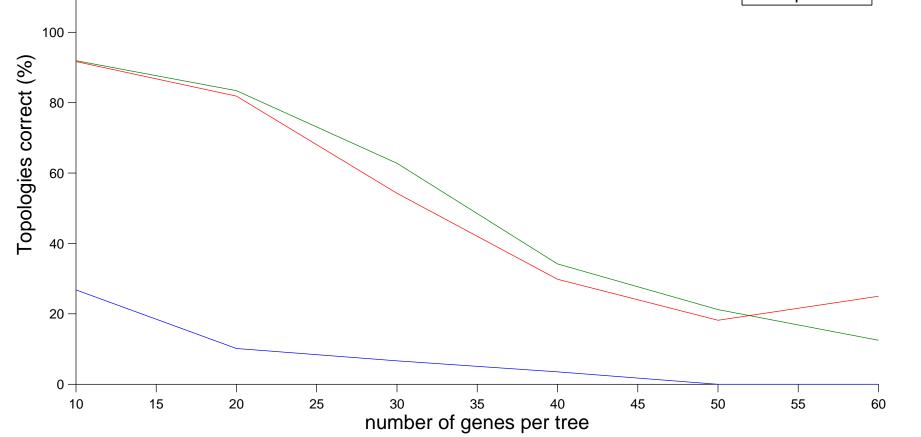
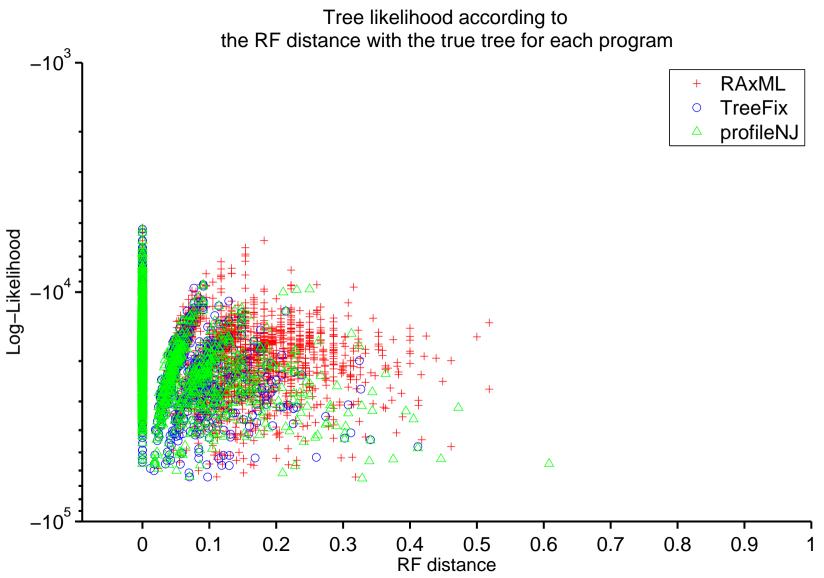
Accuracy of inferred duplication for gene trees of increasing size for simulated fungi dataset **RAxML** 120 -**TreeFix** profileNJ 100 duplication accuracy (%) 80 -60 -40 -20 -0 35 10 15 20 25 30 40 50 55 45 60

number of genes per tree

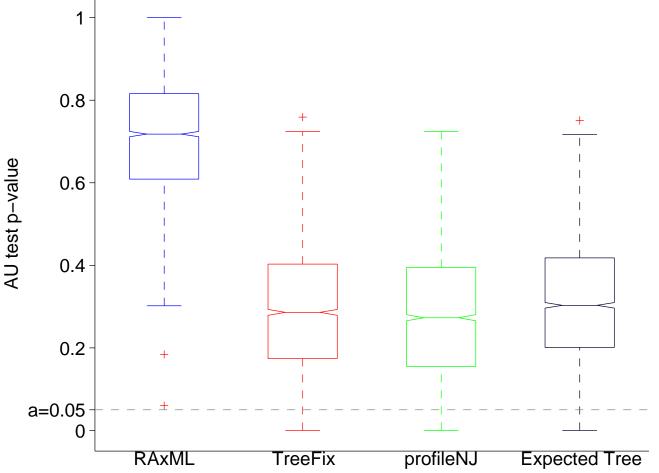
Accuracy of inferred lost for gene trees of increasing size for simulated fungi dataset **RAxML** 120 -**TreeFix** profileNJ 100 lost accuracy (%) 60 -40 20 -0 -25 30 35 10 15 20 40 45 50 55 60 number of genes per tree

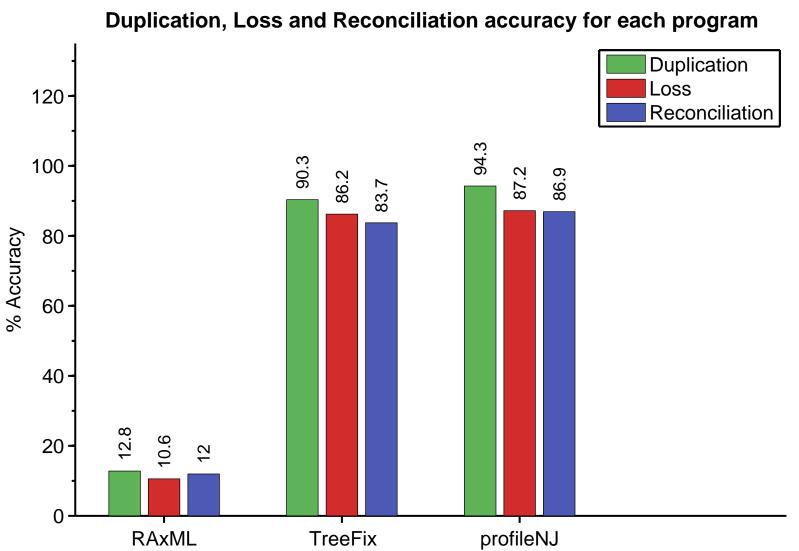
Accuracy of the inferred topology for gene trees of increasing size for simulated fungi dataset **RAxML** 120 -TreeFix profileNJ 100 -80 -60 -



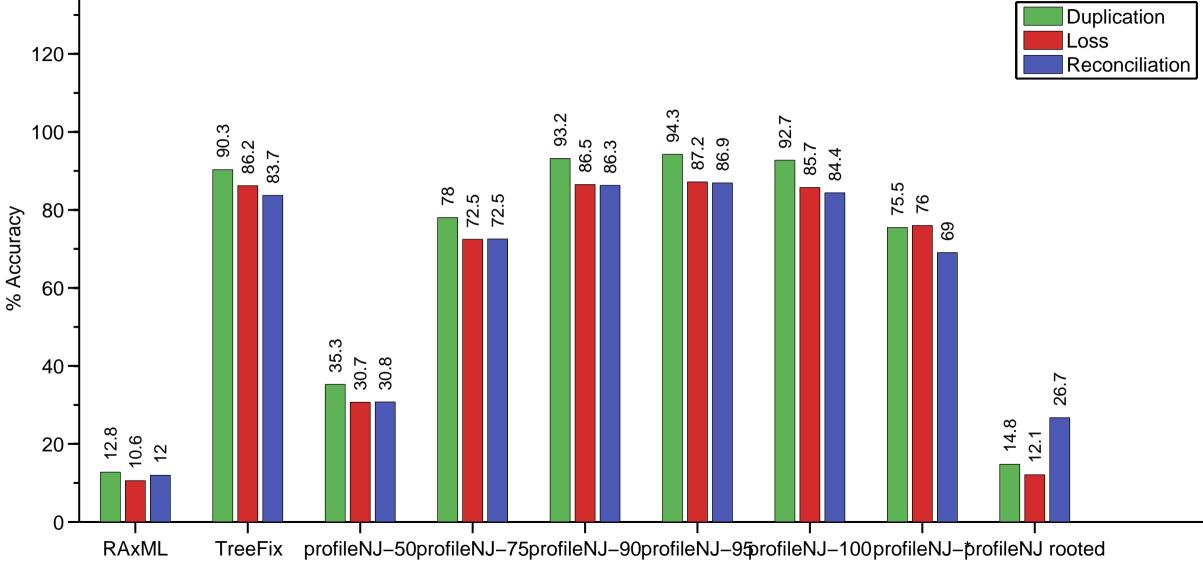


Comparision of AU test p-value between the true tree and tree returned by RAxML, profileNJ and TreeFix





Duplication, Loss and Reconciliation accuracy for each program Duplication Loss Reconciliation 93.2 92.7 90.3 86.2 85.7 75.5 76 72.5 35.3 30.7



RF comparision between TreeSolver, TreeFix and RAxML method profileNJ-50 75 profileNJ-75 profileNJ-90 profileNJ-95 profileNJ-100 profileNJ-* 50 profileNJ rooted % of trees 25 2 6 8 10 12 16 18 20 26 28 30 32 34 36 38 40 42 44 46 48 50 14 22 24 RF distance

