The Genome Sequences of 118 Taxonomically Diverse Eukaryotes of the Salish Sea

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Biodiversity Genomes

We present the complete genome sequences of 118 taxonomically diverse eukaryotes from the Salish Sea. Illumina sequencing was performed on genetic material from wild-collected individuals. The reads were assembled using a *de novo* method followed by a finishing step. The raw and assembled data are publicly available via Genbank.

Methods

DNA extraction was performed using the Qiagen DNAeasy genomic extraction kit using the standard protocol. A paired-end sequencing library was constructed using the Illumina TruSeq kit according to the manufacturer's instructions. The library was sequenced on an Illumina Hi-Seq platform in paired-end, 2 × 150 bp format. The resulting fastq files were trimmed of adapter/primer sequence and low-quality regions with Trimmomatic v0.33 (Bolger, Lohse, and Usadel 2014). The trimmed sequence was assembled by SPAdes v2.5 (Bankevich et al. 2012) followed by a finishing step using Zanfona (Kieras, O'Neill, and Pirro 2021).

Results and Data Availability

All genomes are available via Genbank:

Aegina citrea	JAUKWD000000000
Aequorea victoria	JAUTBS000000000
Aglantha digitale	JAUELD000000000
Alaria marginata	JBBMKB000000000
Americanaplana fernaldi	JAYRCC000000000
Archaeomysis grebnitzkii	JARUHE000000000
Ariolimax columbianus	JAUELV000000000
Arion rufus	JAUUEA000000000
Armandia brevis	JAXGGS000000000
Axiothella rubrocincta	JAULKN000000000
Balanus glandula	JARBER000000000
Balanus nubilus	JARFNZ000000000
Blastophysa rhizopus	JAUKWA000000000
Boltenia villosa	JAUELA000000000
Bonnemaisonia californica	JAUBNZ000000000
Bougainvillia muscus	JAUCNQ000000000
Calliostoma canaliculatum	JAULCD000000000

Callophyllis flabellulata	JAUJPK000000000
Catablema vesicarium	JAUELI000000000
Chlamys rubida	JAUMHH000000000
Chlorellidium tetrabotrys	JAUKPS000000000
Chlorocystis dangeardii	JAULKI000000000
Chondracanthus exasperatus	JAULBT000000000
Chrysaora fuscescens	JAACYV000000000
Clinocardium nuttalli	JAUELF000000000
Clione limacina	JAUUEB000000000
Coelogynopora nodosa	JAUZND000000000
Costaria costata	JAYJME000000000
Crassadoma gigantea	JAULCA000000000
Crossaster papposus	JAUELB000000000
Cryptochiton stelleri	JAUELC000000000
Cumathamnion decipiens	JAUKWE000000000
Cymathaere triplicata	JAXGGQ000000000
Dendraster excentricus	JAUELG000000000
Dendronotus rufus	JAULCB000000000
Devaleraea mollis	JAULCF000000000
Diodora aspera	JAUELE000000000
Dirona albolineata	JARFNW000000000
Dirona pellucida	JARDUL000000000
Dryodora glandiformis	JAUELJ000000000
Egregia menziesii	JAXCLT000000000
Endocladia muricata	JAUKWC000000000
Eupentacta quinquesemita	JAUOBX000000000
Euphysa ruthae	JAUZNK000000000
Eutonina indicans	JAUKWF000000000
Evasterias troscheli	JAUELU000000000
Gastropteron pacificum	JAUELK000000000
Hermissenda crassicornis	JAUELH000000000
Internoretia fryeana	JAYMFV000000000
Invenusta paracnida	JAYRBW000000000
Katharina tunicata	JAVFBZ000000000
Laminaria ephemera	JAYJMJ000000000
Laminaria setchellii	JBBMHP000000000
Laminaria sinclairii	JAYJMD000000000
Lepidozona retiporosa	JAUOBW000000000
Macoma nasuta	JAULCE000000000
Macrochaeta pege	JAZDWB000000000
Mastocarpus papillatus	JAUKWB000000000
Mediaster aequalis	JAULKO000000000
Melibe leonina	JAUEKZ000000000
Mesocentrotus franciscanus	JARFNY000000000
Metridium farcimen	JAUPMH000000000
Microcladia borealis	JAVCKV000000000
Minona dolichovesicula	JAYJLU000000000
Mitrocomella polydiademata	JAYRBV000000000
Monocelis spectator	JAYMFX000000000
Mopalia muscosa	JARFOD000000000
Mopalia swanii	JARDVA000000000
Mopalia vespertina	JAQQZZ000000000

Nanomia bijuga	JAUKPT000000000
Nematoplana nigrocapitula	JAUYWV000000000
Neoagarum fimbriatum	JAYJMC000000000
Neoturris breviconis	JAULBZ000000000
Nereis procera	JAUOBU000000000
Nuttallia obscurata	JAULCC000000000
Odonthalia washingtoniensis	JAULBU000000000
Onykia robusta	JBAKGL000000000
Ophiopholis aculeata	JAUMTS000000000
Opuntiella californica	JAUZSR000000000
Pagurus beringanus	JARFOF000000000
Pagurus granosimanus	JARFYG000000000
Pagurus hirsutiusculus	JASNJQ000000000
Parotoplana pacifica	JAUYWI000000000
Phacellophora camtschatica	JAYJMH000000000
Phaeophila floridearum	JAYMFU000000000
Pharyngocirrus eroticus	JAVSBT000000000
Phascolosoma agassizii	JAVJHY000000000
Phronima sedentaria	JBAGKJ000000000
Phyllaplysia taylori	JAUKPP000000000
Pododesmus macrochisma	JAUMGZ000000000
Prasiola linearis	JAULKR000000000
Psolus chitonoides	JAODUJ000000000
Pteraster tesselatus	JAVCKS000000000
Pterothamnion heteromorphum	JAULBV000000000
Pterygophora californica	JAUKPR000000000
Rhodymenia pacifica	JAUJPL000000000
Saccharina sessilis	JAVRMO000000000
Sarcodiotheca gaudichaudii	JAUKVZ000000000
Sarsia tubulosa	JAYJMI000000000
Saxidomus gigantea	JAUMHA000000000
Semibalanus cariosus	JARFNR000000000
Smithsoniella earleae	JAULKQ000000000
Stomotoca atra	JAYJMG000000000
Stomphia didemon	JAUPMF000000000
Strongylocentrotus droebachiensis	JARFOA000000000
Strongylocentrotus pallidus	JARBES000000000
Tiaropsis multicirrata	JAUJPO000000000
Tonicella lineata	JAVFBY000000000
Tritonia festiva	JARBEP000000000
Tritonia tetraquetra	JARBEQ000000000
Tubulanus ruber	JAYJLZ000000000
Ulothrix subflaccida	JAULKP000000000
Ulva armoricana	JAUMHO000000000
Ulvella scutata	JAUMHD000000000
Urosalpinx cinerea	JAVDPJ000000000
Urticina crassicornis	JAUUIK000000000
Vannuccia rotundouncinata	JAUZNC000000000
Vaucheria bursata	JAULBW000000000

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