```
OGs_100044_T1_83_before
                Monocots_AGJ_0026319
                Monocots_AEO_0028889
                 Monocots_ACG_0008641
                 -Monocots AHE 0024816
                -Monocots_AGW_0013258
               Monocots_ABP_0027091
               -Monocots_AFA_0028497
              -Monocots_ABQ_0030228
                                              OGs_100044_T1_83_after
              -Monocots_AIT_0026281
                                                                     Monocots_AGJ_0026319
               -Monocots_AEX_0004494
                                                                    Monocots_AEO_0028889
              -Monocots_ACX_0032065
                                                                     Monocots_ACG_0008641
              -Monocots_ACC_0042790
                                                                      Monocots_AHE_0024816
               -Monocots_AEB_0007570
                                                                   -Monocots_AGW_0013258
             __Monocots_AEY_0024787
                                                                   Monocots_ABP_0027091
               -Monocots_AHF_0024249
                                                                   -Monocots_AFA_0028497
              -Monocots AIS 0010259
                                                                  Monocots_ABQ_0030228
              Monocots_AFT_0009399
                                                                   Monocots_AIT_0026281
             \( \text{Monocots_AIR_0002879} \)
                                                                   Monocots AEX 0004494
                                                                 Monocots_ACX_0032065
               Monocots_AGD_0037610
                                                                  Monocots_ACC_0042790
                -Monocots_AAH_0035163
               Monocots_ADO_0011876
                                                                   -Monocots_AEB_0007570
             -Monocots_AFD_0028066
                                                                   -Monocots_AEY_0024787
            -Monocots_AGK_0029880
                                                                  -Monocots_AHF_0024249
          -Monocots_ADV_0006310
                                                                  -Monocots_AIS_0010259
                      Monocots_AKN_0008780
                                                                 -Monocots_AFT_0009399
                      Monocots_AKO_0006677
                                                                _Monocots_AIR_0002879
            Monocots_AAO_0000818
                                                                   Monocots_AGD_0037610
            Monocots_AAN_0020352
                                                                   -Monocots_AAH_0035163
                                                                  Monocots_ADO_0011876
     -Monocots_AFF_0027719
    -Monocots ABF 0005058
                                                                -Monocots_AFD_0028066
    -Monocots_AEQ_0033199
                                                               -Monocots_AGK_0029880
   Monocots_AIH_0004408
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          Monocots_ACP_0017741
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               -Monocots_ADJ_0008810
                                                               Monocots_AAO_0000818
         -Monocots_AIJ_0010897
                                                               Monocots_AAN_0020352
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                                                            -Monocots_ACP_0017741
             -Monocots_AAB_0000217
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     Monocots_AKE_0020729
                                                           -Monocots_AIJ_0010897
     -Monocots_AAE_0009004
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                    -Monocots_AHH_0003870
                                                                      -Monocots_AAI_0010244
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          -Magnoliids_AAU_0007565
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Ceratophyllales_AIA_0016429
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                                                     Monocots_AKE_0020729
         -Eudicots_AKA_0008716
                                                     LMonocots_AAE_0009004
                   -Eudicots_AAS_0013489
        -Eudicots_AKC_0026065
                                                -Ceratophyllales_AIA_0016429
        -Eudicots_AKB_0003140
                                                          -Eudicots_AKC_0026065
          -Eudicots_AKH_0021358
                                                         ∟Eudicots_AKB_0003140
          Eudicots_AKK_0026923
                                                         -Eudicots_AKA_0008716
             -Eudicots_AKF_0007595
                                                            -Eudicots AKH 0021358
      Eudicots_ADL_0013645
                                                            Eudicots_AKK_0026923
      -Eudicots_AKD_0009349
                                                                -Eudicots_AKF_0007595
        Eudicots_AHC_0025153
                                                       Eudicots_ADL_0013645
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                                                         -Eudicots_AHC_0025153
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      Eudicots_AKI_0018391
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        Eudicots_AKP_0006925
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     -Eudicots_ABE_0009636
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    -Eudicots_AIN_0004704
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          -Eudicots_AEG_0004325
    Eudicots AZA 0011518
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        Eudicots_ACY_0037036
                                                          Eudicots_ACY_0037036
     Magnoliids_ABX_0012185
                                                      Magnoliids_ABX_0012185
     Magnoliids_ABW_0011989
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  -Magnoliids_ABS_0028122
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  -Magnoliids_AEH_0023153
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      -Chloranthales_ABV_0016274
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       -basal angiosperms_ADD_0028557
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