**Strict consensus tree & semi-strict consensus tree**

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,Carcharias\_taurus,Odontaspis\_ferox,Odontaspis\_noronhai,Pseudocarcharias\_kamoharai,Megachasma\_pelagios,(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus))))));

**50% Majority-Rule Tree**

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,(Carcharias\_taurus,((Odontaspis\_ferox,Odontaspis\_noronhai),Pseudocarcharias\_kamoharai,(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus))))),Megachasma\_pelagios)));

**60% Majority-Rule Tree**

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,(Carcharias\_taurus,((Odontaspis\_ferox,Odontaspis\_noronhai),Pseudocarcharias\_kamoharai,(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus))))),Megachasma\_pelagios)));

**70% Majority-Rule Tree**

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,(Carcharias\_taurus,(Odontaspis\_ferox,Odontaspis\_noronhai),Pseudocarcharias\_kamoharai, Megachasma\_pelagios),(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus)))))));

**10 EMPTs**

Tree A:

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,(Carcharias\_taurus,((Odontaspis\_ferox,Odontaspis\_noronhai),(Pseudocarcharias\_kamoharai,((((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus)))),Megachasma\_pelagios))))));

Tree B:

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,(Carcharias\_taurus,(((Odontaspis\_ferox,Odontaspis\_noronhai),(Pseudocarcharias\_kamoharai,(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus)))))),Megachasma\_pelagios))));

Tree C:

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,(Carcharias\_taurus,((((Odontaspis\_ferox,Odontaspis\_noronhai),Pseudocarcharias\_kamoharai),(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus))))),Megachasma\_pelagios))));

Tree D:

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,(Carcharias\_taurus,(((Odontaspis\_ferox,Odontaspis\_noronhai),Pseudocarcharias\_kamoharai),((((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus)))),Megachasma\_pelagios)))));

Tree E:

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,(Carcharias\_taurus,(((Odontaspis\_ferox,(Pseudocarcharias\_kamoharai,(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus)))))),Odontaspis\_noronhai),Megachasma\_pelagios))));

Tree F:

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,(((Carcharias\_taurus,(Pseudocarcharias\_kamoharai,((((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus)))),Megachasma\_pelagios))),Odontaspis\_ferox),Odontaspis\_noronhai)));

Tree G:

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,((Carcharias\_taurus,((Odontaspis\_ferox,Odontaspis\_noronhai),(Pseudocarcharias\_kamoharai,(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus))))))),Megachasma\_pelagios)));

Tree H:

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,(Carcharias\_taurus,((Odontaspis\_ferox,Odontaspis\_noronhai),(Pseudocarcharias\_kamoharai,(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus)))))))),Megachasma\_pelagios);

Tree I:

(Outgroup\_Scyliorhinus,(Mitsukurina\_owstoni,((Carcharias\_taurus,((Odontaspis\_ferox,Odontaspis\_noronhai),Pseudocarcharias\_kamoharai)),(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus)))))),Megachasma\_pelagios);

Tree J:

(Outgroup\_Scyliorhinus,((Mitsukurina\_owstoni,((Odontaspis\_ferox,(Pseudocarcharias\_kamoharai,(((Alopias\_pelagicus,Alopias\_vulpinus),Alopias\_superciliosus),(Cetorhinus\_maximus,((Carcharodon\_carcharias,Isurus\_oxyrinchus,Isurus\_paucus),(Lamna\_ditropis,Lamna\_nasus)))))),Odontaspis\_noronhai)),Carcharias\_taurus),Megachasma\_pelagios);