Supplementary

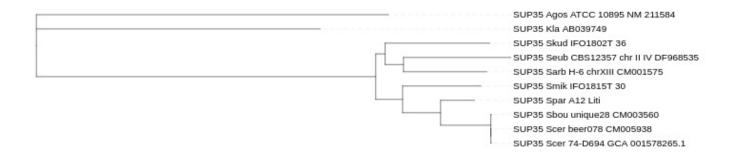


Figure 1. Tree without bootstrap support

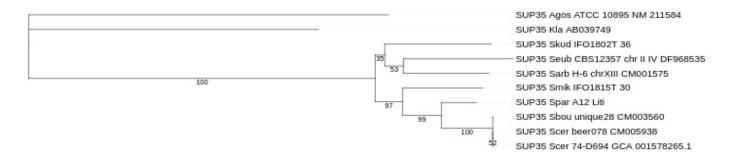


Figure 2. 100 replicas of bootstrap

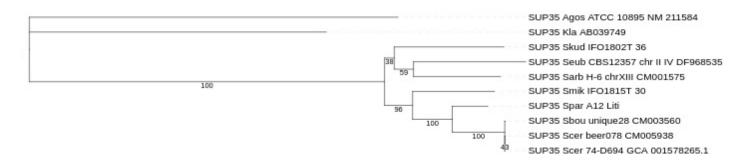


Figure 3. 1000 replicas of ultrafast bootstrap

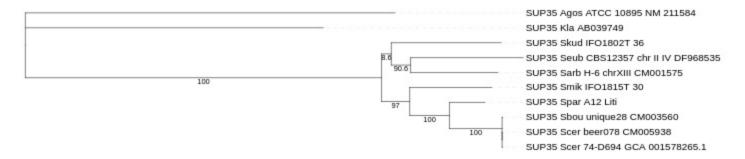


Figure 4. 1000 ultrafast bootstrap + 1000 alrt + abayes

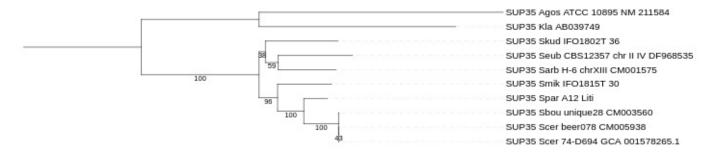


Figure 5. Midpoint rooting in iTOL

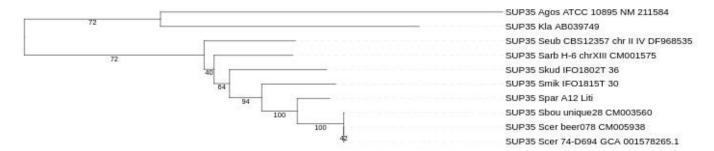


Figure 6. Non-reversible rooting in iq-tree2