```
OGs_100094_T1_77_before
      Monocots_AGJ_0028853
      Monocots_AEO_0062426
      -Monocots_AHE_0014225
      Monocots_ACG_0029792
      -Monocots_AGW_0009472
      Monocots_ABP_0036888
     Monocots_AFA_0022784
      -Monocots_AEX_0012083
     Monocots_ACX_0023616
     Monocots_ACC_0047092
     Monocots_ABQ_0005196
                                                        OGs_100094_T1_77_after
      -Monocots_AIT_0048708
     Monocots_AIR_0000872
                                                                 -Outgroup AZB 0001328
                                                                 -Eudicots_ADL_0033717
     Monocots_AFT_0020491
     Monocots AIS 0023474
                                                                 Eudicots_AKH_0008458
     Monocots_AEB_0020421
                                                                        -Eudicots AKF 0008084
                                                                     -Eudicots_AKC_0007302
     Monocots_AEY_0020801
                                                                   Eudicots_AKB_0023119
     -Monocots_AHF_0002359
                                                                  -Eudicots_AKA_0031464
     Monocots_AAH_0019411
     Monocots_AGD_0019727
                                                                                -Eudicots_AAS_0009794
     Monocots_ADO_0025672
                                                                             -Eudicots_AKI_0034243
                                                                      -Eudicots AGG 0028832
     -Monocots_AFD_0018972
     Monocots_AGK_0028817
                                                                    Eudicots_AKG_0006744
    -Monocots_ADV_0005649
                                                                             —Eudicots_AKR_0021800
                                                                      -Eudicots_AKL_0008253
     Eudicots_AKD_0006512
                                                                        -Eudicots_AKQ_0018410
     Monocots_AKN_0022965
                                                                      -Eudicots_ADN_0020856
     Monocots_AKO_0023286
                                                                Eudicots_AHC_0024855
       -Monocots_AHH_0019938
                                                                    -Eudicots AKP 0007131
   -Monocots_AAB_0008890
    Monocots_ACT_0006677
                                                           Eudicots_AIO_0012463
                                                            -Eudicots_AIN_0031684
    Monocots_ACU_0005076
                                                            -Eudicots_AEG_0000183
   -Monocots_AAN_0021136
                                                                  -Eudicots_AAR_0006734
       -Monocots_AAV_0020686
         -Monocots_AHJ_0003386
                                                           -Eudicots_AZA_0019198
                                                             -basal angiosperms_AEV_0001769
                                -Monocots_AIH_0077496
                                                                         Monocots AKN 0022965
                           -Monocots_AAO_0008513
                                                                         Monocots AKO 0023286
  -basal angiosperms_AKM_0032624
                                                                                  -Monocots_AHH_0019938
 -basal angiosperms AEV 0001769
                        -basal angiosperms_ADD_0019162
                                                                            -Monocots_AGJ_0028853
                                                                            Monocots_AEO_0062426
  Monocots_AKE_0005875
                                                                             -Monocots_AHE_0014225
  Monocots_AAE_0010671
                                                                            <sup>L</sup>Monocots_ACG_0029792
   -Eudicots_AKK_0018365
                                                                          -Monocots_ABP_0036888
   Eudicots_AKH_0008458
  Eudicots_ADL_0033717
                                                                         <sup>L</sup>Monocots_AFA_0022784
    -Eudicots_AKF_0008084
                                                                         Monocots_ACC_0047092
  Eudicots_AKC_0007302
Eudicots_AKB_0023119
                                                                         Monocots_ACX_0023616
                                                                         -Monocots_ABQ_0005196
 Eudicots_AKA_0031464
                                                                             -Monocots_AIT_0048708
                                                                        -Monocots_AIR_0000872
     -Eudicots_AAS_0009794
      -Eudicots_AKI_0034243
                                                                        _Monocots_AFT_0020491
  Eudicots_AGG_0028832
                                                                        -Monocots_AIS_0023474
  LEudicots_AKG_0006744
                                                                           -Monocots_AEB_0020421
                                                                        Monocots_AEY_0020801
      -Eudicots_AKR_0021800
  Eudicots_AKL_0008253
                                                                        -Monocots_AHF_0002359
    -Eudicots_AKQ_0018410
                                                                         Monocots_AAH_0019411
  Eudicots_ADN_0020856
                                                                         Monocots_AGD_0019727
  -Eudicots_AHC_0024855
                                                                         Monocots ADO 0025672
                                                                         -Monocots AFD 0018972
   -Eudicots AKP 0007131
                                                                       -Monocots_AGK_0028817
-Eudicots_AIO_0012463
rEudicots_AIN_0031684
-Eudicots_AEG_0000183
                                                                       -Monocots_ADV_0005649
                                                                   Monocots_AAB_0008890
                                                                      Monocots_ACT_0006677
 -Eudicots_AAR_0006734
                                                                      <sup>L</sup>Monocots_ACU_0005076
-Eudicots_AZA_0019198
                                                                     Monocots_AAN_0021136
<sub>[</sub>Magnoliids_AID_0003006
^{
hl}Magnoliids_AEH_0005875
                                                                               -Monocots_AAV_0020686
  [Magnoliids_AIC_0042401
                                                                                        -Monocots_AHJ_0003386
  <sup>L</sup>Magnoliids_AAU_0010650
                                                            -Magnoliids_AID_0003006
                                                           LMagnoliids_AEH_0005875
            -Magnoliids_ABX_0018155
Magnoliids_AIB_0022196
Magnoliids_ABW_0002468
                                                                  rMagnoliids_AIC_0042401
                                                                    -Magnoliids AAU 0010650
                                                           Magnoliids_ABW_0002468
 -Magnoliids_ABS_0005489
                                                                -Magnoliids_AIB_0022196
 Chloranthales_ABV_0004064
Chloranthales_ABU_0004979
                                                               -Magnoliids_ABS_0005489
-Ceratophyllales_AIA_0025159
                                                             Chloranthales_ABV_0004064
Outgroup ADK 0022067
                                                             ^{ldash}Chloranthales_ABU_0004979
                                                         Ceratophyllales_AIA_0025159
 -Outgroup_AZB_0001328
                                                        0.246435
0.860085
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