```
Xestes augustus masked-XT scaffold72960-processed-gene-0.0-mRNA-1 | OG3 |
                  Xestes maker-XT scaffold2655-snap-gene-0.390-mRNA-1 | OG3 |
                 -Xestes snap masked-XT scaffold23811-processed-gene-0.1-mRNA-1 | OG3 |
                               Xestes_augustus_masked-XT_scaffold67885-processed-gene-0.0-mRNA-1 | OG4 |
   83
                  100
                                        -Xestes_augustus_masked-XT_scaffold40748-processed-gene-0.0-mRNA-1 | OG4 |
                                                   Aaur scaffold683.g37.t1 | OG5 |
        95
                       100
                                                        -Xestes_augustus_masked-XT_scaffold165020-processed-gene-0.0-mRNA-1 | OG5 |
              95
                                         •Ctel_gnl_WGS_AMQN_CAPTEDRAFT_mRNA142168 | OG6 |
                                     •Aaur_scaffold683.g40.t1 | OG6 |
                     -Xestes_augustus_masked-XT_scaffold161381-processed-gene-0.2-mRNA-1 | OG0 |
               <sup>100</sup>,Xestes_augustus_masked-XT_scaffold179854-processed-gene-0.0-mRNA-1 | OG0 |
     75
                        •Morvir_scaffold121.g49.t1 | OG0 |
         94
                        -Spis_Spis_22601_1 | OG0 |
                       •Diagra_EP00040_Diaphanoeca_grandis_P002341 | OG0 |
                     Stedip_EP00041_Stephanoeca_diplocostata P032047 | OG0 |
        100
                     -Acaspe EP00035 Acanthoeca spectabilis P024622 | OG0 |
                    -Helnan_EP00037_Helgoeca_nana_P009949 | OG0 |
                    Saldol_EP00054_Salpingoeca_dolichothecata_P004347 | OG0 |
                        •Codhol_EP00042_Codosiga_hollandica_P038424 | OG0 |
      74
          46
                            Didcos EP00039 Didymoeca costata P033488 | OG0 |
             40
                                        Tadh TriadT34857 | OG0 |
                          Salurc_EP00051_Salpingoeca_urceolata_P001632 | OG0 |
              100
                        Salkve_EP00050_Salpingoeca_kvevrii_P017674 | OG0 |
                       Mbre_EDQ87712 | OG0 |
                       Chofle_EP00730_Choanoeca_flexa_P010256 | OG0 |
                       •Choper EP00045 Choanoeca perplexa P014878 | OG0 |
                         •Salmac_EP00052_Salpingoeca_macrocollata_P015775 | OG0 |
                        •Mylflu_EP00047_Mylnosiga_fluctuans_P010271 | OG0 |
                         -Salinf_EP00049_Salpingoeca_infusionum_P015239 | OG0 |
                          •Microa EP00043_Microstomoeca_roanoka_P027610 | OG0 |
               100
                       •Sros EGD73808 | OG0
                       •Tadh_TriadT63032 | OG1 |
   88
                 Spis_XP_022778800_1 | OG1 |
              <sup>1001</sup>Spis_Spis_25557_1 | OG1 |
                •Choper_EP00045_Choanoeca_perplexa_P022184 | OG2 |
      76
                •Salpun_EP00053_Salpingoeca_punica_P014057 | OG2 |
                     •Lcom_lcpid165354 | OG2 |
                     •Clacor Ccor scaffold15410 01 | OG2 |
   73
                     •Scil_scict022374.1 | OG2 |
           100
                       •Gracom_Gcom_C555288_01 | OG2 |
               100
     82
                         •Lcom_lcpid75524 | OG2 |
                          •Leuniv_Lniv_C813366_01 | OG2 |
                       Xestes_augustus_masked-XT_scaffold116033-processed-gene-0.1-mRNA-1 | OG2 |
                          •Codhol_EP00042_Codosiga_hollandica_P029254 | OG2 |
                        TrH2 TrispH2 009769-RA | OG2 |
                     <sup>100</sup> Tadh_TriadT61292 | OG2 |
             54
                           <sub>f</sub>Hhon_g07252.t1 | OG2 |
                   100
                        <sup>100</sup> HoiH04_mRNA11630 | OG2 |
         63
                          -HoiH11_mRNA8210 | OG2 |
                            _*HoiH23_PIH23_011252-RA | OG2 |
                          <sup>97</sup> HoiH06_mRNA13830 | OG2 |
                     •Plajan_Pjan_C561824_01 | OG2 |
                           •Bralan_BLAG04000929_1 | OG2 |
           46
                            •Hsap_ENST00000366560 | OG2 |
                               ·Cscu_XM_023381672.1 | OG2 |
                      94
                                  •Tcas_TC013056_001 | OG2 |
                                •Dpul_mRNA2386 | OG2 |
                  63
                             Skow_XM_002740726.2 | OG2 |
                             •Acagra_model.g15840.t1_model.g15842.t1 | OG2 |
                             Skow_XM_006824530.1 | OG2 |
                                 •Cgig XM 034470355.1 | OG2 |
                                 Spur XM 030999768.1 | OG2 |
                                     •Ctel_gnl_WGS_AMQN_CAPTEDRAFT_mRNA172326 | OG2 |
                                 •Hvul_g32698_1 | OG2 |
                                  •Hvul_g32693_1 | OG2 |
                               Chem TCONS 00001576 | OG2 |
                               •Morvir_scaffold50.g70.t1 | OG2 |
                        67
                                   •Aaur_scaffold781.g3.t1 | OG2 |
                          63
               55
                                    Nemnom_g9035.t1 | OG2 |
                                 <sup>96</sup> Rhoesc_Res_002073-T1 | OG2 |
                    67
                                   Sanmal Sma 027242-T1 | OG2 |
                                                                       •Rhoesc_Res_002088-T1 | OG2 |
                             •Dgig_XM_028553957.1 | OG2 |
                        100 Xesp_012405-T1 | OG2 |
                                 •Exapal_XM_021050525.2 | OG2 |
                                 Nvec_v1g237597 | OG2 |
                           100
                                    •Nvec_v1g75756 | OG2 |
                                     -Nvec_NVE23094 | OG2 |
                        100
                              -Pocdam_XM_027182969.1 | OG2 |
                                   -Gasp_gasp1.m3.15809.m1 | OG2 |
                                <sup>45</sup>□-Fspp_ffun1.m4.14165.m1 | OG2 |
                                   •Gfas_gfas1.m1.7899.m1 | OG2 |
                                     Adig_XM_015902857.1 | OG2 |
                                        Amil_Amillepora16742-RA | OG2 |
                                     <sup>100</sup>Amil Amillepora16729-RA | OG2 |
                              •Plespi Pspi scaffold10249 01 | OG2 |
                               -Emue_Em0019g199a.t1 | OG2 |
                                -Spolac_c100759_g1_i1_m.23449c100759-g1 | OG2 |
                                Stycar_maker-SC_scaffold104286-snap-gene-0.19-mRNA-1 | OG2 |
                        100
                                   •Tetwil g21614.t1 | OG2 |
                           99
                                     Xestes maker-XT scaffold5936-augustus-gene-0.36-mRNA-1 | OG2 |
                                        •Aque Aqu2.1.38794 001 | OG2 |
                      55
                                  <sup>100</sup>Ū-Halamb_c52736_g1_i1m.33830 | OG2 |
                                  Opea_EP00118_Oscarella_pearsei_P002419 | OG2 |
                                     Eupdun Edun sb10643319 | OG2 |
                                   Eupdun Edun sb10696873 | OG2 |
                        61
                                  Bolinf Binf sb1270093 | OG2 |
                               <sup>100</sup> Mertsp_Mesp_sb589804 | OG2 |
                           93
                                       Lampan Lpan 14219 01 | OG2 |
                                                               •Coemet_Cmet_scaffold20692_01 | OG2 |
                                           Vmul sbMO452552 | OG2 |
                             67
                                        100
                                               •Vmul_sbMO452553 | OG2 |
                                          Coemet Cmet scaffold20691 01 | OG2 |
                                             Coeast_Cast_sb797165 | OG2 |
                                          1001-Coeast_Cast_sb797166 | OG2 |
                                       "Horcal Hcv1.av93.c8.g314.i1 | OG2 |
                                           •Pbac_sb2662200 | OG2 |
                                    100
                                         <sup>88</sup><sup>1</sup> -Pbac sb2637739 | OG2 |
                                           Pbac sb2637657 | OG2 |
                                         90 Pbac sb2637894 | OG2 |
                                      -•Mlei_ML1254.g1.i1 | OG2 |
                                         Beraby Baby sb325741 | OG2 |
                                             Drygla Dgla sb293056 | OG2 |
                                          <sup>100</sup> -Drygla_Dgla_sb293057 | OG2 |
                                           Mertsp_Mesp_sb555409 | OG2 |
                                             Bolinf_Binf_sb1274924 | OG2 |
                                            <sup>75</sup> Bolinf Binf sb1274925 | OG2 |
0.416667
```

0.4166