```
•Lcom | lcpid183313 | OG0 |
                    •Tetwil g4927.t2 | OG0 |
                 •Plespi_Pspi_C591030_01 | OG0 |
   72
                  -Xestes_maker-XT_scaffold16448-snap-gene-0.17-mRNA-1 | OG0 |
     88
                    Aque Aqu2.1.34847 001 | OG0 |
                       •Halamb c378 g1 i1m.63 | OG0 |
       36
                     •Spolac c77458 g1 i1 m.1889c77458-g1 | OG0 |
                       Emue Em0018g508a.t1 | OG0 |
                 100
                    <sup>100</sup> Emue_Em0440g4a.t1 | OG0 |
                Xestes maker-XT scaffold64838-snap-gene-0.17-mRNA-1 | OG1 |
                    Xestes maker-XT scaffold188808-snap-gene-0.112-mRNA-1 | OG1 |
             100
                      -Xestes_augustus_masked-XT_scaffold27957-processed-gene-0.1-mRNA-1 | OG1 |
                100
14
                         -Xestes_augustus_masked-XT_scaffold2347-processed-gene-0.135-mRNA-1 | OG1 |
                     <sup>100</sup> Xestes_augustus_masked-XT_scaffold21605-processed-gene-0.1-mRNA-1 | OG1 |
                        Xestes augustus masked-XT scaffold90295-processed-gene-0.1-mRNA-1 | OG10 |
                      Xestes snap masked-XT scaffold174712-processed-gene-0.26-mRNA-1 | OG7 |
                        Stycar augustus masked-SC scaffold146926-processed-gene-0.27-mRNA-1 | OG7 |
      70
                     Xestes_augustus_masked-XT_scaffold165361-processed-gene-0.0-mRNA-1 | OG8 |
        39
               99
                      -Xestes_augustus_masked-XT_scaffold86424-processed-gene-0.0-mRNA-1 | OG8 |
                                 Codhol EP00042 Codosiga hollandica P012139 | OG8 |
                      Ctel gnl WGS AMQN CAPTEDRAFT mRNA143515 | OG8 |
  67
                     Helnan EP00037 Helgoeca nana P033434 | OG8 |
                        -Salkve_EP00050_Salpingoeca_kvevrii_P020418 | OG8 |
                98
                    <sup>100</sup>Ū-Salmac_EP00052_Salpingoeca_macrocollata_P031445 | OG8 |
                     Xestes augustus masked-XT scaffold34121-processed-gene-0.2-mRNA-1 | OG2 |
                       Xestes augustus masked-XT scaffold175867-processed-gene-0.2-mRNA-1 | OG2 |
              99
                        -Xestes augustus masked-XT scaffold81790-processed-gene-0.1-mRNA-1 | OG2 |
                      •Xestes augustus masked-XT scaffold75968-processed-gene-0.0-mRNA-1 | OG4 |
    79
                      -Xestes_augustus_masked-XT_scaffold46457-processed-gene-0.1-mRNA-1 | OG4 |
        76
                        -Xestes augustus masked-XT scaffold84106-processed-gene-0.1-mRNA-1 | OG4 |
              100
                    •Xestes augustus masked-XT scaffold21743-processed-gene-0.2-mRNA-1 | OG4 |
                  -Xestes_augustus_masked-XT_scaffold10925-processed-gene-0.3-mRNA-1 | OG11 |
                      ·Stycar_snap_masked-SC_scaffold76855-processed-gene-0.2-mRNA-1 | OG9 |
                           •Xestes_augustus_masked-XT_scaffold38387-processed-gene-0.1-mRNA-1 | OG9 |
          82
                            •Spis XP 022803908 1 | OG9 |
                                  Clacor Ccor scaffold11550 01 | OG9 |
                           •Lcom | lcpid97257 | OG9 |
                  100
                                 •Gracom_Gcom_C539774_01 | OG9 |
                       100
                                    Scil_scict008762.1 | OG9 |
                          100
                                   Leuniv Lniv scaffold10464 01 | OG9 |
                                      Leuniv Lniv scaffold10462 01 | OG9 |
                                  <sup>100</sup>Ū-Leuniv Lniv scaffold10463 01 | OG9 |
             •Lcom lcpid236925 | OG12 |
                  •Lcom_lcpid206760 | OG13 |
                      Didcos EP00039 Didymoeca costata P028409 | OG5 |
            93
                        •Lcom | lcpid185111 | OG5 |
                    Stedip EP00041 Stephanoeca diplocostata P006483 | OG5 |
        80
                       Acaspe_EP00035_Acanthoeca_spectabilis_P020033 | OG5 |
          98
                      Helnan_EP00037_Helgoeca_nana_P032028 | OG5 |
                      Salinf EP00049 Salpingoeca infusionum P000677 | OG6 |
                         Salpun EP00053 Salpingoeca punica P016195 | OG6 |
                  96
                            Salmac EP00052 Salpingoeca macrocollata P030875 | OG6 |
          58
      63
               87
                             •Mylflu_EP00047_Mylnosiga_fluctuans_P002075 | OG6 |
                  88
                                •Codhol_EP00042_Codosiga_hollandica_P013270 | OG6 |
                         Salkve EP00050 Salpingoeca kvevrii P006285 | OG6 |
                             Saldol EP00054 Salpingoeca dolichothecata P037326 | OG6 |
                               •Mbre EDQ86198 | OG6 |
                               •Chofle_EP00730_Choanoeca_flexa_P000271 | OG6 |
        68
                              •Choper_EP00045_Choanoeca_perplexa_P012178 | OG6 |
                      Microa EP00043 Microstomoeca roanoka P012921 | OG6 |
               100
                       Sros EGD74034 | OG6 |
                             Lcom | lcpid193555 | OG6 |
                        ·Salurc_EP00051_Salpingoeca_urceolata_P027173 | OG6 |
                           •Hvul_g24016_1 | OG6 |
          53
                 82
                           •Chem TCONS 00061290 | OG6 |
    70
              80
                        Coemet Cmet scaffold3339 01 | OG6 |
                     1001 Coemet Cmet scaffold3340 01 | OG6 |
                            Diagra EP00040 Diaphanoeca grandis P002144 | OG6 |
                          •Vmul_sbMO439767 | OG6 |
               86
                            •Horcal Hcv1.av93.c1.g1201.i1 | OG6 |
                  98
                               Pbac sb2667470 | OG6 |
                                 •Pbac sb2661732 | OG6 |
                      100
                                   •Mlei ML3008.g1.i1 | OG6 |
                                 -Lampan_Lpan_C402433_01 | OG6 |
                                     Eupdun Edun sb10641739 | OG6 |
                   Opea EP00118 Oscarella pearsei P004617 | OG3 |
                   •Bralan_BLAG07001207_2 | OG3 |
                      •Dgig_XM_028536643.1 | OG3 |
      73
              94
                        •Xesp_005611-T1 | OG3 |
                           •Morvir scaffold77.g26.t1 | OG3 |
        66
                            Sanmal Sma 025310-T1 | OG3 |
                                    •Aaur scaffold402.g13.t2 | OG3 |
                  83
                             •Nemnom_g17355.t1 | OG3 |
                            -Rhoesc_Res_011024-T1 | OG3 |
              54
          60
                                Lcom | lcpid179139 | OG3 |
                            TrH2 TrispH2 005646-RA | OG3 |
                         100 - Tadh TriadT37084 | OG3 |
                69
                               -HoiH23_PIH23_004479-RA | OG3 |
                      100
                            <sup>100</sup> HoiH06_mRNA3121 | OG3 |
                               Hhon g06061.t1 | OG3 |
            60
                            100 HoiH04 mRNA5569 | OG3 |
                          •Spur_XM_776897.4 | OG3 |
                                  •Gfas_gfas1.m1.21263.m1 | OG3 |
                              •Amil_Amillepora10590-RA | OG3 |
                      100
                               •Adig XM 015921617.1 | OG3 |
              53
                    100
                              -Spis XP 022804886 1 | OG3 |
                          <sup>100</sup> Pocdam XM_027181392.1 | OG3 |
                              Gasp_gasp1.m3.15111.m1 | OG3 |
                              Fspp_ffun1.m4.3353.m1 | OG3 |
                90
                              •Exapal XM 021042186.2 | OG3 |
                     97
                            •Nvec v1g81576 | OG3 |
                             Hsap ENST00000315467 | OG3 |
                  71
                                 -Hsap_ENST00000564536 | OG3 |
                          100
                             <sup>100</sup> Hsap_ENST00000640345 | OG3 |
                    97
                                Ctel gnl WGS AMQN CAPTEDRAFT mRNA150527 | OG3 |
                                        -Acagra model.g30820.t1 | OG3 |
                      97
                             99
                                        •Cgig XM 011443815.3 | OG3 |
                         90
                                Cscu_XM_023375093.1 | OG3 |
                                      •Dpul mRNA17005 | OG3 |
                                        •Tcas_TC010478_001 | OG3 |
```