```
OGs_100043_T1_51_before
            Eudicots AKB 0007996
            Eudicots AKC 0010309
            Eudicots AKH 0030438
            Eudicots AKK 0009998
            Magnoliids AIC 0053999
            Magnoliids AAU 0002118
                -Chloranthales ABU 0006096
            Eudicots AGG 0022951
            -Eudicots AAS 0011817
           -Eudicots AKQ 0005621
           Monocots AAH 0027205
            Monocots AGD 0025584
            Magnoliids AEH 0021101
           Magnoliids AID 0012467
           Eudicots_AIN_0025628
            Eudicots AEG 0021110
            Ceratophyllales AIA 0002129
                       -basal angiosperms AKM 0039611
                -Eudicots AKI 0047158
                        -Magnoliids ABS 0009419
            Magnoliids ABX 0003074
            Magnoliids AIB 0013518
                                                     OGs 100043 T1 51 after
           -Eudicots_AZA_0015676
            Eudicots AKG 0029675
            Eudicots AKA 0013632
            basal angiosperms ADD 0011747
            basal angiosperms AEV 0015431
                       -Monocots ADO 0020276
                            Monocots AEB 0021526
                            Monocots AEY 0012885
                 Monocots_AHF_0027609
                 -Monocots AIS 0008163
   Monocots AFT 0016921
   Monocots AFD 0023713
    Monocots_AIR_0023257
               -Monocots ACX 0035462
                Monocots ABO 0017745
                Monocots AIT 0031674
                 Monocots AGW 0020764
                             -Monocots ABP 0008043
   Monocots AEO 0055524
   Monocots ACG 0019276
    -Monocots_AHE_0007847
   Monocots_AFA_0020117
                 -Monocots AGJ 0020860
1.60035
                                                     1.48837
```

Monocots AHF 0027609 Monocots AFD 0023713 Monocots\_AFT\_0016921 Monocots AIR 0023257 -Monocots ACX 0035462 Monocots ABQ 0017745 Monocots AIT 0031674 -Monocots AGW 0020764 Monocots\_AFA\_0020117 Monocots\_AEO\_0055524 Monocots\_ACG\_0019276 -Monocots AGJ 0020860 basal angiosperms AEV 0015431 Ceratophyllales AIA 0002129 Eudicots AKB 0007996 Eudicots\_AKC\_0010309 Eudicots\_AKH\_0030438 Eudicots\_AKK\_0009998 Magnoliids AIC 0053999 Magnoliids AAU 0002118

Monocots AEB 0021526

Monocots AEY 0012885