**a**

| Subkingdom | Clade1 | Clade2 | Clade3 | Clade4 | Clade5 | Clade6 | Phylum | Class | Order | Family | Genus | Species | AphiaID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eumetazoa | Bilateria | Protostor | Lophotroc | NN | NN | Annelida | Annelida | Polychae | [unassigr | Arenicolic | Abarenic | Abarenicola pacifica | 326192 |
| Eumetazoa | Bilateria | Deustero | Ambulacr | Ambulacr | Ambulacr | Ambulacr | Echinode | Echinoide | Spatangc | Schizaste | Abatus | Abatus cordatus | 160763 |
| Eumetazoa | Bilateria | Protostor | Lophotroc | Tetraneu | Tetraneu | Tetraneu | Mollusca | Cephalop | Octopodc | Octopodi | Abdopus | Abdopus aculeatus | 409949 |
| Eumetazoa | Bilateria | Protostor | Ecdysozc | Ecdysozc | Ecdysozc | Ecdysozc | Arthropoc | Malacostr | Amphipoc | Melitidae | Abludom | Abludomelita obtusata | 102788 |
| Eumetazoa | Bilateria | Protostor | Lophotroc | Tetraneu | Tetraneu | Tetraneu | Mollusca | Bivalvia | Cardiida | Semelida | Abra | Abra alba | 141433 |
| Eumetazoa | Bilateria | Protostor | Lophotroc | Tetraneu | Tetraneu | Tetraneu | Mollusca | Bivalvia | Cardiida | Semelida | Abra | Abra nitida | 141435 |
| Eumetazoa | Bilateria | Protostor | Lophotroc | Tetraneu | Tetraneu | Tetraneu | Mollusca | Bivalvia | Cardiida | Semelida | Abra | Abra prismatica | 141436 |
| Eumetazoa | Bilateria | Protostor | Lophotroc | Tetraneu | Tetraneu | Tetraneu | Mollusca | Bivalvia | Cardiida | Semelida | Abra | Abra segmentum | 141438 |
| Eumetazoa | | | | | | | | Bivalvia | Cardiida | Semelida | Abra | Abra tenuis | |
| Eumetazoa | | | | | | | | Asteroide | Valvatida | Acanthas | Acanthas | Acanthaster p | |
| Eumetazoa | | | | | | | | Bivalvia | Cardiida | Cardiidae | Acanthoc | Acanthocardia | |
| Eumetazoa | | | | | | | | Bivalvia | Cardiida | Cardiidae | Acanthoc | Acanthocardia | |
| Eumetazoa | | | | | | | | Gastropo | Doridida | Acanthod | Acanthod | Acanthodoris | |
| Eumetazoa | | | | | | | | Malacostr | Amphipoc | Haustorii | Acanthoh | Acanthohaust | |
| Eumetazoa | | | | | | | | Malacostr | Mysida | Mysidae | Acanthon | Acanthomysis | |

**b**

| Species | Trait ID | Modality ID | Score | Reference ID |
|---|---|---|---|---|
| Abarenicola pacifica | 1 | 1 | 0 | 3291 |
| Abarenicola pacifica | 1 | 2 | 2 | 3291 |
| Abarenicola pacifica | 1 | 3 | 0 | 3291 |
| Abarenicola pacifica | 1 | 4 | 0 | 3291 |
| Abarenicola pacifica | 1 | 5 | 0 | 3291 |
| Abarenicola pacifica | 2 | 1 | 0 | 3291 |
| Abarenicola pacifica | 2 | 2 | 0 | 3291 |
| Abarenicola pacifica | 2 | 3 | 1 | 3291 |
| Abarenicola pacifica | 2 | 4 | 1 | 3291 |
| Abarenicola pacifica | 2 | 5 | 0 | 3291 |
| Abarenicola pacifica | 3 | 1 | 0 | 3291 |
| Abarenicola pacifica | 3 | 2 | 0 | 3291 |
| Abarenicola pacifica | 3 | 3 | 1 | 3291 |
| Abarenicola pacifica | 3 | 4 | 0 | 3291 |
| Abarenicola pacifica | 3 | 5 | 0 | 3291 |
| Abarenicola pacifica | 3 | 6 | 0 | 3291 |
| Abarenicola pacifica | 3 | 7 | 0 | 3291 |
| Abarenicola pacifica | 4 | 1 | 0 | 3291 |
| Abarenicola pacifica | 4 | 2 | 0 | 3291 |
| Abarenicola pacifica | 4 | 3 | 0 | 3291 |
| Abarenicola pacifica | 4 | 4 | 0 | 3291 |
| Abarenicola pacifica | 4 | 5 | 1 | 3291 |
| Abarenicola pacifica | 5 | 1 | 0 | 3291 |
| Abarenicola pacifica | 5 | 2 | 1 | 3291 |
| Abarenicola pacifica | 5 | 3 | 0 | 3291 |
| Abarenicola pacifica | 5 | 4 | 0 | 3291 |
| Abarenicola pacifica | 5 | 5 | 0 | 3291 |

**c**

| Species | Trait ID | Modality ID | Trait |
|---|---|---|---|
| Abarenicola pacifica | 1 | 1 | Biome |
| Abarenicola pacifica | 1 | 2 | Biome |
| Abarenicola pacifica | 1 | 3 | Biome |
| Abarenicola pacifica | 1 | 4 | Biome |
| Abarenicola pacifica | 1 | 5 | Biome |
| Abarenicola pacifica | 2 | 1 | Salinity |
| Abarenicola pacifica | 2 | 2 | Salinity |
| Abarenicola pacifica | 2 | 3 | Salinity |
| Abarenicola pacifica | 2 | 4 | Salinity |
| Abarenicola pacifica | 2 | 5 | Salinity |
| Abarenicola pacifica | 3 | 1 | Water depth |
| Abarenicola pacifica | 3 | 2 | Water depth |
| Abarenicola pacifica | 3 | 3 | Water depth |
| Abarenicola pacifica | 3 | 4 | Water depth |
| Abarenicola pacifica | 3 | 5 | Water depth |
| Abarenicola pacifica | 3 | 6 | Water depth |
| Abarenicola pacifica | 3 | 7 | Water depth |
| Abarenicola pacifica | 4 | 1 | Sea floor affinity |
| Abarenicola pacifica | 4 | 2 | Sea floor affinity |
| Abarenicola pacifica | 4 | 3 | Sea floor affinity |

**d**

| Species | Province | Reference ID |
|---|---|---|
| Abarenicola pacifica | 8 | 3291 |
| Abarenicola pacifica | 10 | 3291 |
| Abatus cordatus | 59 | 4561 |
| Abdopus aculeatus | 9 | 3513 |
| Abdopus aculeatus | 25 | 3513 |
| Abdopus aculeatus | 26 | 3513 |
| Abdopus aculeatus | 28 | 3513 |
| Abdopus aculeatus | 30 | 3513 |
| Abdopus aculeatus | 31 | 3513 |
| Abdopus aculeatus | 32 | 3513 |
| Abdopus aculeatus | 33 | 3513 |
| Abludomelita obtusata | 2 | 4659 |
| Abludomelita obtusata | 3 | 4659 |
| Abludomelita obtusata | 4 | 4659 |
| Abludomelita obtusata | 16 | 4659 |
| Abra alba | 2 | 1825 |
| Abra alba | 3 | 1825 |
| Abra alba | 4 | 1825 |
| Abra alba | 7 | 1825 |
| Abra alba | 16 | 1825 |
| Abra nitida | 2 | 1825 |
| Abra nitida | 3 | 1825 |
| Abra nitida | 4 | 1825 |
| Abra prismatica | 2 | 1825 |
| Abra prismatica | 3 | 1825 |
| Abra prismatica | 4 | 1825 |

**e**

| Realm | Biome | Province | Longitude | Latitude |
|---|---|---|---|---|
| Arctic | Polar | 1 | -83.608 | 70.543 |
| Temperate Northern Atlantic | Temperate | 2 | 7.235 | 60.120 |
| Temperate Northern Atlantic | Temperate | 3 | -10.980 | 34.527 |
| Temperate Northern Atlantic | Temperate | 4 | 16.528 | 36.467 |
| Temperate Northern Atlantic | Temperate | 5 | -66.123 | 44.764 |
| te Northern Atlantic | Temperate | 6 | -88.277 | 30.166 |
| te Northern Atlantic | Temperate | 7 | 35.180 | 43.948 |
| te Northern Pacific | Temperate | 8 | 145.073 | 50.710 |
| te Northern Pacific | Temperate | 9 | 127.414 | 30.612 |
| te Northern Pacific | Temperate | 10 | -142.393 | 52.475 |
| te Northern Pacific | Temperate | 11 | -112.780 | 28.093 |
| Atlantic | Tropical | 12 | -77.025 | 17.772 |
| Atlantic | Tropical | 13 | -52.128 | 2.059 |
| Atlantic | Tropical | 14 | -35.452 | -11.344 |
| Atlantic | Tropical | 15 | -5.716 | -15.997 |
| Atlantic | Tropical | 16 | -20.372 | 16.248 |
| Atlantic | Tropical | 17 | 2.341 | 1.230 |
| Indo-Pacific | Tropical | 18 | 41.399 | 18.117 |
| Indo-Pacific | Tropical | 19 | 54.896 | 24.073 |
| Indo-Pacific | Tropical | 20 | 47.213 | -14.723 |
| Indo-Pacific | Tropical | 21 | 74.372 | 16.370 |
| Indo-Pacific | Tropical | 22 | 72.442 | 1.199 |
| Indo-Pacific | Tropical | 23 | 88.846 | 18.847 |
| Indo-Pacific | Tropical | 24 | 95.567 | 5.718 |
| ndo-Pacific | Tropical | 25 | 111.165 | 18.624 |
| ndo-Pacific | Tropical | 26 | 106.498 | 4.080 |
| ndo-Pacific | Tropical | 27 | 106.727 | -9.121 |
| ndo-Pacific | Tropical | 28 | 127.549 | 23.645 |
| ndo-Pacific | Tropical | 29 | 146.099 | 12.129 |
| ndo-Pacific | Tropical | 30 | 124.591 | 1.142 |
| ndo-Pacific | Tropical | 31 | 153.281 | -6.559 |
| ndo-Pacific | Tropical | 32 | 135.034 | -12.867 |

**f**

| Reference ID | Reference type | Reference |
|---|---|---|
| 1 | Article | Aarset AV, Aunaas T (1987) Osmotic responses to hyposmotic stress in the amphipods Gammarus wilkitzkii, Onisimus glacialis and Parathemisto libellula from Arctic waters. Polar Biology 7:189–193 |
| 2 | Article | Abada-Boudjema Y, Dauvin J (1995) Recruitment and life span of two natural mussel populations Perna perna (Linnaeus) and Mytilus galloprovincialis (Lamarck) from the Algerian coast. Journal of Molluscan Studies 61:467–48 |
| 3 | Article | Aban SM, Argente FAT, Raguindin RS, Garcia AC, Ibarra CE, De Vera RB (2017) Length-Weight Relationships of the Asian Green Mussel, Perna viridis (Linnaeus 1758) (Bivalvia: Mytilidae) Population in Bolinao Bay, Pangasina |
| 4 | Article | Abarca A, Oliva D, Gutiérrez R, Celis A, Durán LR (2012) Grown-out of seeds of the taquilla clam Mulinia edulis (King & Broderip, 1832) in the subtidal zone in northern Chile and in the intertidal zone in southern Chile. Latin Ame |
| 5 | Article | Abbiati M, Santangelo G, Novelli S (1993) Genetic variation within and between two Tyrrhenian populations of the Mediterranean alcyonarian Corallium rubrum. Marine Ecology Progress Series 95:245–250 |
| 6 | Article | Abbott RT (1954) The habits and occurrence of the nudibranch, Armina tigrina, in southeast United States. The Nautilus 67:83–86 |
| 7 | Article | Abbott RT (1958) The gastropod genus Assiminea in the Philippines. Proceedings of the Academy of Natural Sciences of Philadelphia 110:213–278 |
| 8 | Article | Abbott RT (1960) The genus Strombus in the Indo-Pacific. Indo-Pacific Mollusca 1:33–146 |
| 9 | Article | Abele LG, Campanella PJ, Salmon M (1986) Natural history and social organization of the semiterrestrial grapsid crab Pachygrapsus tramversus (Gibbes). Journal of Experimental Marine Biology and Ecology 104:153–170 |
| 10 | Article | Abelló P (1989) Feeding habits of Macropipus tuberculatus (Brachyura, Portunidae) off the Catalan coast (NW Mediterranean). Miscellaneous publications 13:45–50 |
| 11 | Article | Abelló P (1989) Reproduction and moulting in Liocarcinus depurator (Linnaeus, 1758) (Brachyura: Portunidae) in the Northwestern Mediterranean sea. Scientia Marina 53:127–134 |
| 12 | Article | Abelló P (1989) Reproductive biology of Macropipus tuberculatus (Roux, 1830) (Brachyura: Portunidae) in the northwestern Mediterranean. Ophelia 30:47–53 |
| 13 | Article | Abelló P, Cartes JE (1992) Population characteristics of the deep-sea lobsters Polycheles typhlops and Stereomastis sculpta (Decapoda: Polychelidae) in a bathyal mud community of the Mediterranean Sea. Marine Biology 11 |
| 14 | Article | Abelló P, Frankland RJ (1997) Population characteristics of the neustonic isopod Idotea metallica (Crustacea, Isopoda, Idoteidae) in the western Mediterranean (June 1993). Scientia Marina 61:409–414 |
| 15 | Article | Abelló P, Reid DG, Naylor E (1991) Comparative locomotor activity patterns in the portunid crabs Liocarcinus holsatus and L. depurator. Journal of the Marine Biological Association of the United Kingdom 71:1–10 |
| 16 | Article | Abirezabalaga F, Parapar J (2014) Deep-sea Ampharetidae (Polychaeta) from Cap Breton Canyon (north-east Atlantic) with the description of a new species. Journal of the Marine Biological Association of the United Kingdom 9 |
| 17 | Thesis | Abraham J (2005) Studies on some aspects of the reproductive physiology of Metapenaeus monoceros (Fabricius). PhD thesis, Deemed University, Mumbai, 151 p |
| 18 | Article | Abrahão JR, Cardoso RS, YokoyamaLQ, Amaral ACZ (2010) Population biology and secondary production of the stout razor clam Tagelus plebeius (Bivalvia, Solecurtidae) on a sandflat in southeastern Brazil. Zoologia 27:54–6 |
| 19 | Article | Abrams PA, Hill C, Elmgren R (1990) The functional response of the predatory polychaete, Harmothoe sarsi, to the amphipod, Pontoporeia affinis. Oikos 59:261–269 |
| 20 | Article | Abrunhosa FA, Pires MAB, Lima JF, Coelho-Filho PA (2005) Larval development of Lepidophtalmus siriboia Felder & Rodrigues, 1993 (Decapoda: Thalassinidea) from the Amazon region, reared in the laboratory. Acta Amazoni |
| 21 | Article | Abrunhosa FA, Santiago AP, Abrunhosa JP (2008) The early phyllosoma stages of spiny lobster Panulirus echinatus Smith, 1869 (Decapoda: Palinuridae) reared in the laboratory. Brazilian Journal of Biology 68:179–186 |
| 22 | Article | Abrunhosa FA, Simith DJB, Monteiro JRC, de Souza Junior AN, Oliva PAC (2011) Development and functional morphology of the larval foregut of two brachyuran species from Northern Brazil. Anais da Academia Brasileira de C |
| 23 | Article | Acarli S, Lok A, Yigitkurt S, Palaz M (2011) Culture of fan mussel (Pinna nobilis, Linnaeus 1758) in relation to size on suspended culture system in Izmir Bay, Aegean Sea, Turkey. Kafkas Universitesi Veteriner Fakültesi Dergisi |
| 24 | Article | Achari GPK (1968) Studies on new or little known Polychaetes from Indian seas 1. Trocmochaeta watsoni (Fauve) and Poecilochaetus serpens Allen. Journal of the Marine Biological Association of India 10:99–106 |
| 25 | Article | Achituv Y, Cook PA (1984) The influence of temperature variations and thermal pollution on various aspects of the biology of the prawn Palaemon pacificus (Stimpson). Journal of Experimental Marine Biology and Ecology 74:29 |