BARCODE'.

Phylogenetic tree showing relationships between various species, primarily from the order Arachnida. The tree is rooted on the left and branches out to the right. Each terminal node is labeled with a species name and a NCBI accession number. The labels are preceded by dashes (-) and 'X's, indicating the presence or absence of certain characters or features. The species names are often followed by 'NCBI'.

Species listed include:

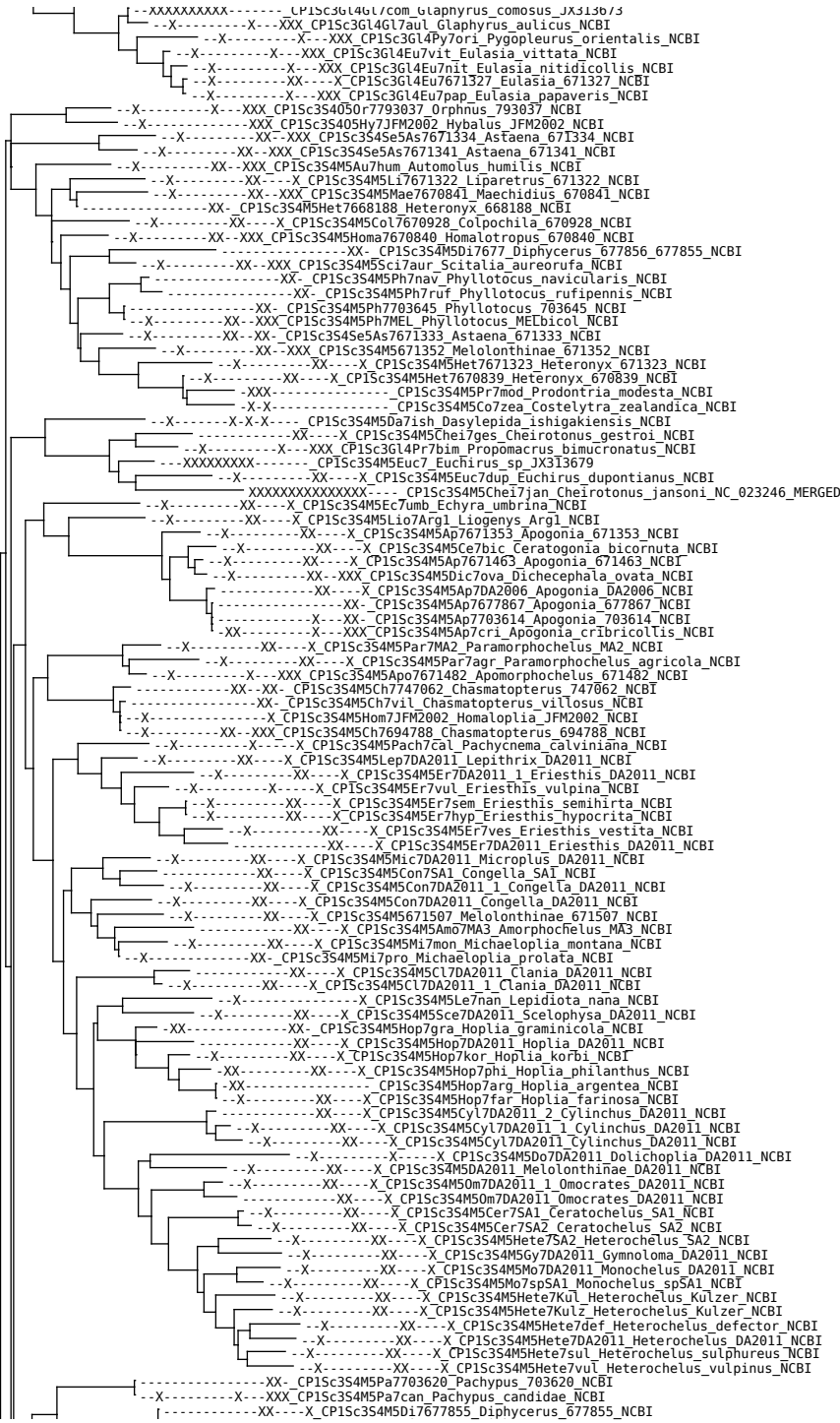
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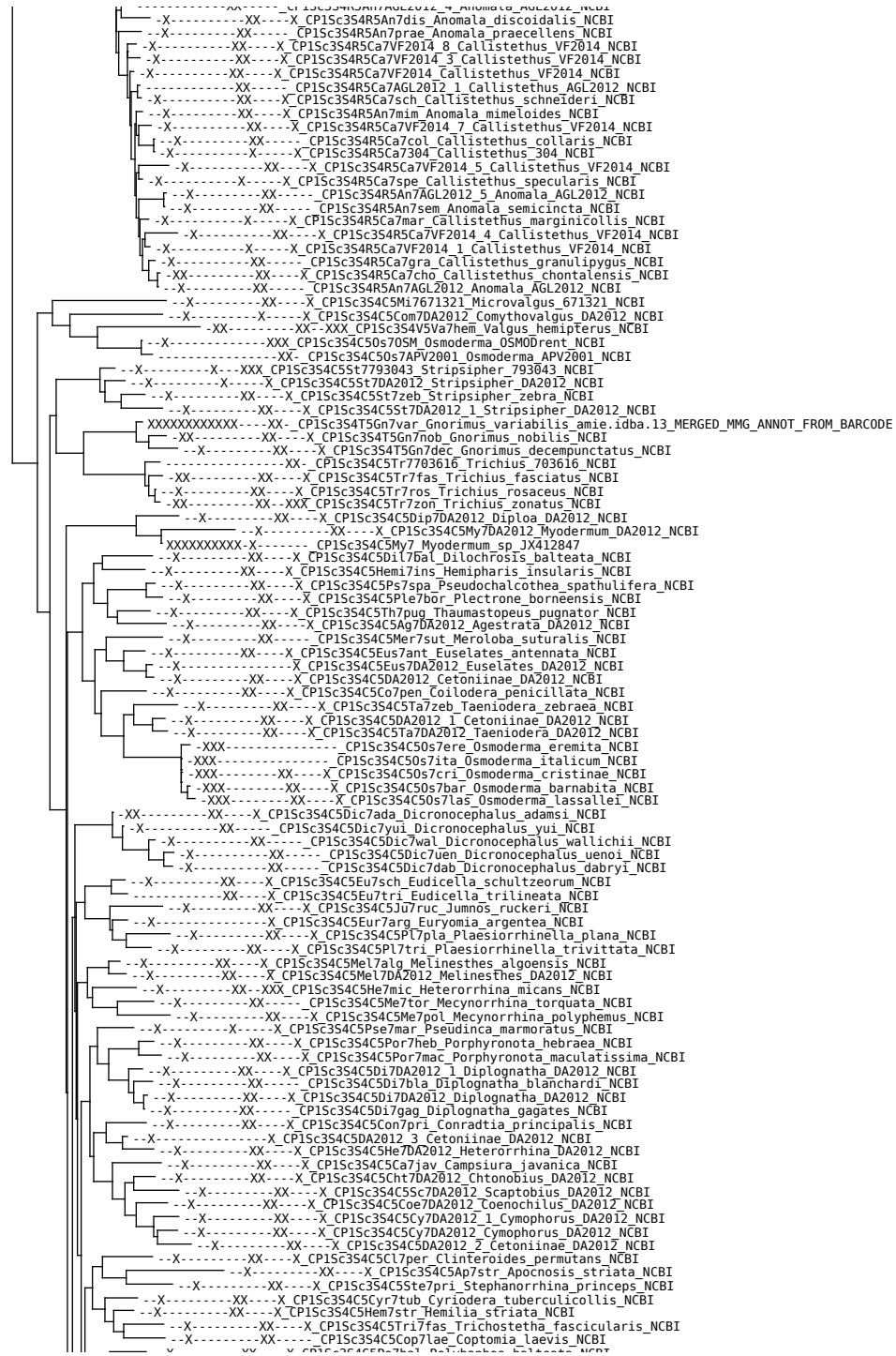
Phylogenetic tree showing relationships between various species, primarily from the genus *Onthophagus*. The tree is rooted on the left and branches out to the right. Each node and branch is labeled with a species name and its corresponding accession number (e.g., CP1Sc354550nt7pul, CP1Sc354550nt7lem). The labels are arranged in a columnar format, with some species names truncated for brevity. The tree structure is complex, with many internal nodes and branches, indicating a large number of species being compared. The labels include various identifiers such as 'MMG\_ANNOT\_FROM\_BARCODE', 'MMG\_ANNOT\_FROM\_TREE', and 'MERGED\_MMG\_ANNOT\_FROM\_BARCODE', suggesting that the tree is based on multiple data sources or analyses. The species names are listed in a specific order, likely corresponding to the order of the tips in the tree. The tree shows a high degree of genetic differentiation among the species, with many distinct clusters and branches. The overall structure is a dense, bushy tree with many small branches and nodes, indicating a large number of species and a complex evolutionary history. The labels are in a standard font, and the tree is drawn with simple lines and dots to represent nodes and branches. The tree is oriented vertically, with the root at the top and the tips at the bottom. The labels are placed to the right of the tree, and some are indented to show their position relative to the branches. The tree is a clear representation of the genetic relationships between the species, and it provides a visual summary of the data. The labels are in a standard font, and the tree is drawn with simple lines and dots to represent nodes and branches. The tree is oriented vertically, with the root at the top and the tips at the bottom. The labels are placed to the right of the tree, and some are indented to show their position relative to the branches. The tree is a clear representation of the genetic relationships between the species, and it provides a visual summary of the data.







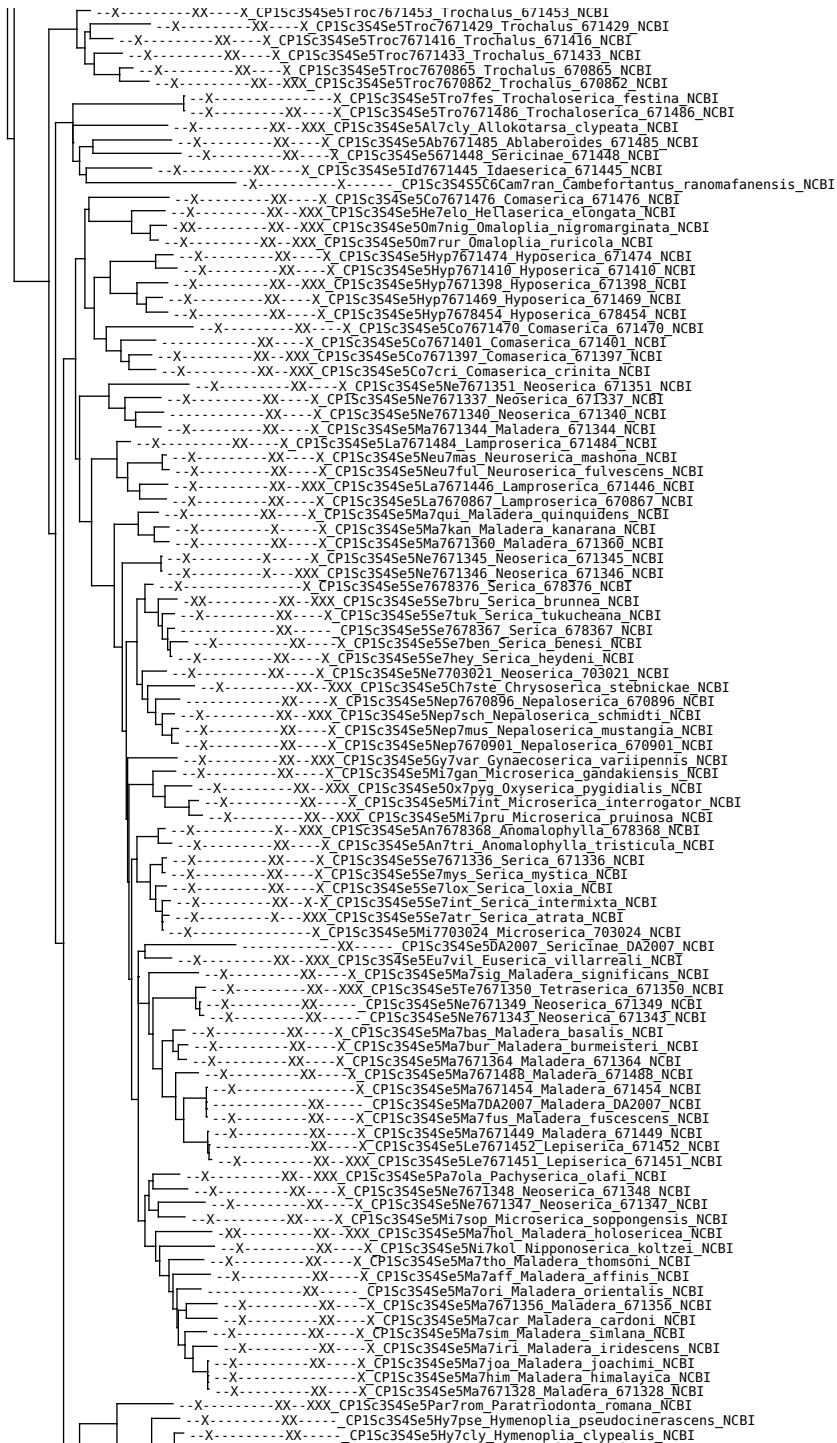
Phylogenetic tree showing relationships between various species, primarily from the genus *Anomala* and related genera. The tree is rooted on the left and branches out to the right. Species names are listed on the right side of the tree, often followed by their source (NCBI) or a specific identifier. The tree shows a complex branching pattern, with many species having multiple accessions (indicated by 'X' or 'XX') and some species being merged (indicated by 'MERGED'). The tree is highly branched, indicating a large number of species and their relationships. The species names are listed on the right side of the tree, often followed by their source (NCBI) or a specific identifier. The tree shows a complex branching pattern, with many species having multiple accessions (indicated by 'X' or 'XX') and some species being merged (indicated by 'MERGED').

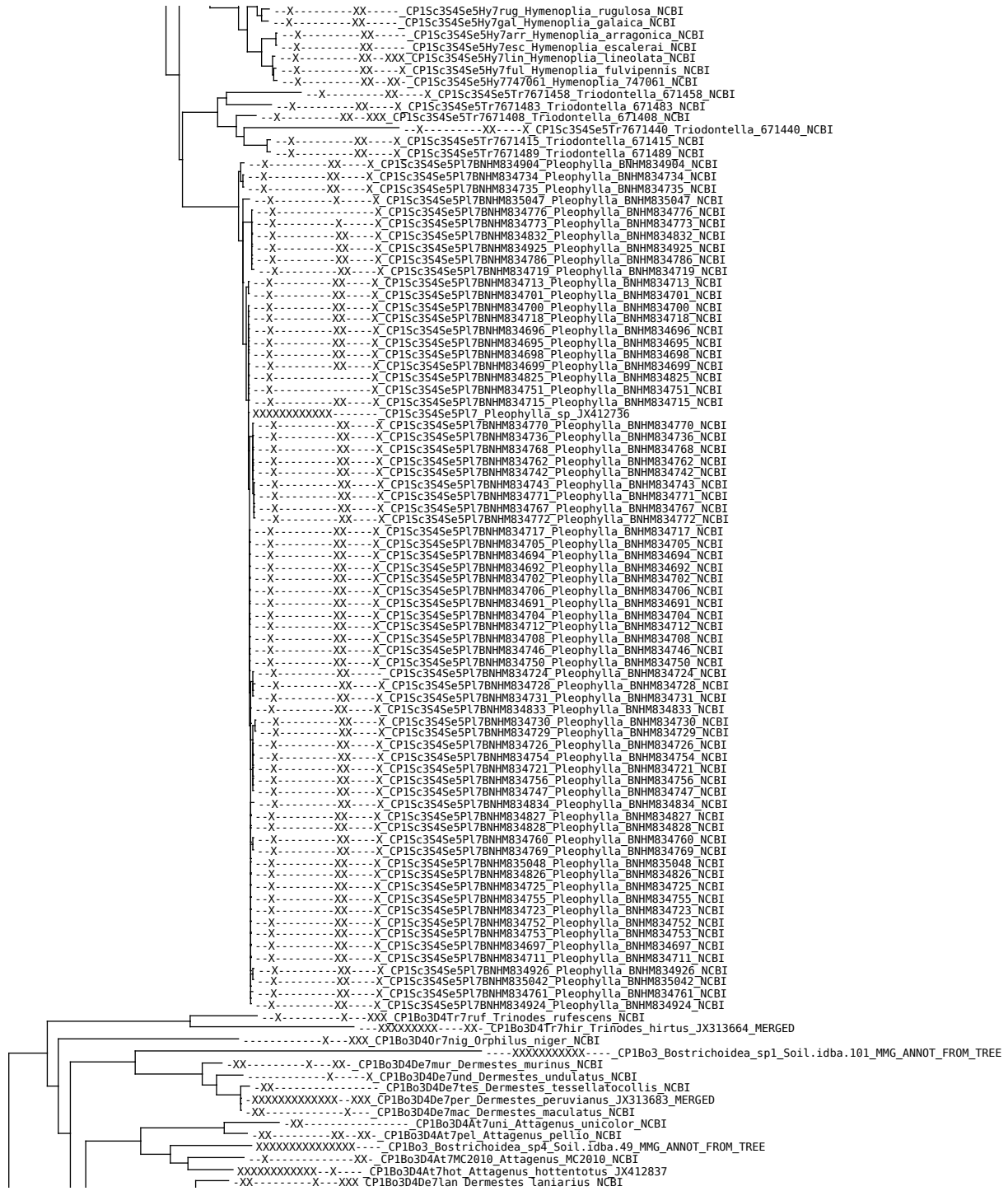


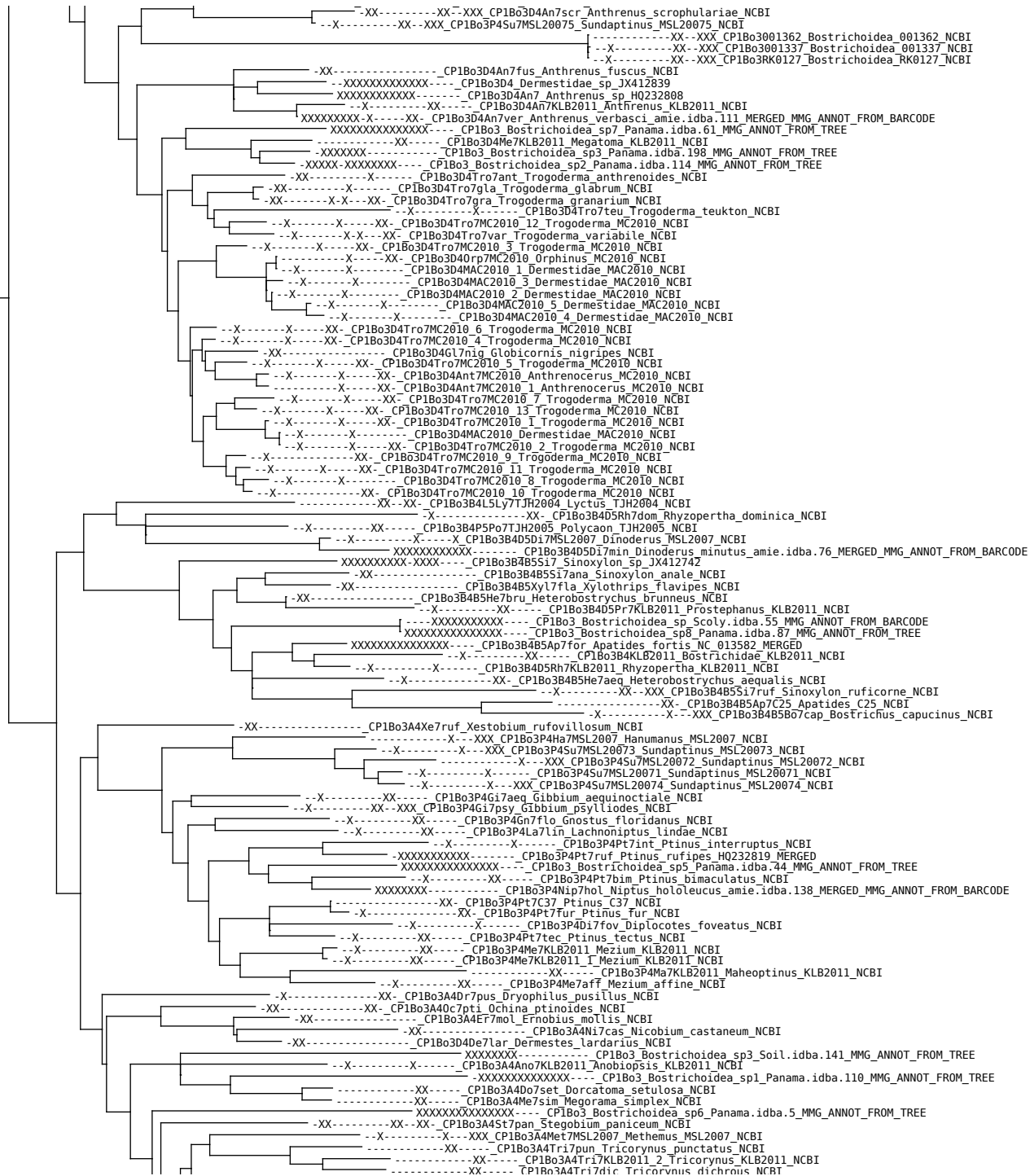


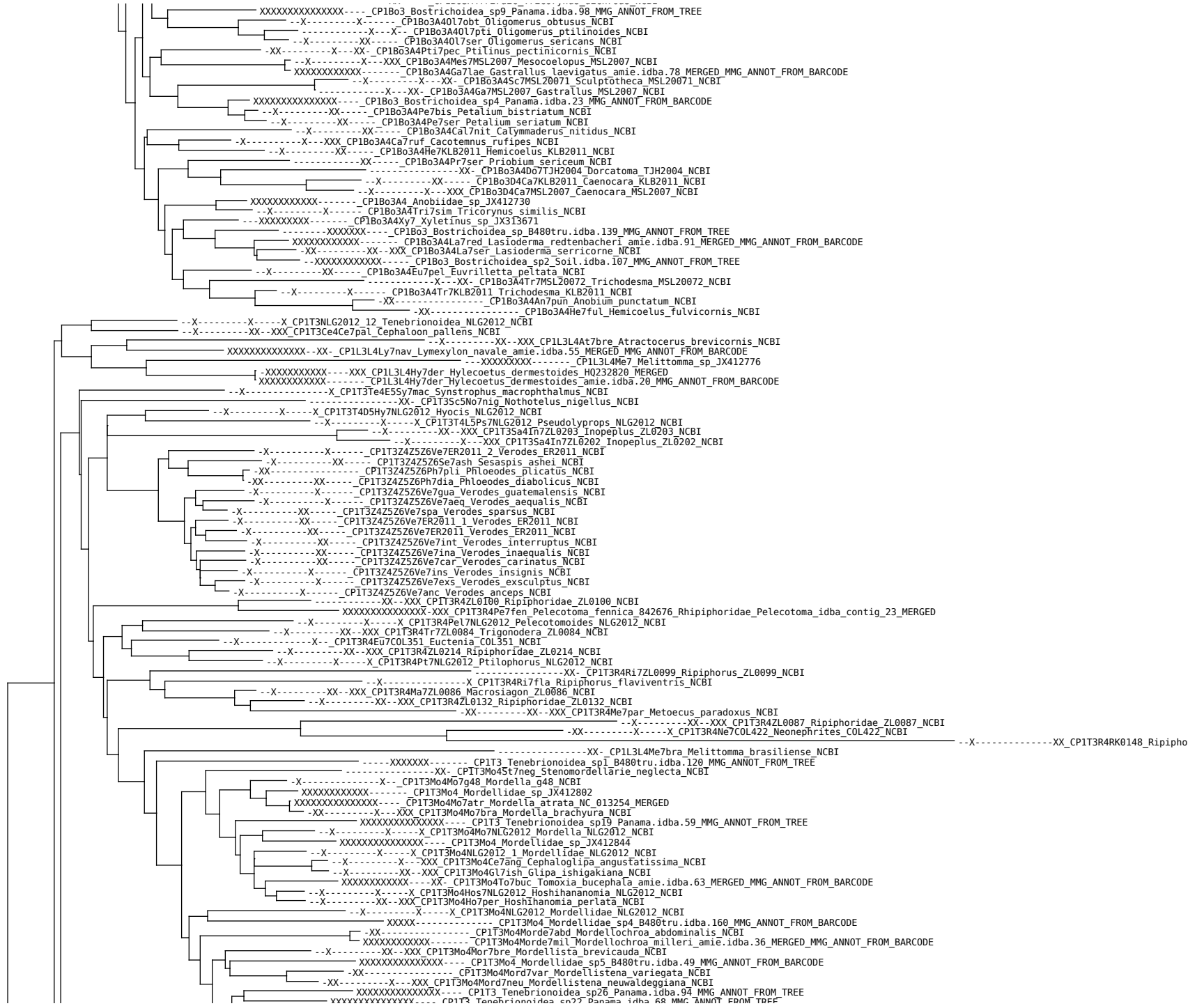
Phylogenetic tree showing relationships between various species, with taxonomic names and accession numbers listed on the right side. The tree is rooted on the left and branches out to the right. The species names are listed on the right side of the tree, with their corresponding accession numbers in parentheses. The tree is rooted on the left and branches out to the right. The species names are listed on the right side of the tree, with their corresponding accession numbers in parentheses. The tree is rooted on the left and branches out to the right. The species names are listed on the right side of the tree, with their corresponding accession numbers in parentheses.

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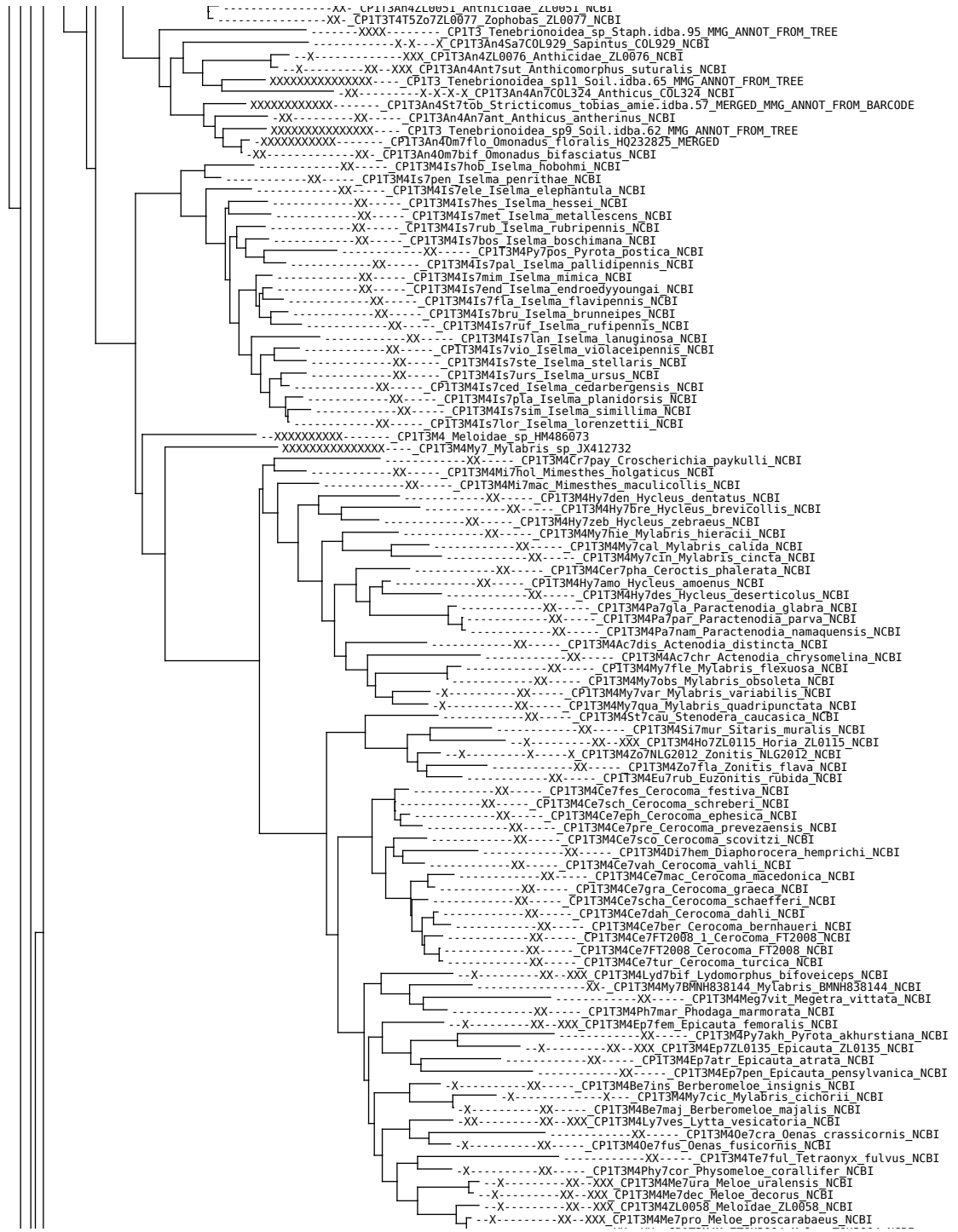




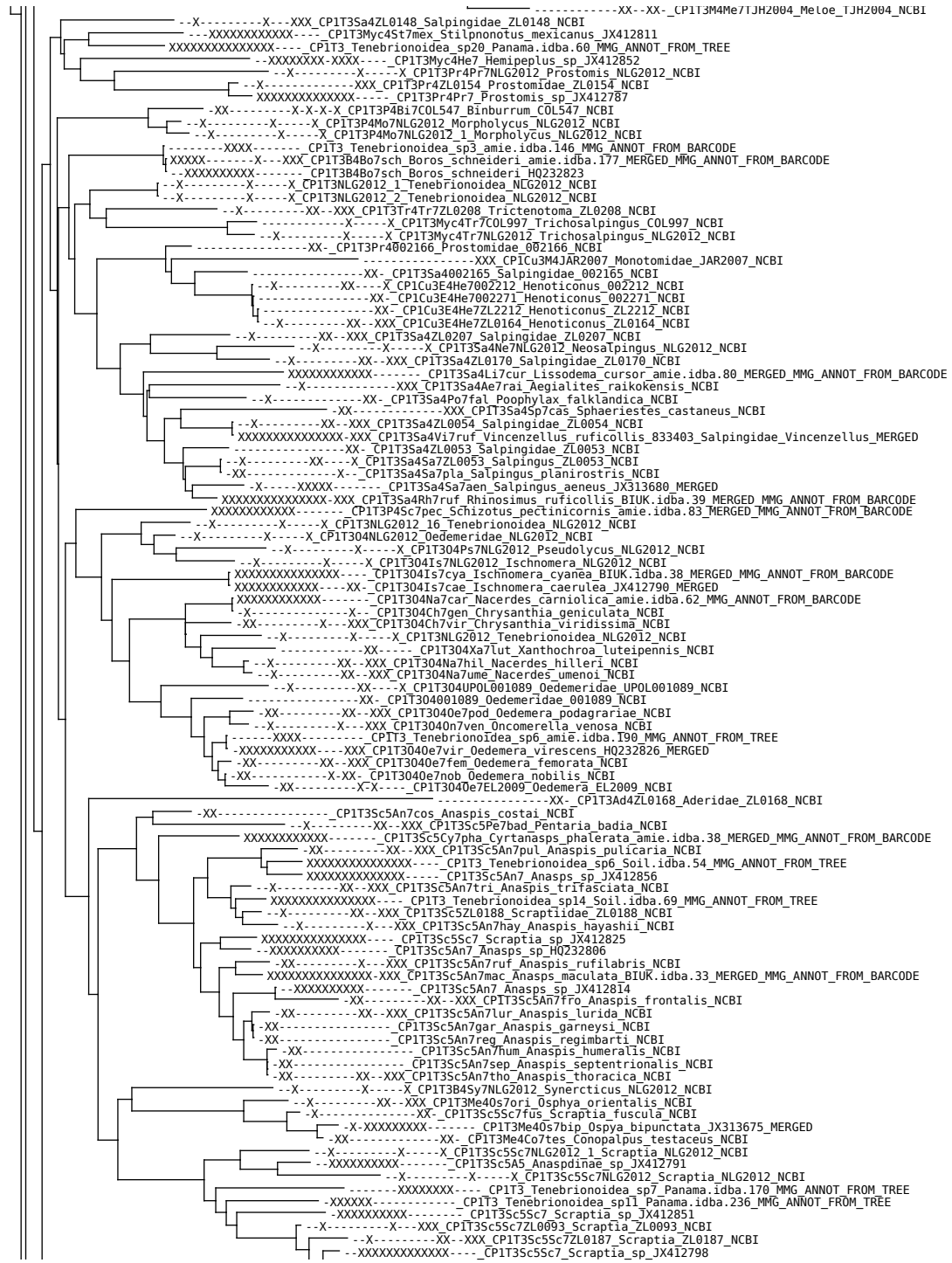




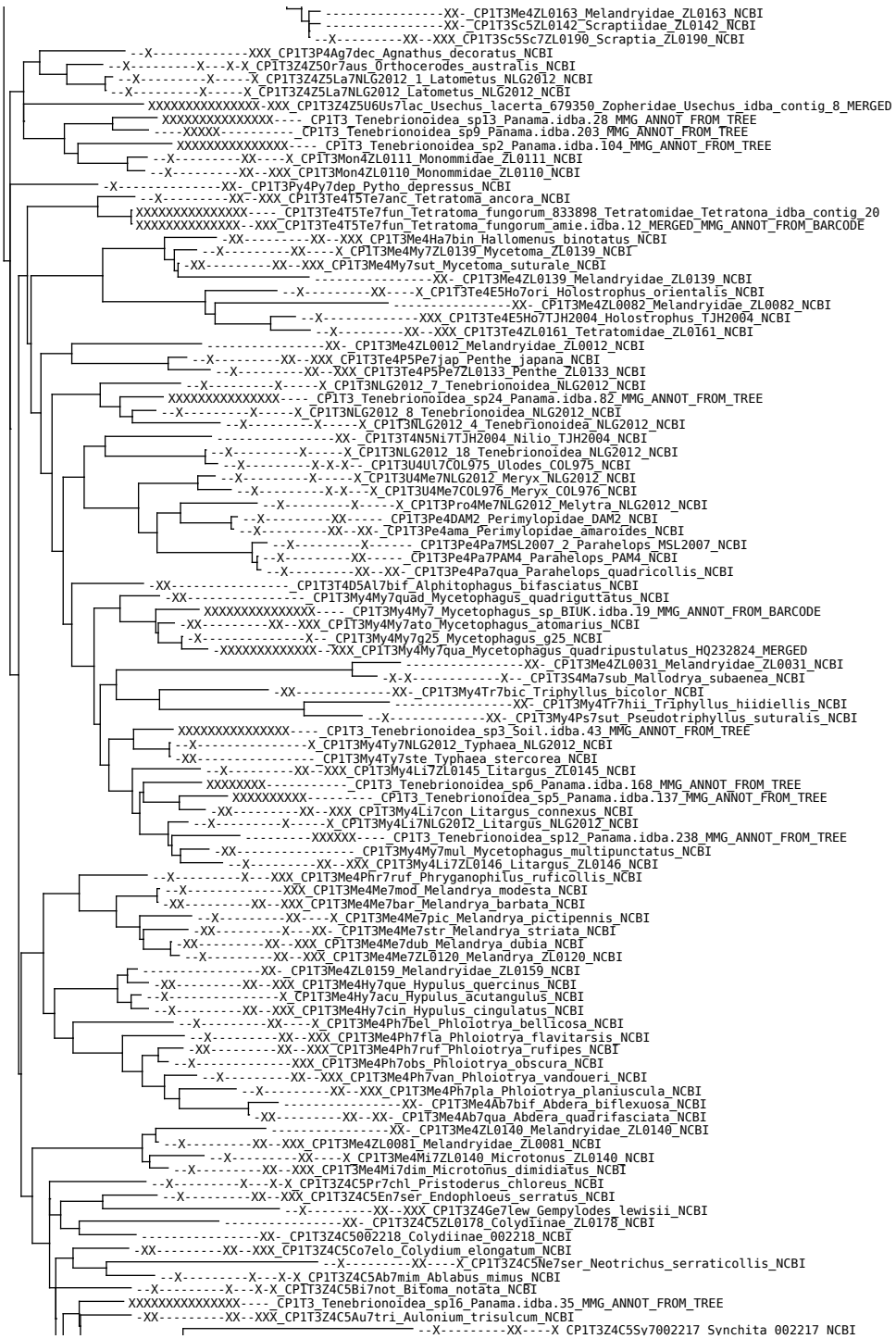


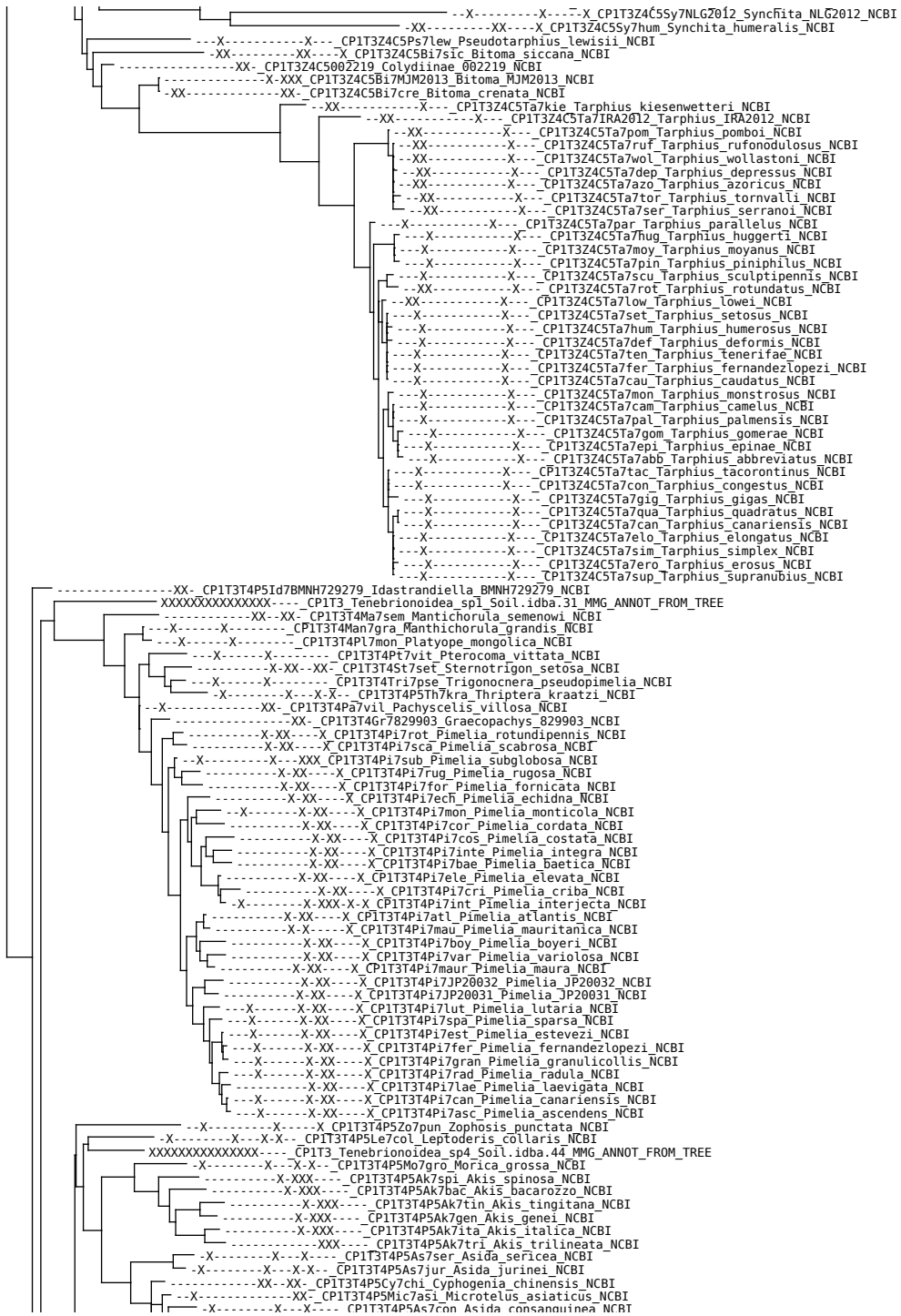


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CP1T3M4Te7ful Tetraonyx fulvus NCBI  
CP1T3M4Phy7cor Physomeloe coralifer NCBI  
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CP1T3M4Me7dec Meloe decorus NCBI  
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Phylogenetic tree showing relationships between various species, with labels such as CP1T3T4T5Lea7NLG2012\_1, CP1T3T4T5Lea7NLG2012\_2, and CP1T3T4T5Lea7NLG2012\_3. The tree is rooted on the left and branches out to the right. Species names are listed on the right side of the tree, often followed by their NCBI accession numbers. The tree is annotated with 'X' and 'XX' characters, likely indicating specific characteristics or data points for each species. The tree is highly branched, showing a complex evolutionary history. The labels are in a monospace font, and the tree structure is represented by vertical and horizontal lines.





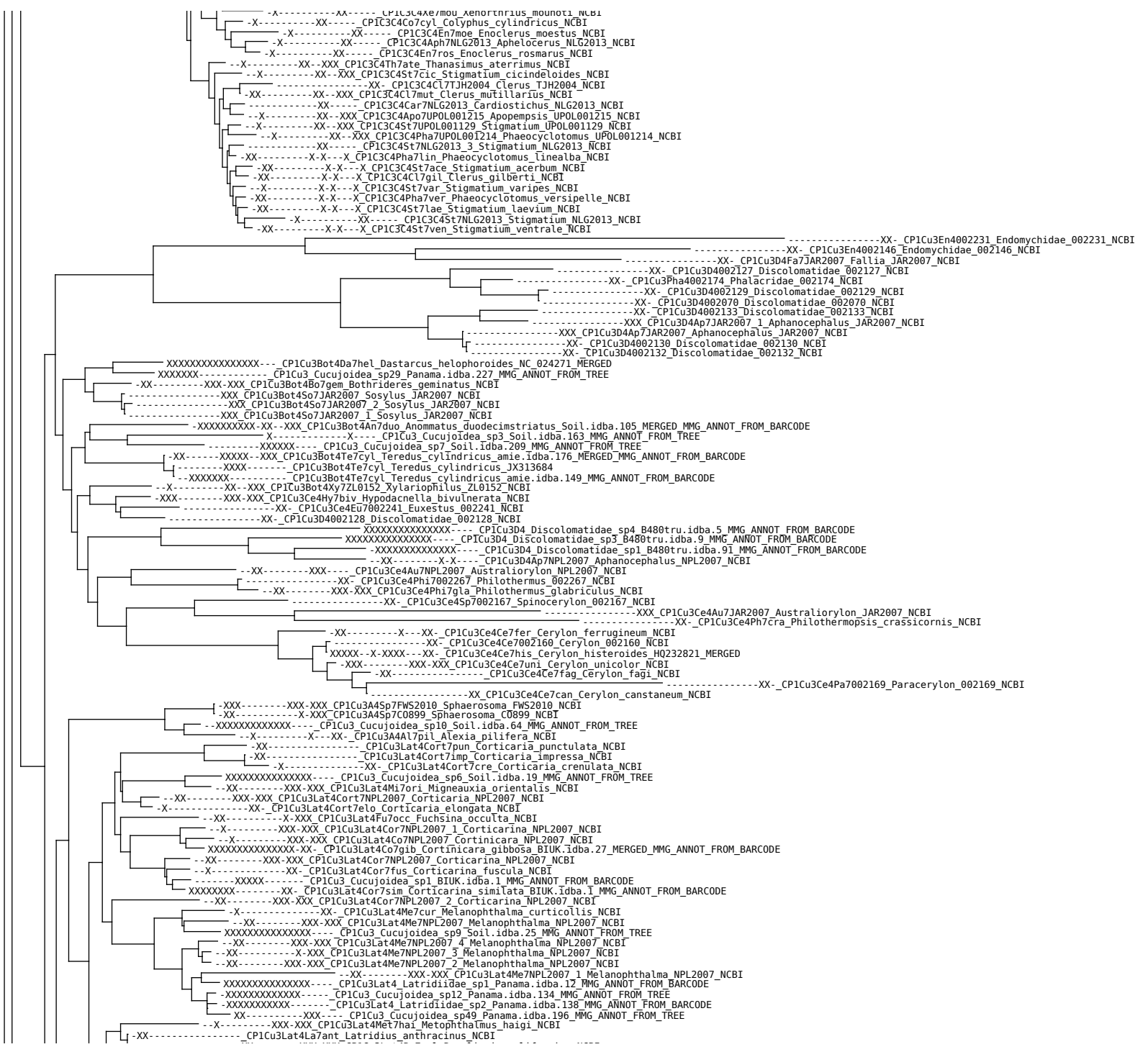






Phylogenetic tree showing relationships between various species, with taxonomic labels and accession numbers. The tree is rooted on the left and branches out to the right. Labels include species names and identifiers such as CP1C3C4Epi7bas, CP1C3C4De7san, etc. Some labels are followed by "NCBI" or "MMG\_ANNOT\_FROM\_BARCODE".

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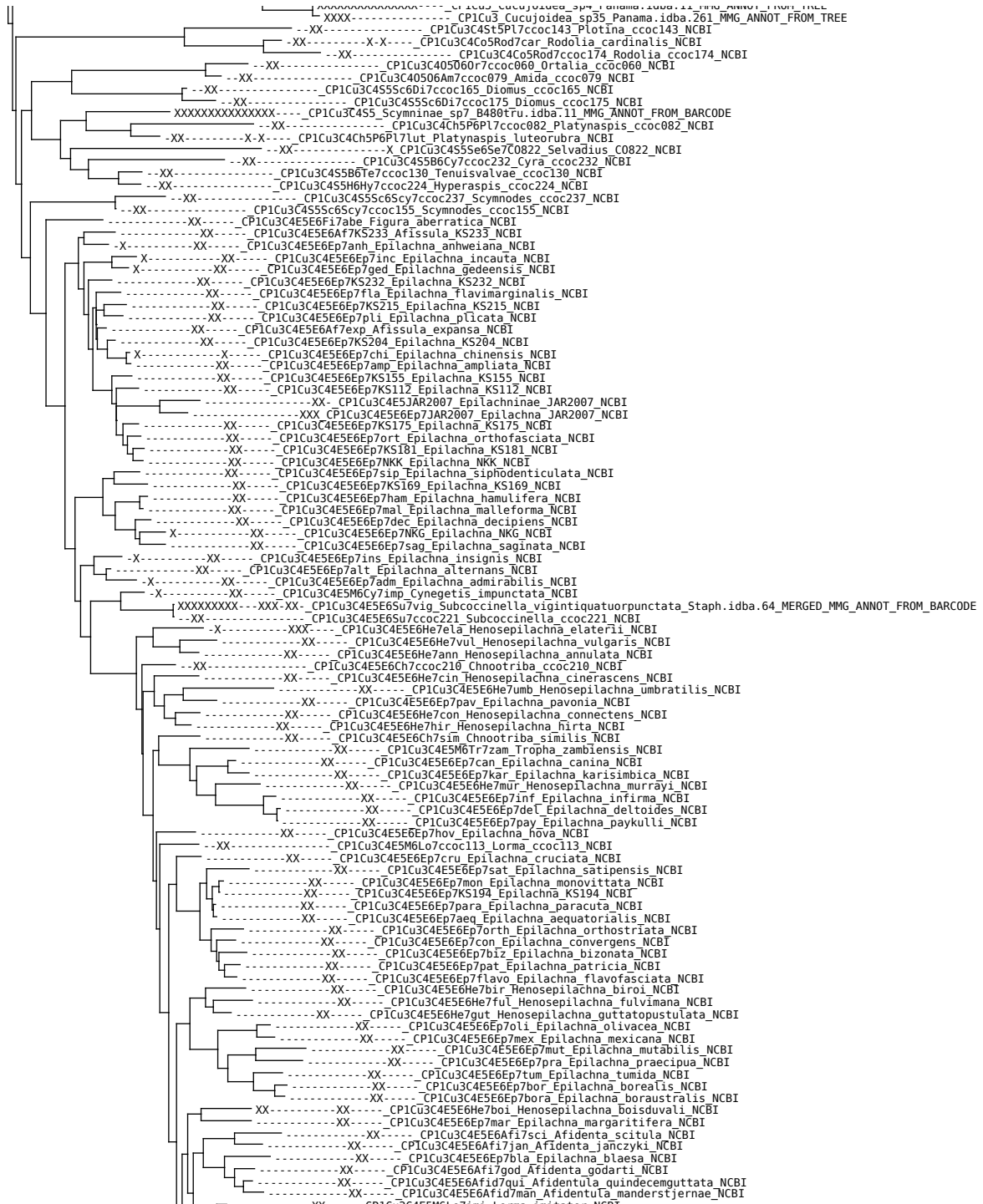




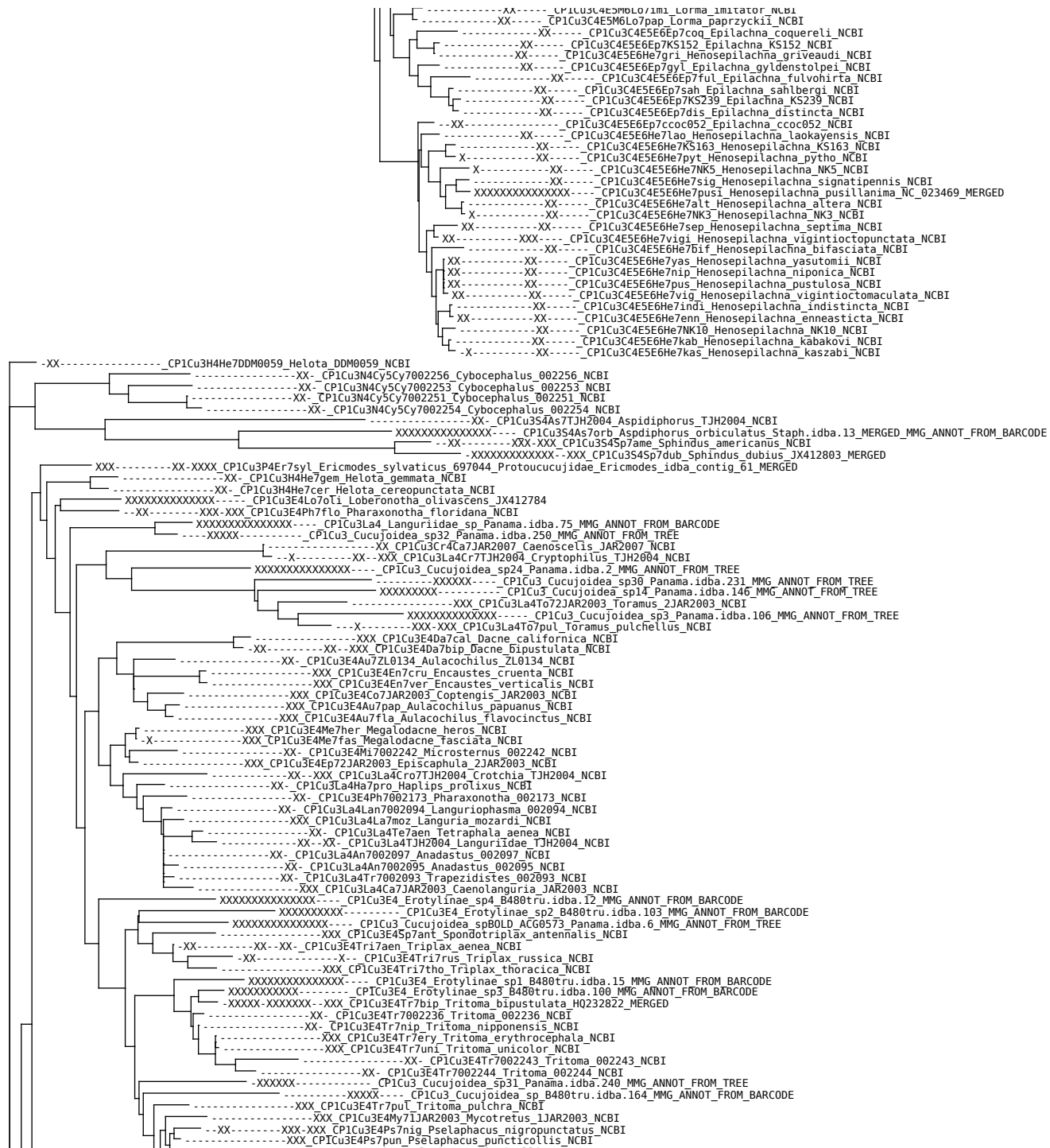


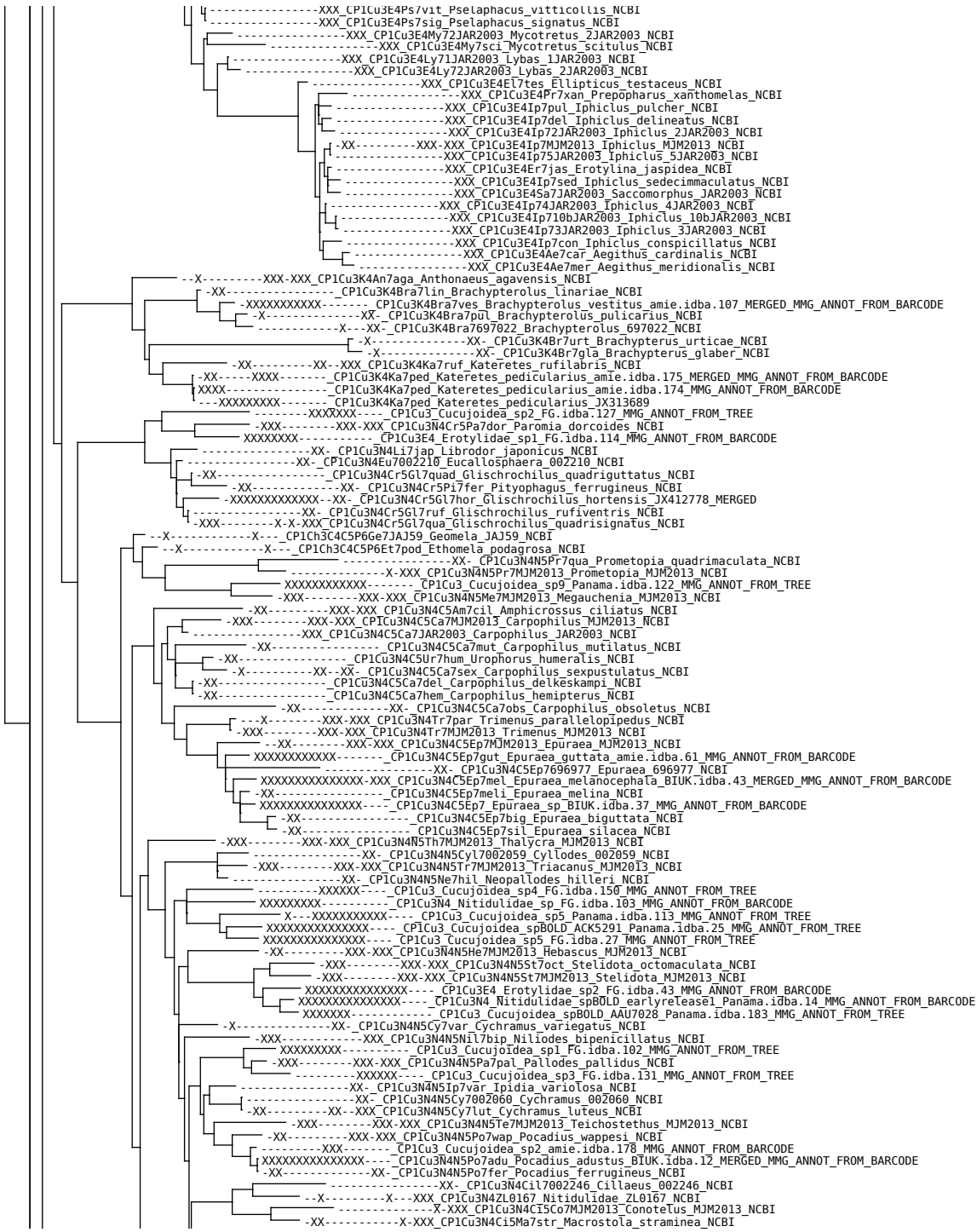




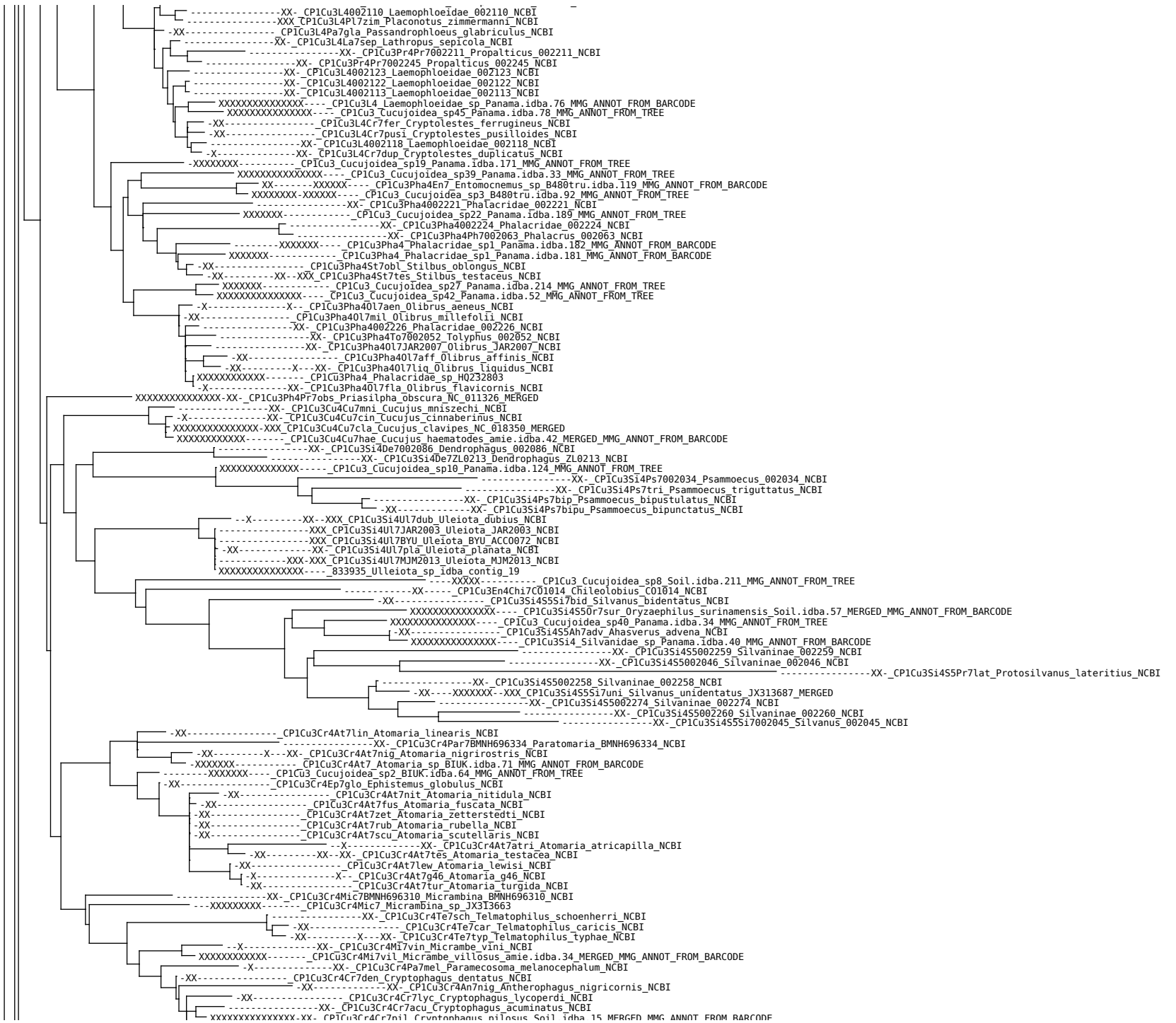




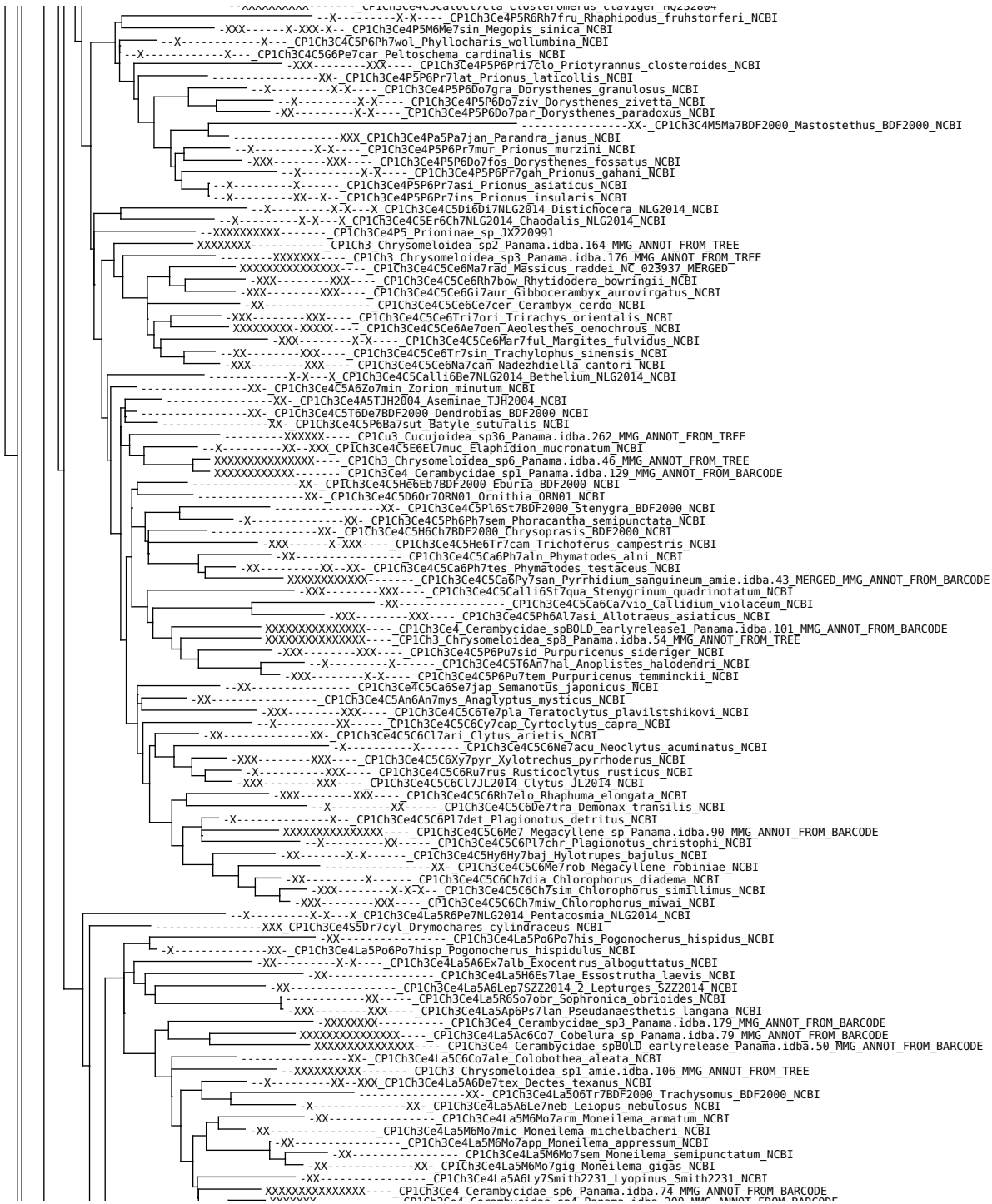




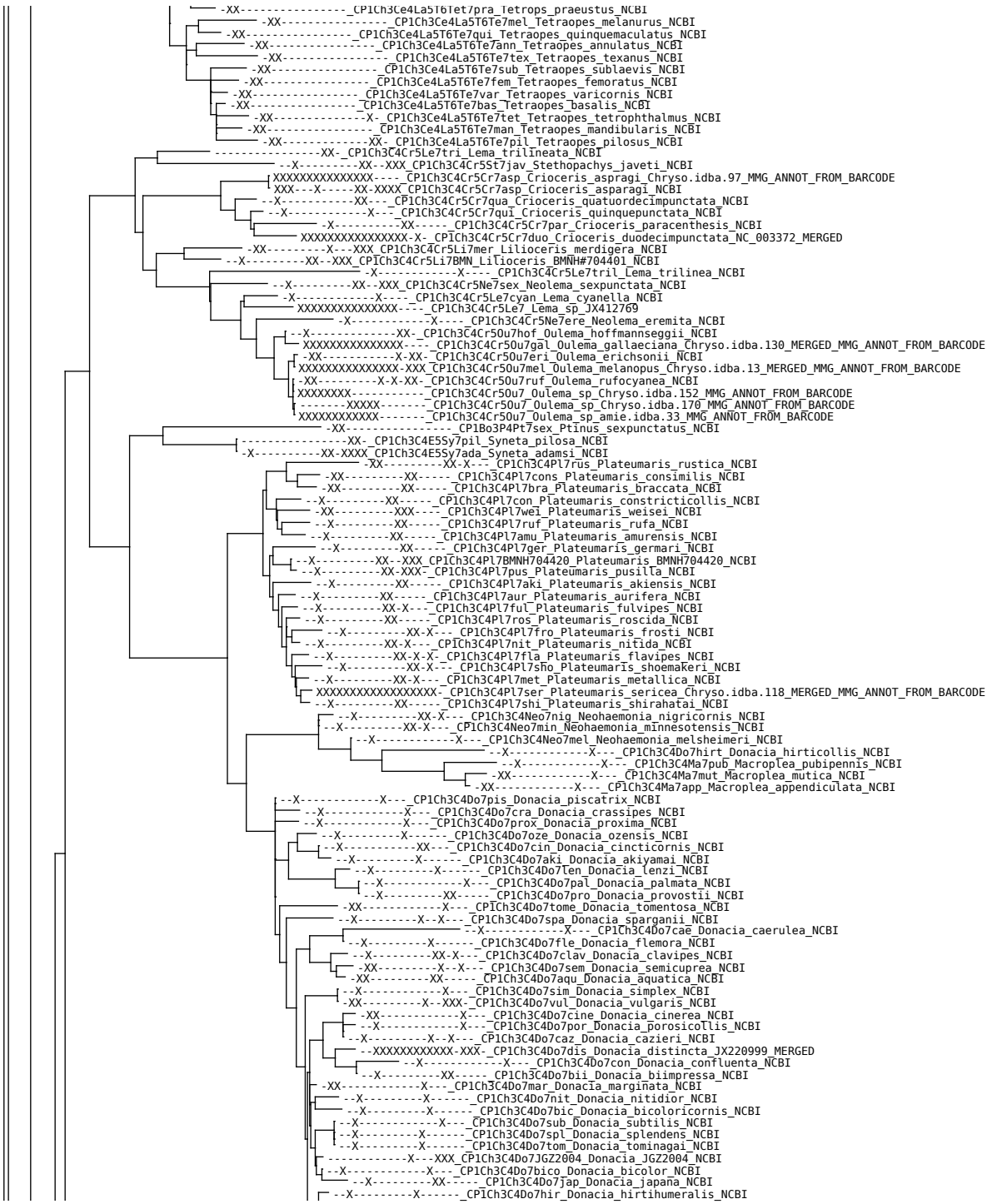




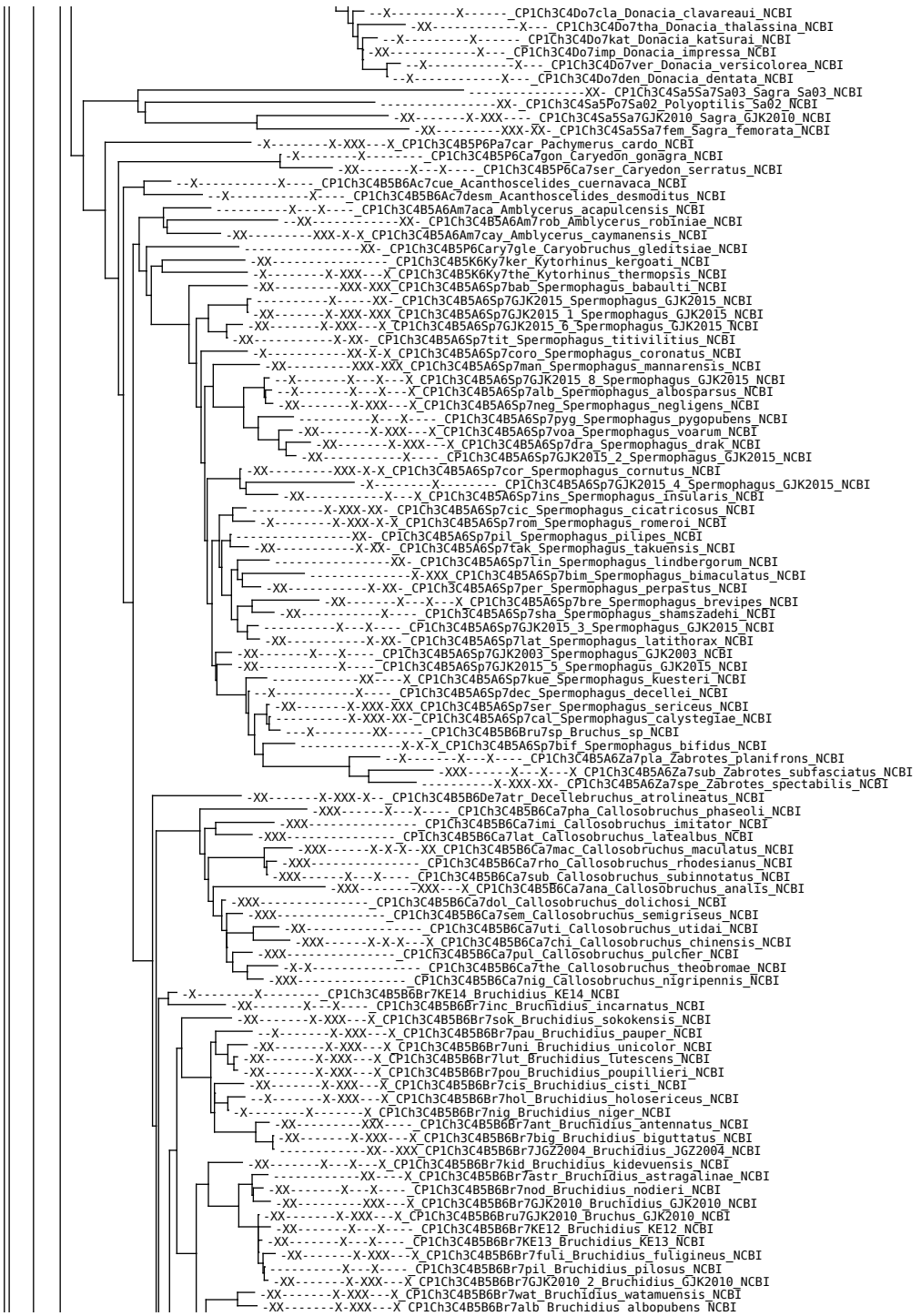




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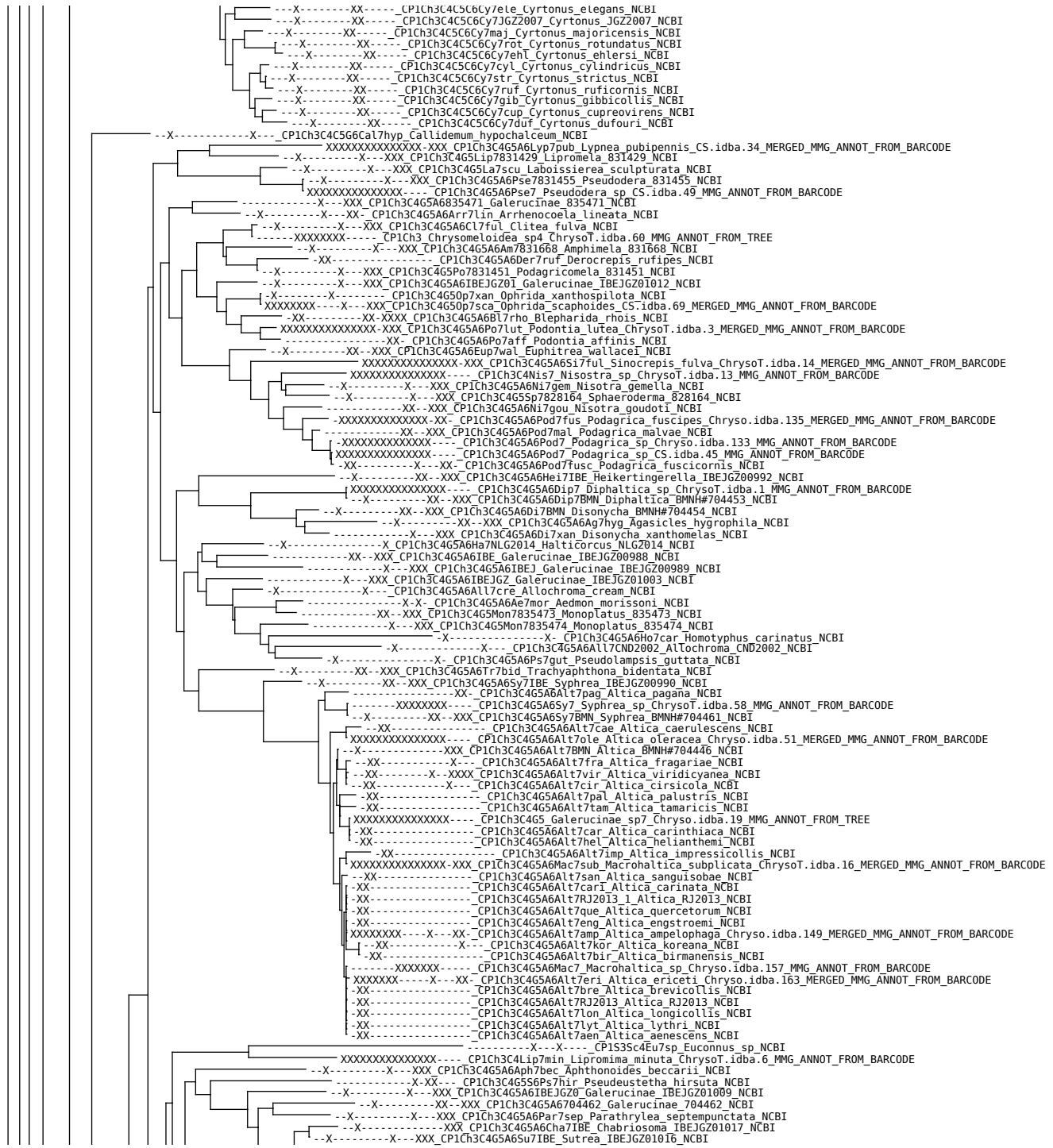


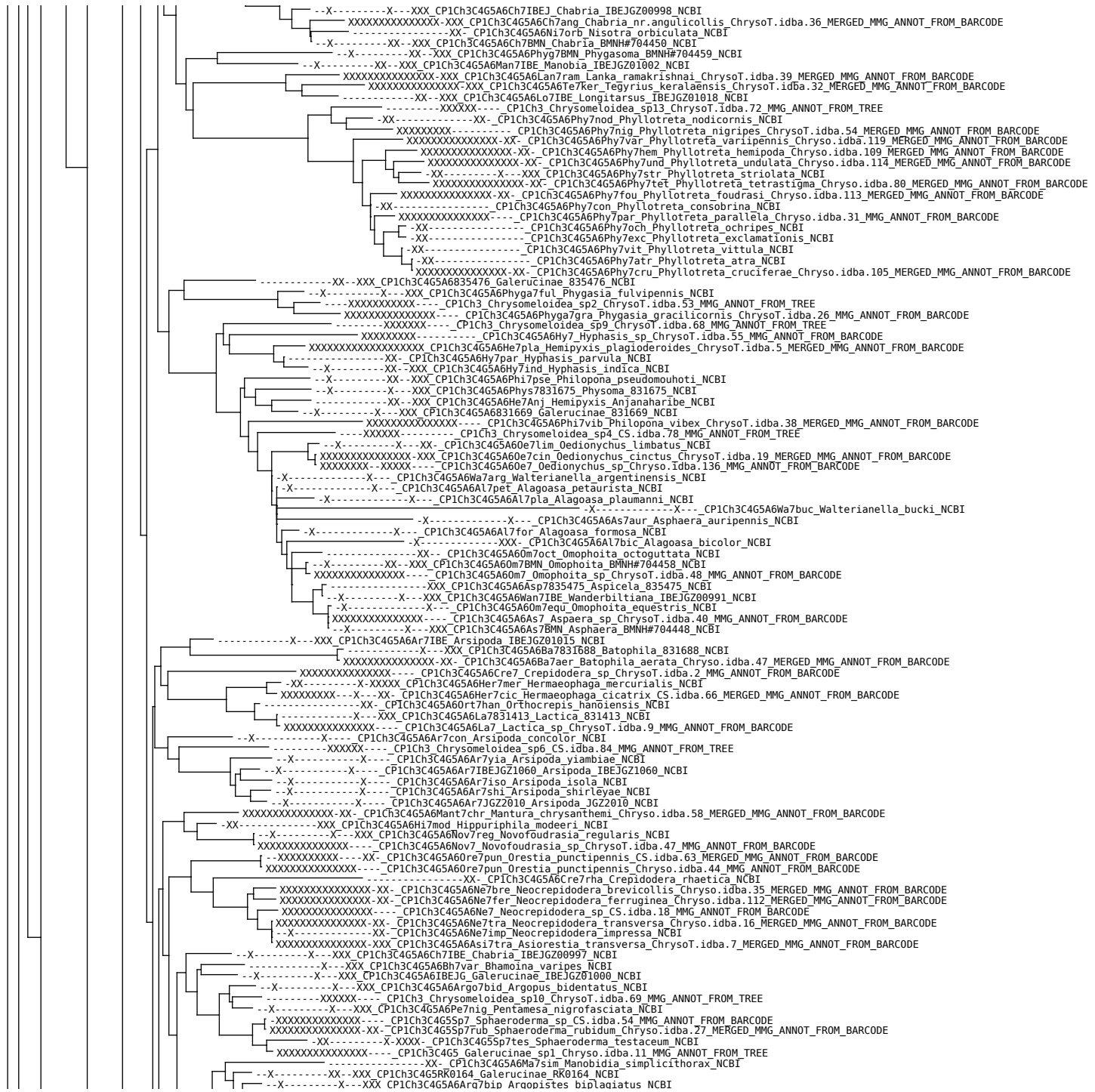
Phylogenetic tree showing relationships between various species, with labels such as CP1Ch3C4B5B6Me7jul Merobruchus julianus NCBI, CP1Ch3C4B5B6Br7nigr Bruchidius nigricornis NCBI, and CP1Ch3C4B5B6Br7ma Bruchidius malindiensis NCBI. The tree is rooted on the left and branches out to the right, with species names listed at the tips of the branches. The labels include accession numbers (e.g., CP1Ch3C4B5B6Me7jul) and species names (e.g., Merobruchus julianus NCBI). The tree shows a complex branching pattern, indicating the evolutionary relationships between these species. The labels are arranged in a way that corresponds to the branching structure, with some species having multiple labels indicating different accessions or related forms. The tree is a cladogram, where the length of the branches is not necessarily proportional to time, but the branching order represents the evolutionary relationships. The species names are written in a standard font, and the accession numbers are in a larger font. The tree is a black and white line drawing, with the branches represented by thin lines. The labels are placed to the right of the branches, and the tree is oriented vertically. The root of the tree is at the top left, and the branches extend downwards and to the right. The species names are listed in a single column, with each name corresponding to a specific branch. The tree is a detailed representation of the evolutionary relationships between these species, showing the common ancestry and the divergence of lineages over time. The labels are arranged in a way that is easy to read, and the tree is a clear and concise representation of the data. The tree is a valuable tool for understanding the evolutionary relationships between these species, and it provides a visual summary of the data. The tree is a complex structure, but it is easy to interpret, and it provides a clear and concise representation of the data. The tree is a valuable tool for understanding the evolutionary relationships between these species, and it provides a visual summary of the data. The tree is a complex structure, but it is easy to interpret, and it provides a clear and concise representation of the data. The tree is a valuable tool for understanding the evolutionary relationships between these species, and it provides a visual summary of the data.





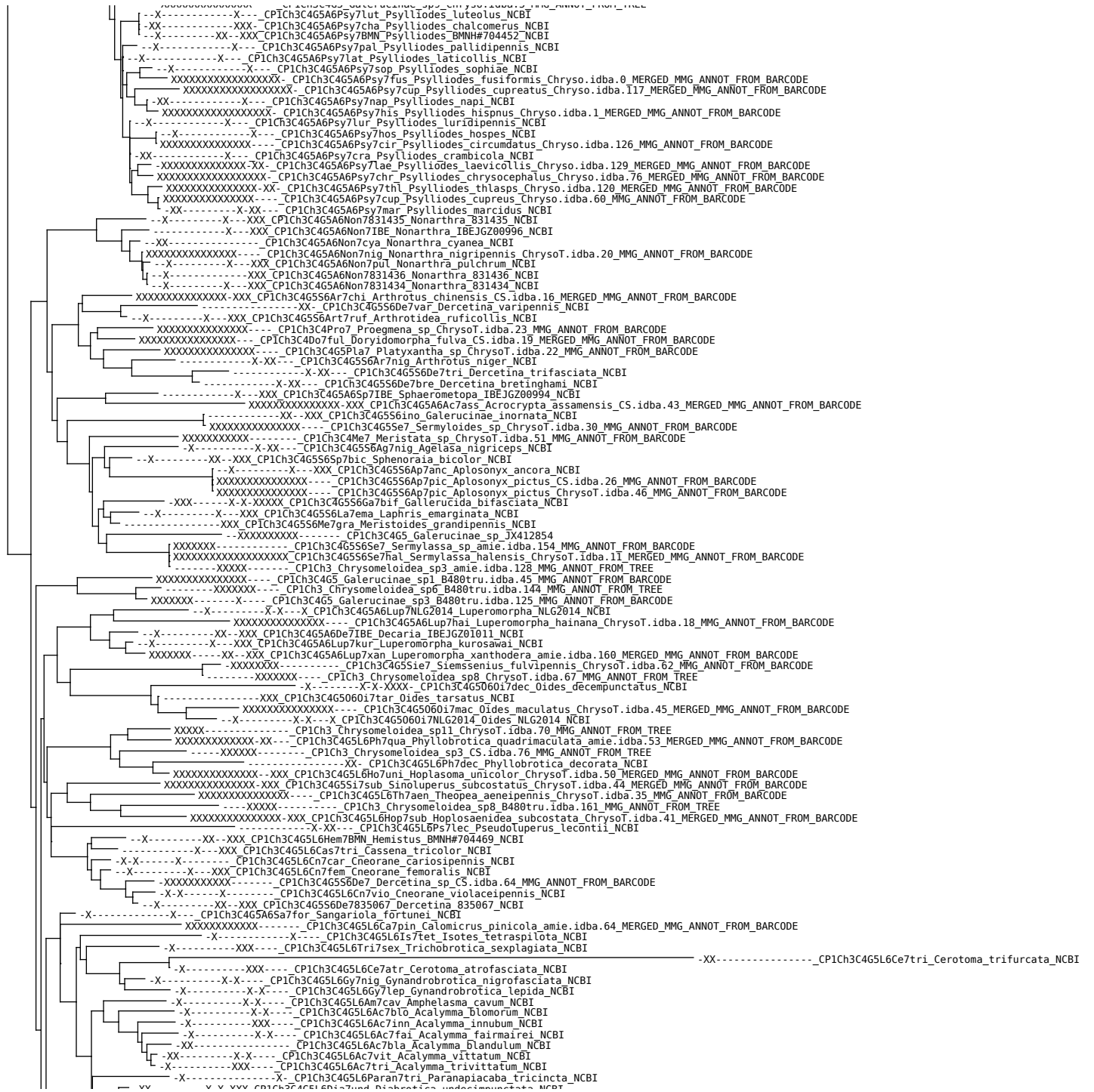
Phylogenetic tree showing relationships between various species, primarily focusing on the Chrysolinidae and Cyrtonus genera. The tree is rooted on the left and branches out to the right. Species names are listed on the right side of the tree, often followed by their NCBI accession numbers or other identifiers. The tree shows a complex branching pattern, indicating a diverse lineage. Key groups include Platypodidae (Platyphora), Chrysolinidae (Chrysolina, Oreina, Chrysolina), and Cyrtonus. The tree is annotated with various symbols (X, -) indicating specific characteristics or data points for each species. The species names are often followed by their NCBI accession numbers, such as CP1Ch3C4C5D6Ca7sca for Calligrapha scalaris and CP1Ch3C4C5C6Ch7pau for Cyrtonus plumbeus. The tree is a detailed representation of the evolutionary relationships between these species, showing their common ancestry and divergence points.



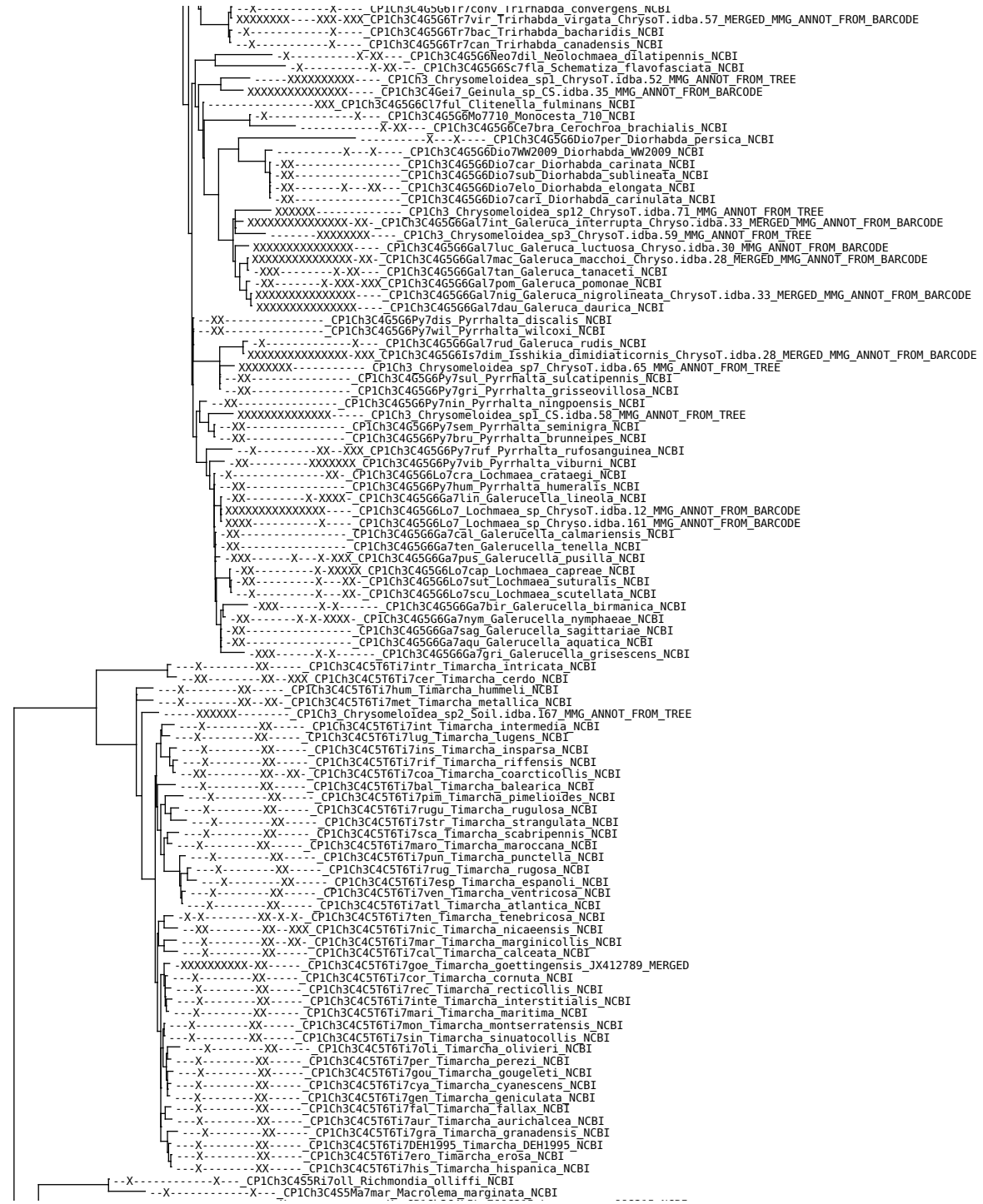


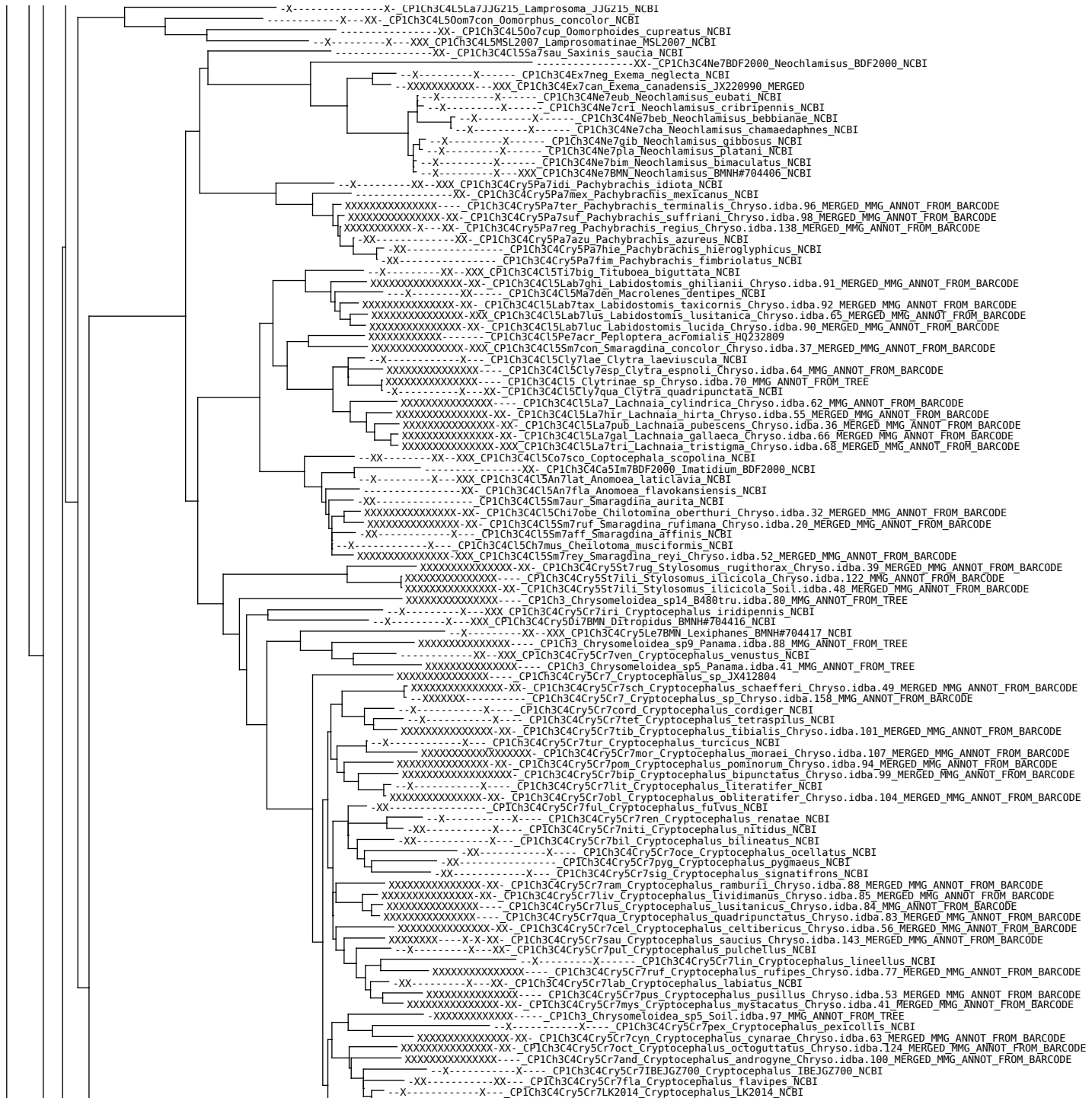
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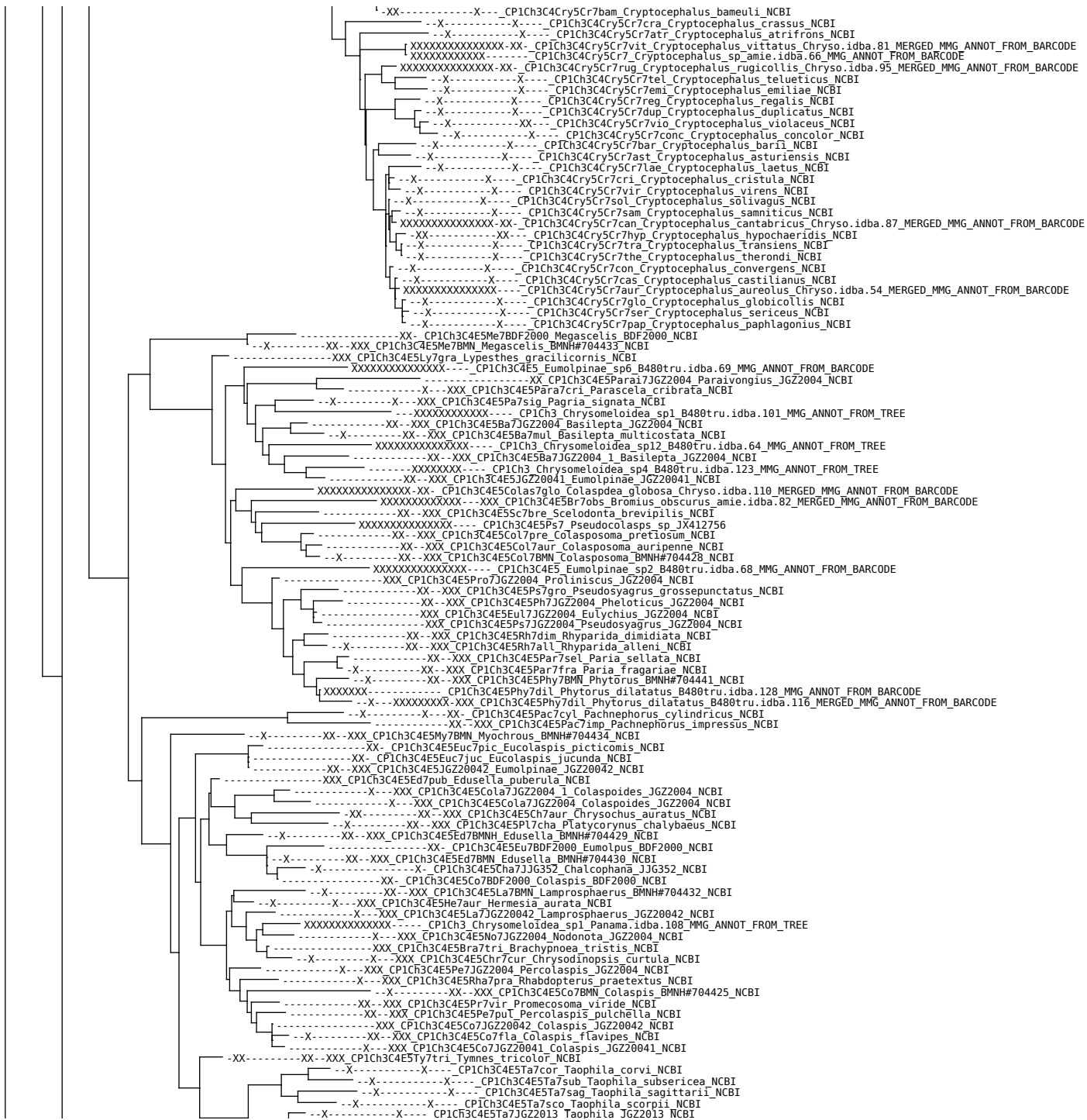


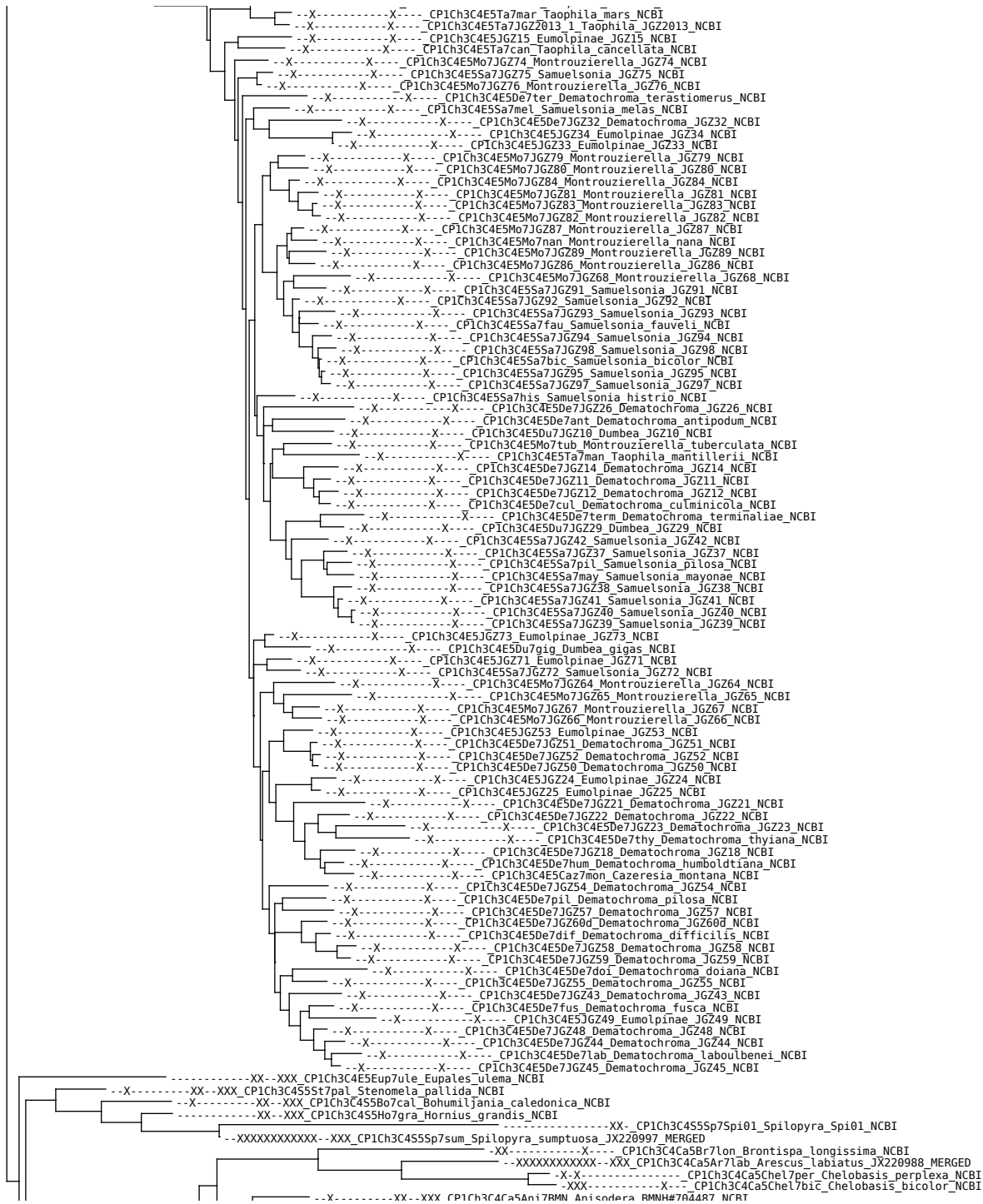


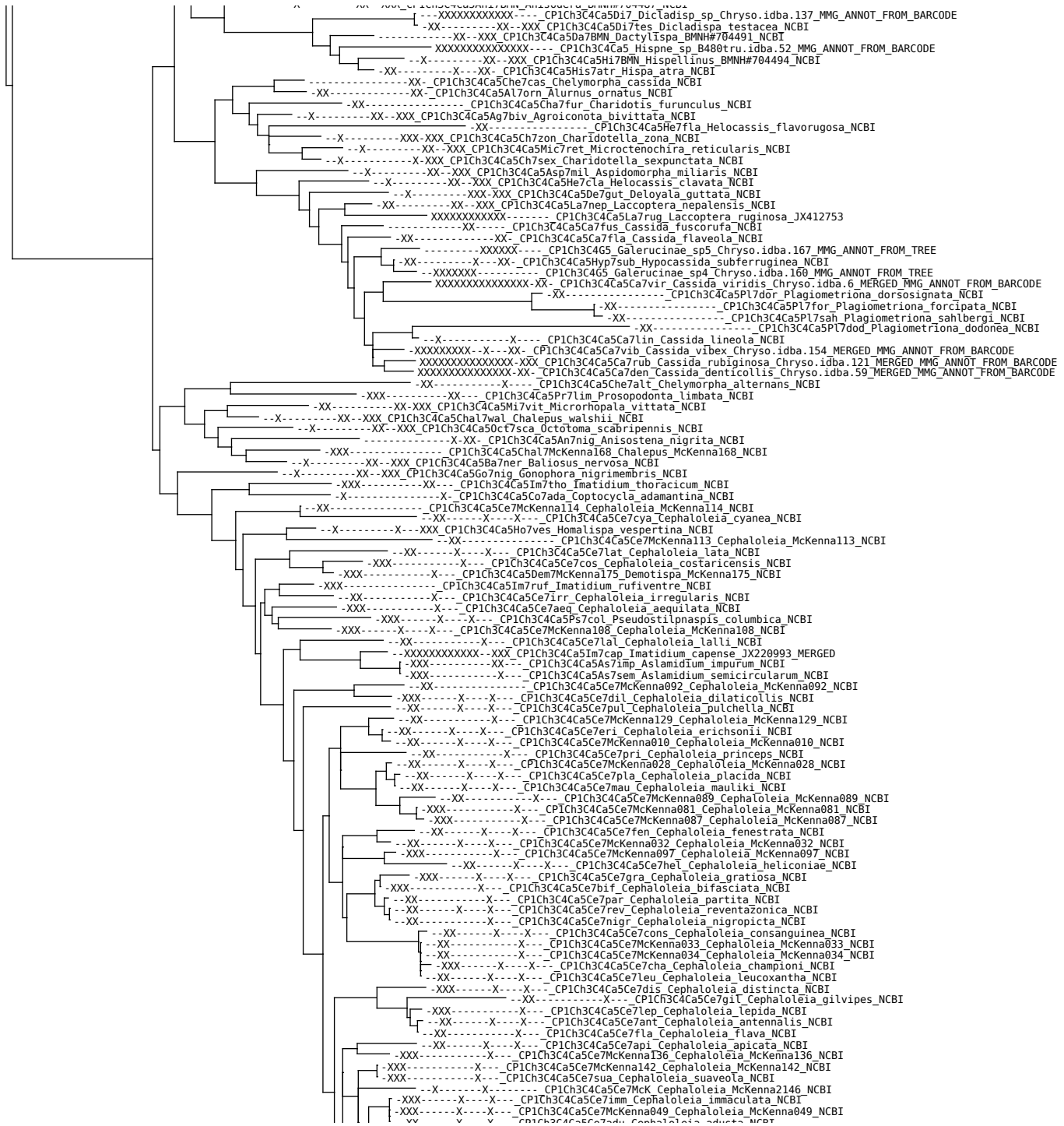
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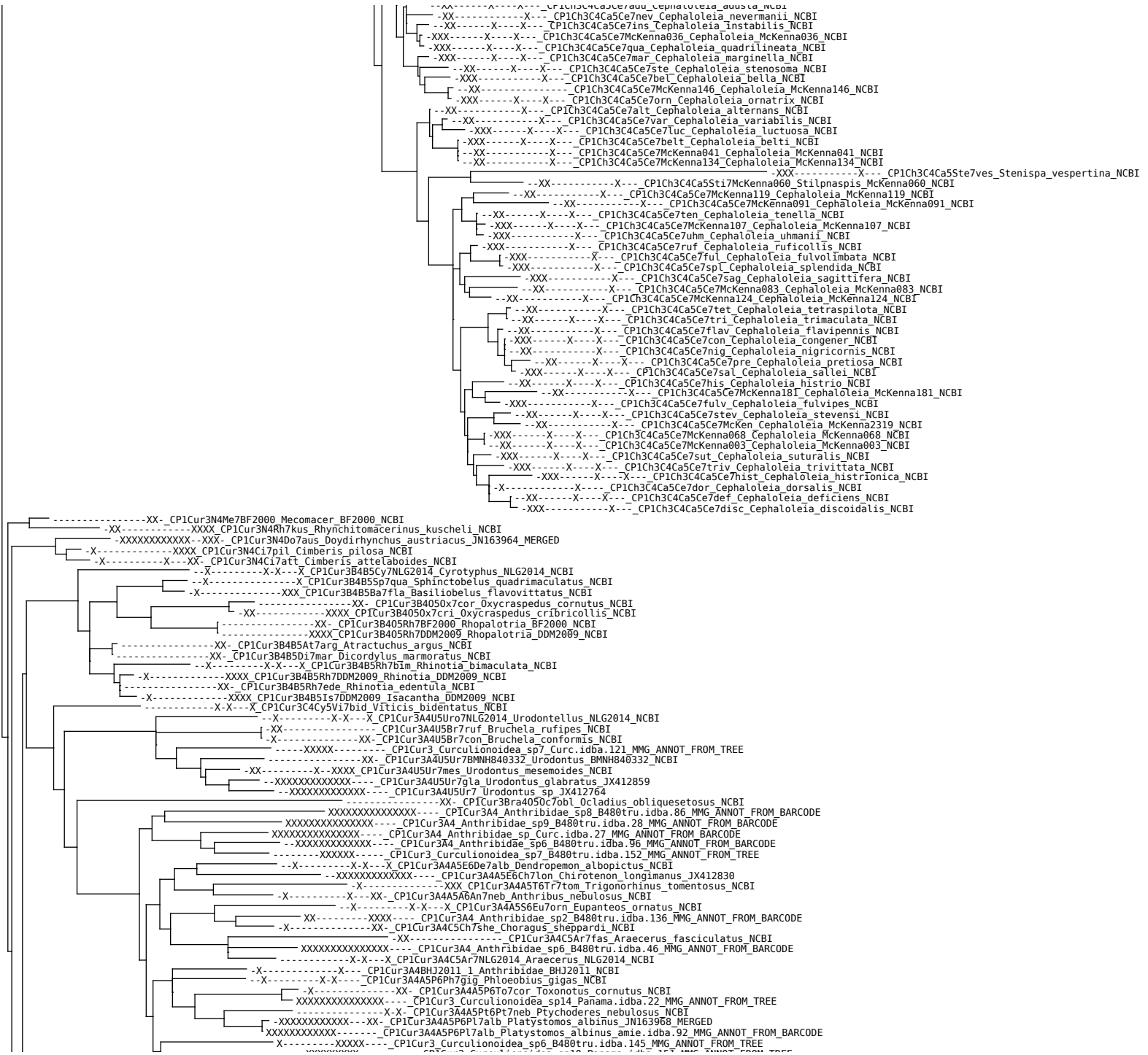






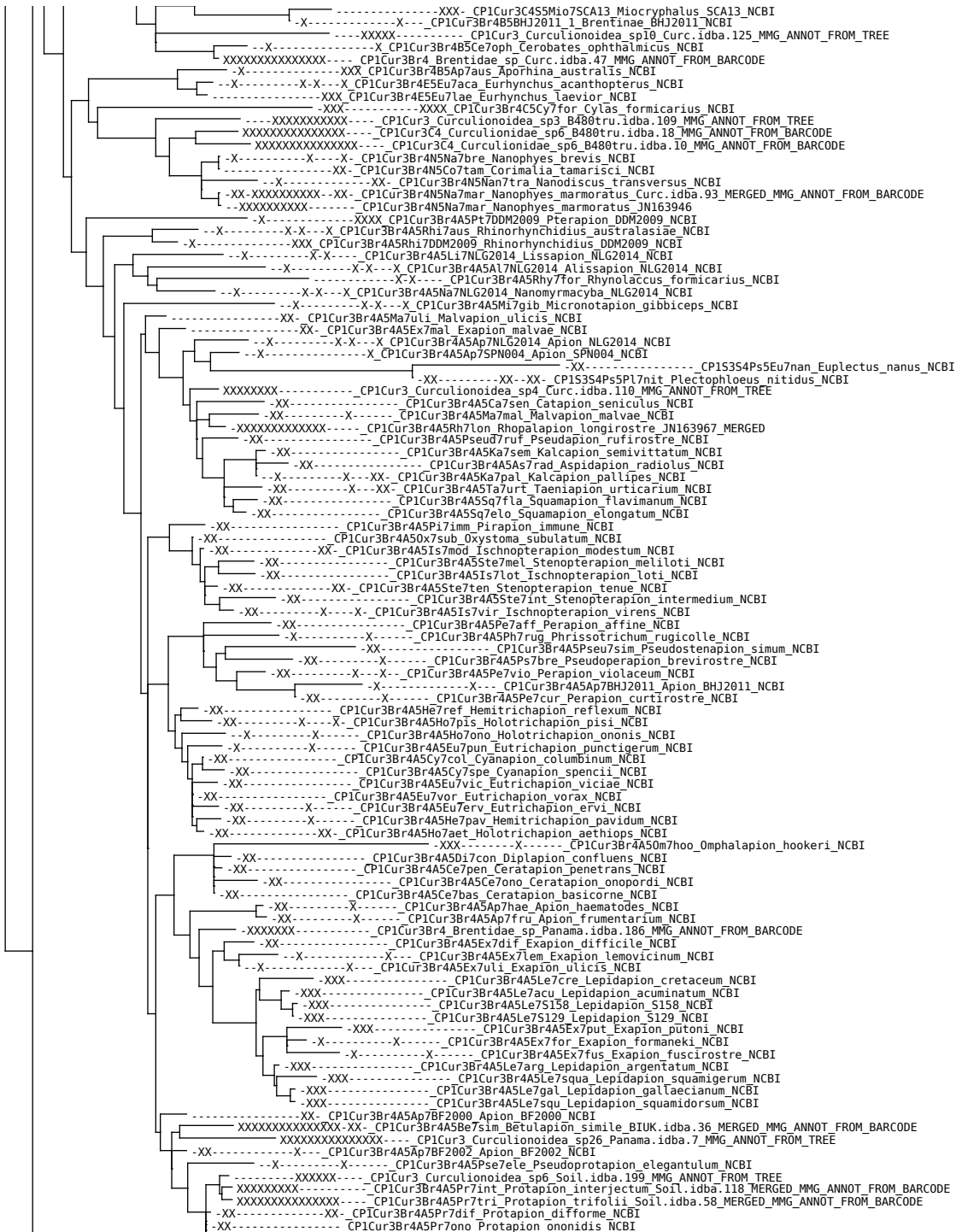


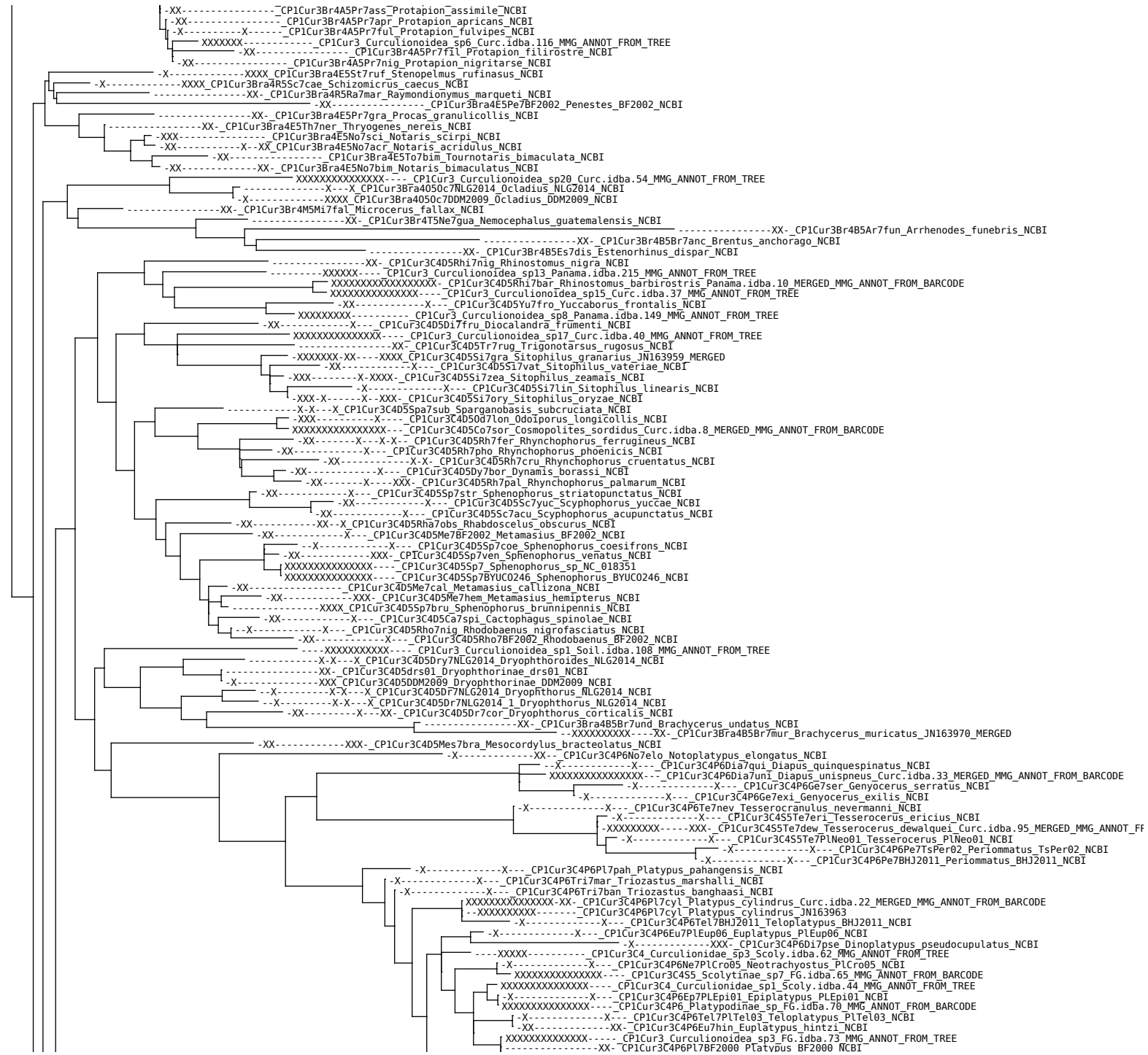


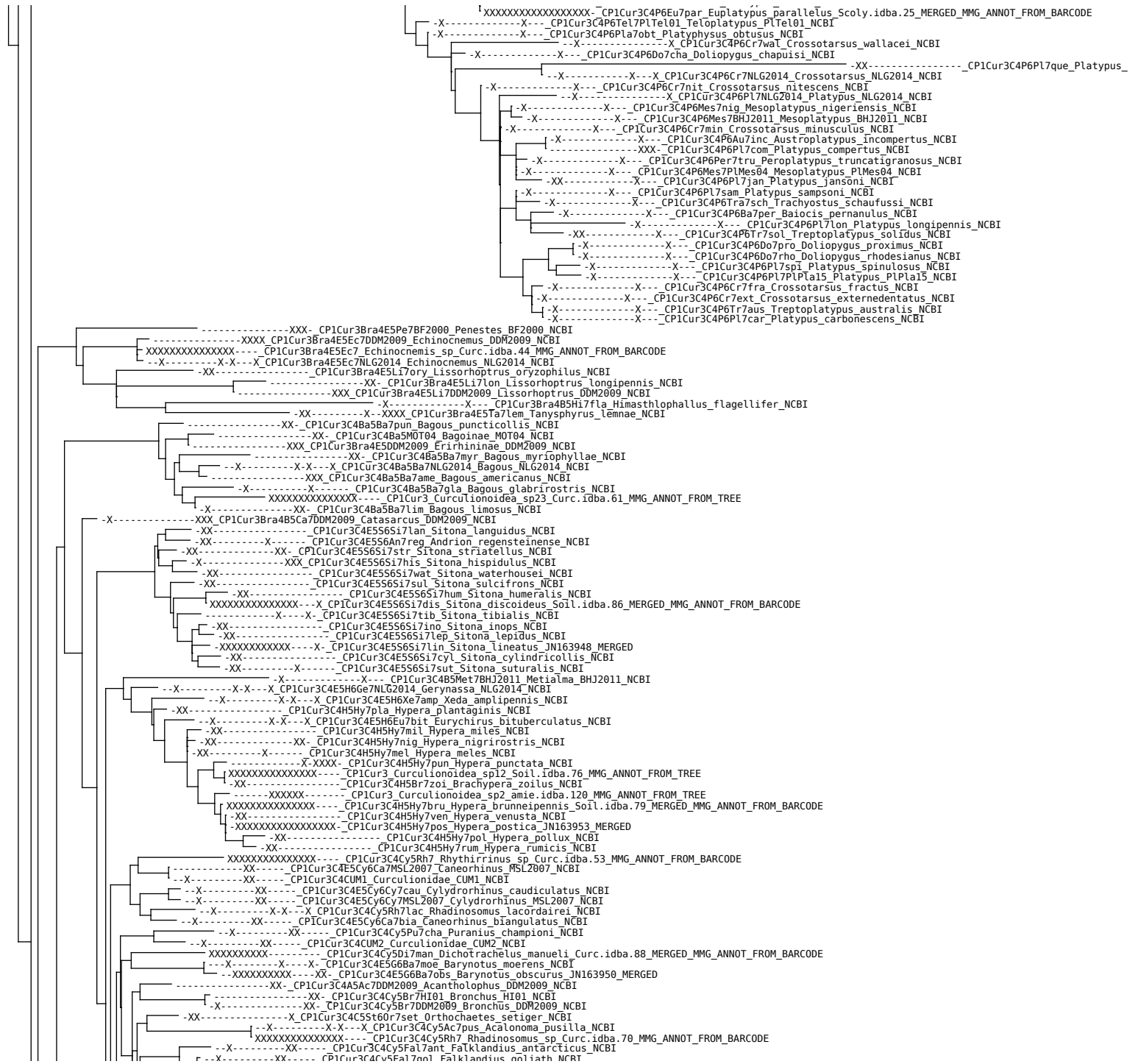




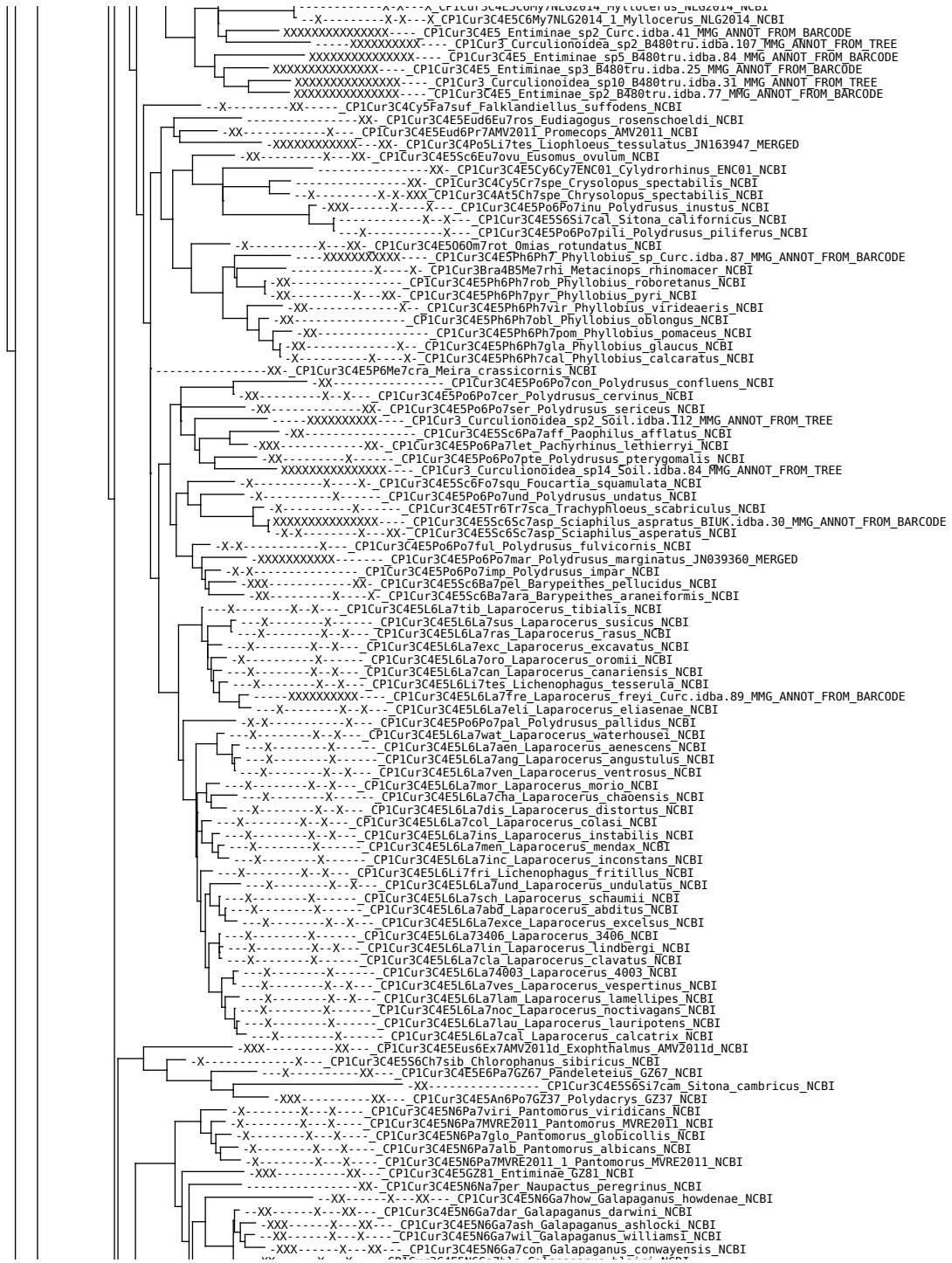








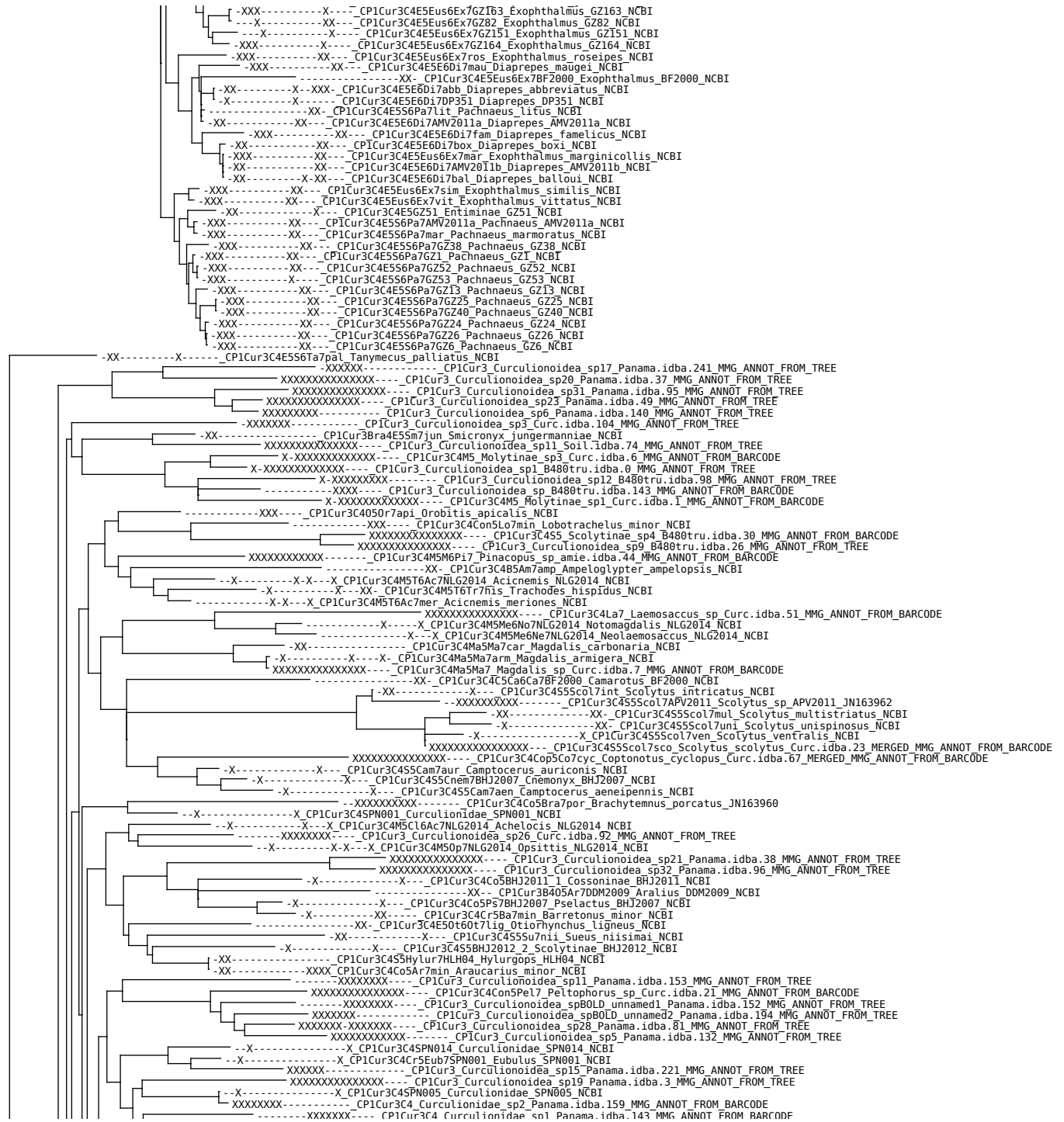
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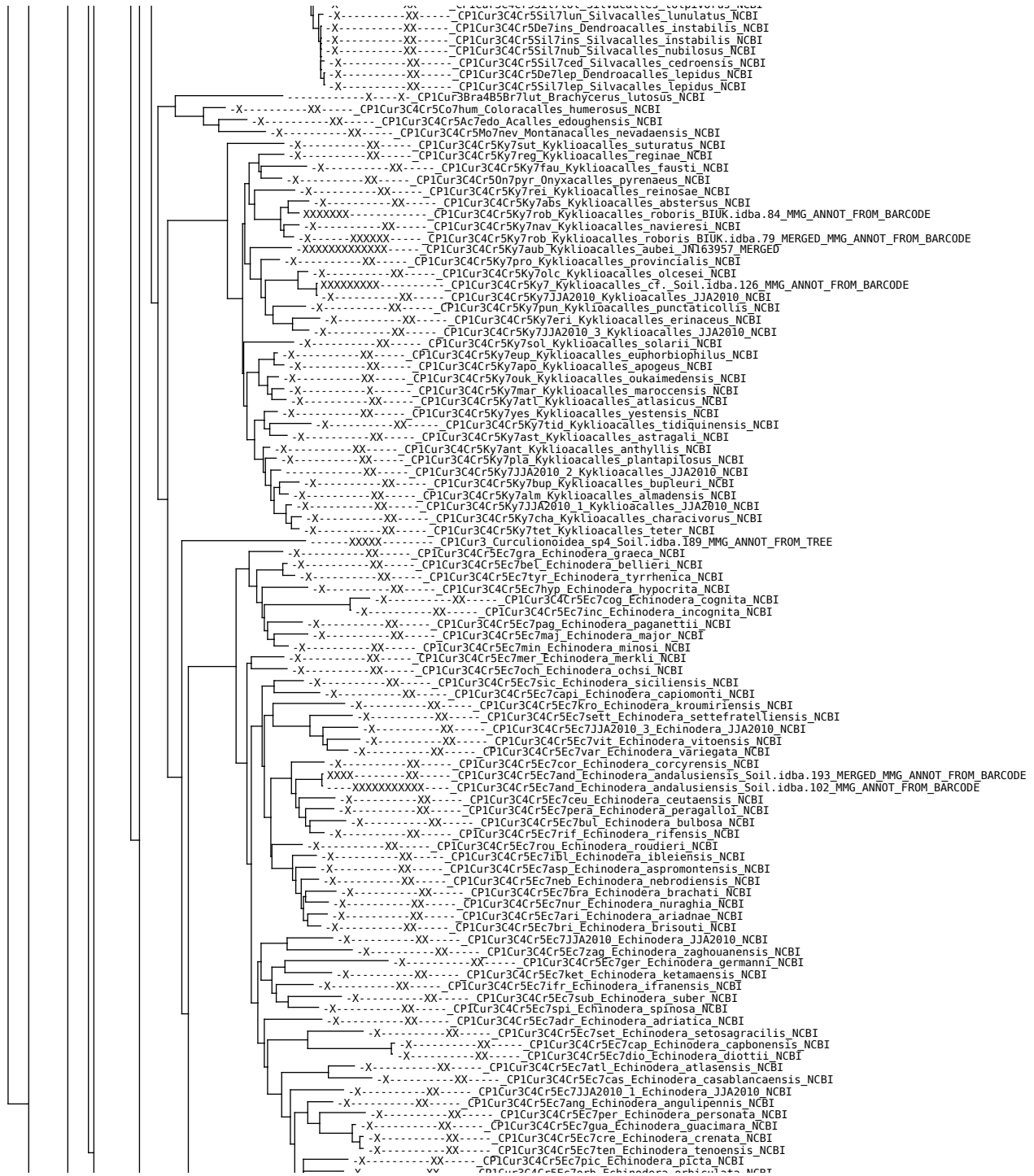
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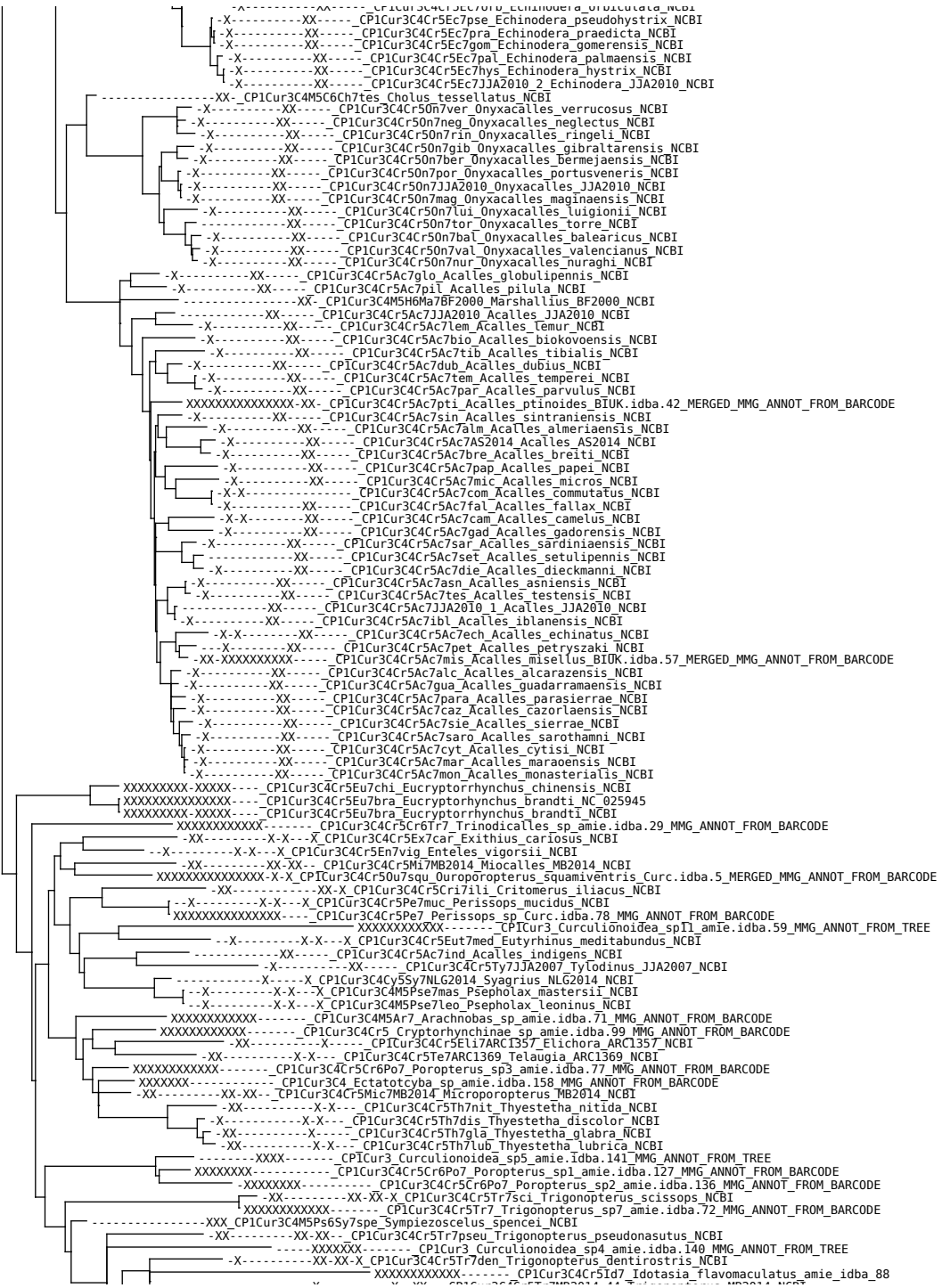
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