**Supporting Informaiton**

**Table S1**: Rod *λ*max values as measured by microspectrophotometry (MSP) and ecological variable assignments across Actinopterygii

| **Order** | **Family** | **Genus** | **Species** | **Rod (*λ*max)** | **Diet** | **Spectral depth** | **Habitat** | **Temperature regime** | **Adult**† | **References** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Acipenseriformes | Acipenseridae | *Acipenser* | *baerii* | 549 |  |  |  |  | ? | [22] |
|  | Acipenseridae | *Acipenser* | *medirostrus* | 540 |  |  |  |  | ? | [60] |
|  | Acipenseridae | *Acipenser* | *ruthenus* | 545 |  |  |  |  | ? | [21] |
|  | Acipenseridae | *Acipenser* | *transmontanus* | 540 | Benthic | Moderate | Inshore | Temperate | + | [39] ; [58] |
|  | Acipenseridae | *Scaphirhynchus* | *albus* | 538 |  |  |  |  | ? | [60] |
|  | Acipenseridae | *Scaphirhynchus* | *platorynchus* | 534 |  |  |  |  | ? | [59] |
|  | Polyodontidae | *Polyodon* | *spathula* | 540 |  |  |  |  | ? | [59] |
| Albuliformes | Albulidae | *Albula* | *vulpes* | 500 |  |  |  |  | ? | [63] |
| Alepocephaliformes | Alepocephalidae | *Bellocia* | *koefoedi* | 477 |  |  |  |  | ? | [14] |
|  | Alepocephalidae | *Conocara* | *macroptera* | 478 |  |  |  |  | ? | [14] |
|  | Alepocephalidae | *Conocara* | *macroptera* | 476 |  |  |  |  | ? | [51] |
|  | Alepocephalidae | *Conocara* | *salmonea* | 476 |  |  |  |  | ? | [14] |
|  | Alepocephalidae | *Rouleina* | *attrita* | 485 |  |  |  |  | ? | [14] |
|  | Alepocephalidae | *Rouleina* | *maderensis* | 477 |  |  |  |  | ? | [51] |
|  | Alepocephalidae | *Talismania* | *antillarum* | 476 |  |  |  |  | ? | [51] |
|  | Alepocephalidae | *Xenodermichthys* | *copei* | 478 |  |  |  |  | ? | [50] |
|  | Platytroctidae | *Barbantus* | *curvifrons* | 478 |  |  |  |  | ? | [51] |
|  | Platytroctidae | *Platytroctes* | *apus* | 475 |  |  |  |  | ? | [51] |
|  | Platytroctidae | *Searsia* | *koefoedi* | 476 |  |  |  |  | ? | [51] |
|  | Platytroctidae | *Searsia* | *koefoedi* | 480 |  |  |  |  | ? | [5] |
| Amiiformes | Amiidae | *Amia* | *calva* | 527 | Pelagic | Shallow | Freshwater | Temperate | + | [8] |
| Anguilliformes | Anguillidae | *Anguilla* | *anguilla* | 482 | Benthic | Shallow | Inshore | Temperate | + | [27] |
|  | Anguillidae | *Anguilla* | *bicolor*§ | 494 |  |  |  |  | ? | [68] |
|  | Anguillidae | *Anguilla* | *japonica* | 497 |  |  |  |  | ? | [68] |
|  | Derichthydae | *Derichthys* | *serpentinus* | 489 |  |  |  |  | ? | [51] |
|  | Muraenidae | *Gymnothorax* | *favagineus* | 487 | Pelagic | Shallow | Inshore | Tropical | + | [67] |
|  | Muraenidae | *Gymnothorax* | *reticularis* | 486 | Pelagic | Moderate | Inshore | Tropical | + | [67] |
|  | Muraenidae | *Rhinomuraena* | *quaesita* | 498 | Pelagic | Shallow | Offshore | Tropical | + | [67] |
|  | Muraenidae | *Strophidon* | *sathete* | 487 | Pelagic | Shallow | Inshore | Tropical | + | [67] |
|  | Synaphobranchidae | *Histiobranchus* | *bathybius* | 477 | Pelagic | Deep | Offshore | ‡ | + | [14] |
|  | Synaphobranchidae | *Histiobranchus* | *bathybius* | 476 |  |  |  |  | ? | [51] |
|  | Synaphobranchidae | *Histiobranchus* | *bathybius* | 477 |  |  |  |  | ? | [52] ; [14] |
|  | Synaphobranchidae | *Synaphobranchus* | *kaupii* | 478 |  |  |  |  | ? | [51] |
| Argentiniformes | Argentinidae | *Argentina* | *silus* | 483 |  |  |  |  | ? | [19] |
|  | Opisthoproctidae | *Opisthoproctus* | *grimaldii* | 480 |  |  |  |  | ? | [52] |
| Atheriniformes | Atherinidae | *Atherina* | *boyeri* | 511 | Benthic | Shallow | Inshore | Temperate | + | [21] |
|  | Atherinidae | *Atherina* | *boyeri* | 509 |  |  |  |  | ? | [54] |
|  | Melanotaeniidae | *Melanotaenia* | *maccullochi* | 509 | Pelagic | Shallow | Freshwater | Tropical | + | [54] |
|  | Telmatherinidae | *Marosatherina* | *ladigesi* | 507 | Benthic | Shallow | Freshwater | Tropical | + | [54] |
| Aulopiformes | Bathysauridae | *Bathysaurus* | *ferox* | 478 |  |  |  |  | ? | [14] |
|  | Bathysauridae | *Bathysaurus* | *mollis* | 477 |  |  |  |  | ? | [52] |
|  | Notosudidae | *Ahliesaurus* | *berryi* | 487 |  |  |  |  | ? | [50] |
|  | Scopelarchidae | *Benthalbella* | *infans* | 451 |  |  |  |  | ? | [51] |
|  | Scopelarchidae | *Scopelarchus* | *analis* | 507 |  |  |  |  | ? | [52] |
|  | Scopelarchidae | *Scopelarchus* | *analis* | 445 |  |  |  |  | ? | [52] |
|  | Scopelarchidae | *Scopelarchus* | *analis* | 503 |  |  |  |  | ? | [52] |
|  | Scopelarchidae | *Scopelarchus* | *analis* | 479 |  |  |  |  | ? | [52] |
|  | Synodontidae | *Synodus* | *variegatus* | 493 | Pelagic | Deep | Offshore | ‡ | + | [41] |
| Batrachoidiformes | Batrachoididae | *Opsanus* | *tau* | 503 |  |  |  |  | ? | [37] |
| Beloniformes | Belonidae | *Belone* | *belone* | 509 | Pelagic | Shallow | Offshore | Temperate | + | [54] |
| Beryciformes | Melamphaidae | *Melamphaes* | *suborbitalis* | 482 |  |  |  |  | ? | [51] |
|  | Melamphaidae | *Poromitra* | *capito* | 481 |  |  |  |  | ? | [51] |
|  | Melamphaidae | *Poromitra* | *megalops* | 487 |  |  |  |  | ? | [51] |
|  | Melamphaidae | *Scopelogadus* | *beanii* | 482 |  |  |  |  | ? | [51] |
| Blenniiformes | Blennidae | *Lipophrys* | *pholis* | 515 | Benthic | Shallow | Inshore | Temperate | + | [38] |
| Centrarchiformes | Centrarchidae | *Lepomis* | *macrochirus* | 538 | Pelagic | Shallow | Freshwater | Temperate | + | [26] |
| Characiformes | Characidae | *Astyanax* | *fasciatus* | 520 | Benthic | Shallow | Freshwater | Tropical | + | [48] ; [31] |
|  | Characidae | *Paracheirodon* | *innesi* | 523 |  |  |  |  | ? | [42] ; [51] |
|  | Serrasalmidae | *Metynnis* | *argenteus* | 533 |  |  |  |  | ? | [31] |
| Chicliformes | Cichlidae | *Aequidens* | *pulcher* | 507 | Benthic | Shallow | Freshwater | Tropical | + | [38] |
|  | Cichlidae | *Aequidens* | *pulcher* | 501 |  |  |  |  | ? | [36] |
|  | Cichlidae | *Amphilophus* | *longimanus* | 525 |  |  |  |  | ? | [38] |
|  | Cichlidae | *Astatotilapia* | *burtoni*§ | 500 | Benthic | Shallow | Freshwater | Tropical | + | [15] |
|  | Cichlidae | *Aulonocara* | *hueseri* | 496 |  |  |  |  | – | [30] |
|  | Cichlidae | *Copadichromis* | *borleyi* | 494 | Pelagic | Shallow | Freshwater | Tropical | + | [30] |
|  | Cichlidae | *Crenicichla* | *frenata* | 520 |  |  |  |  | – | [69] |
|  | Cichlidae | *Cynotilapia* | *afra* | 496 |  |  |  |  | – | [30] |
|  | Cichlidae | *Dimidiochromis* | *compressiceps* | 498 |  |  |  |  | – | [30] |
|  | Cichlidae | *Haplochromis* | *azurea*§ | 503 | Pelagic | Shallow | Freshwater | Tropical | + | [9] |
|  | Cichlidae | *Haplochromis* | *ishmaeli* | 507 | Pelagic | Shallow | Freshwater | Tropical | + | [66] |
|  | Cichlidae | *Haplochromis* | *nyererei*§ | 505 | Pelagic | Shallow | Freshwater | Tropical | + | [9] |
|  | Cichlidae | *Haplochromis* | *piceatus* | 503 | Pelagic | Shallow | Freshwater | Tropical | + | [66] |
|  | Cichlidae | *Haplochromis* | *pyrrhocephalus* | 519 | Pelagic | Shallow | Freshwater | Tropical | + | [66] |
|  | Cichlidae | *Lethrinops* | *parvidens* | 489 |  |  |  |  | – | [30] |
|  | Cichlidae | *Melanochromis* | *auratus* | 497 | Benthic | Shallow | Freshwater | Tropical | + | [30] |
|  | Cichlidae | *Melanochromis* | *vermivorus* | 505 |  |  |  |  | – | [49] |
|  | Cichlidae | *Metriaclima* | *barlowi* | 491 |  |  |  |  | – | [30] |
|  | Cichlidae | *Metriaclima* | *livingstonii* | 495 |  |  |  |  | – | [30] |
|  | Cichlidae | *Metriaclima* | *melabranchion* | 491 |  |  |  |  | – | [30] |
|  | Cichlidae | *Mylochromis* | *lateristriga* | 496 |  |  |  |  | – | [30] |
|  | Cichlidae | *Protomelas* | *taeniolatus* | 496 |  |  |  |  | – | [30] |
|  | Cichlidae | *Pseudotropheus* | *acei* | 505 |  |  |  |  | – | [49] |
|  | Cichlidae | *Pseudotropheus* | *tropheops* | 510 | Benthic | Shallow | Freshwater | Tropical | + | [30] |
|  | Cichlidae | *Pundamilia* | *luanso* | 505 |  |  |  |  | – | [9] |
|  | Cichlidae | *Pundamilia* | *pundamilia* | 506 |  |  |  |  | – | [9] |
|  | Cichlidae | *Tramitichromis* | *intermedius* | 505 |  |  |  |  | – | [49] |
|  | Cichlidae | *Tyrannochromis* | *macrostoma* | 494 |  |  |  |  | – | [30] |
| Chimaeriformes | Chimaeridae | *Chimaera* | *monstrosa* | 485 |  |  |  |  | ? | [14] |
|  | Chimaeridae | *Hydrolagus* | *mirabilis* | 475 |  |  |  |  | ? | [14] |
|  | Rhinochimaeridae | *Hariotta* | *raleighana* | 481 |  |  |  |  | ? | [51] |
| Clupeiformes | Clupeidae | *Clupea* | *harengus* | 503 | Pelagic | Moderate | Inshore | Temperate | + | [29] |
|  | Clupeidae | *Clupea* | *pallasii* | 501 | Pelagic | Moderate | Offshore | Temperate | + | [7] |
|  | Clupeidae | *Sardinops* | *sagax*§ | 502 | Pelagic | Moderate | Inshore | Tropical | + | [46] |
|  | Cyprinidae | *Abramis* | *brama* | 537 | Pelagic | Shallow | Freshwater | Temperate | + | [29] |
|  | Engraulidae | *Engraulis* | *japonicus* | 502 | Pelagic | Moderate | Offshore | Temperate | + | [33] |
|  | Engraulidae | *Engraulis* | *mordax* | 498 | Pelagic | Deep | Inshore | ‡ | + | [7] |
| Cypriniformes | Anablepidae | *Anableps* | *anableps* | 506 |  |  |  |  | ? | [3] |
|  | Cyprinidae | *Alburnus* | *alburnus* | 515 | Pelagic | Shallow | Freshwater | Temperate | + | [29] |
|  | Cyprinidae | *Ballerus* | *ballerus*§ | 518 | Pelagic | Shallow | Freshwater | Temperate | + | [29] |
|  | Cyprinidae | *Blicca* | *bjoerkna* | 539 | Benthic | Shallow | Freshwater | Temperate | + | [29] |
|  | Cyprinidae | *Carassius* | *auratus* | 522 | Benthic | Shallow | Freshwater | Temperate | + | [38] |
|  | Cyprinidae | *Carassius* | *carassius* | 526 | Benthic | Shallow | Freshwater | Temperate | + | [29] |
|  | Cyprinidae | *Cyprinus* | *carpio* | 525 |  |  |  |  | ? | [24] |
|  | Cyprinidae | *Danio* | *malabaricus* | 505 |  |  |  |  | ? | [31] |
|  | Cyprinidae | *Puntigrus* | *tetrazona* | 504 |  |  |  |  | ? | [42] ; [51] |
|  | Cyprinidae | *Scardinius* | *erythrophthalmus* | 537 | Pelagic | Shallow | Freshwater | Temperate | + | [29] |
|  | Cyprinidae | *Scardinius* | *erythrophthalmus* | 515 |  |  |  |  | ? | [70] |
|  | Cyprinidae | *Tinca* | *tinca* | 533 | Benthic | Shallow | Freshwater | Temperate | + | [38] |
|  | Cyprinidae | *Tribolodon* | *hakonensis* | 522 |  |  |  |  | ? | [23] |
| Cyprinodontiformes | Cyprinodontidae | *Cyprinodon* | *variegatus* | 506 |  |  |  |  | ? | [42] |
|  | Cyprinodontidae | *Jordanella* | *floridae* | 511 |  |  |  |  | ? | [42] ; [51] |
|  | Elopidae | *Elops* | *saurus* | 518 |  |  |  |  | ? | [63] |
|  | Fundulidae | *Fundulus* | *heteroclitus* | 503 |  |  |  |  | – | [18] |
|  | Poeciliidae | *Micropoecilia* | *parae* | 503 | Benthic | Shallow | Freshwater | Tropical | + | [28] |
|  | Poeciliidae | *Poecilia* | *formosa* | 504 |  |  |  |  | – | [35] |
|  | Poeciliidae | *Poecilia* | *latipinna* | 503 | Pelagic | Shallow | Freshwater | Temperate | + | [35] |
|  | Poeciliidae | *Poecilia* | *mexicana* | 504 | Pelagic | Shallow | Freshwater | Tropical | + | [35] |
|  | Poeciliidae | *Poecilia* | *reticulata* | 503 | Pelagic | Shallow | Freshwater | Tropical | + | [2] |
| Elopiformes | Esocidae | *Esox* | *lucius* | 521 | Pelagic | Shallow | Freshwater | Temperate | + | [29] |
|  | Megalopidae | *Megalops* | *atlanticus* | 500 | Pelagic | Shallow | Offshore | Tropical | + | [62] |
| Gadiformes | Aulorhynchidae | *Aulorhynchus* | *flavidus* | 499 | Pelagic | Shallow | Inshore | Temperate | + | [7] |
|  | Gadidae | *Gaidropsarus* | *mediterraneus* | 512 | Pelagic | Moderate | Inshore | Temperate | + | [38] |
|  | Gadidae | *Microgadus* | *proximus* | 497 | Pelagic | Deep | Inshore | ‡ | + | [7] |
|  | Gadidae | *Pollachius* | *pollachius* | 498 |  |  |  |  | ? | [56] |
|  | Gadidae | *Theragra* | *chalcogramma* | 500 | Pelagic | Deep | Inshore | ‡ | + | [7] |
|  | Macrouridae | *Caelorhinchus* | *labiatus* | 479 |  |  |  |  | ? | [14] |
|  | Macrouridae | *Coryphaenoides* | *armatus* | 483 |  |  |  |  | ? | [14] |
|  | Macrouridae | *Coryphaenoides* | *carapinus* | 484 |  |  |  |  | ? | [14] |
|  | Macrouridae | *Coryphaenoides* | *carapinus* | 482 |  |  |  |  | ? | [52] |
|  | Macrouridae | *Coryphaenoides* | *leptolepis* | 482 |  |  |  |  | ? | [14] |
|  | Macrouridae | *Coryphaenoides* | *profundicolus* | 483 |  |  |  |  | ? | [14] |
|  | Macrouridae | *Coryphaenoides* | *profundicolus*§ | 482 |  |  |  |  | ? | [52] |
|  | Macrouridae | *Echinomacrurus* | *mollis* | 478 |  |  |  |  | ? | [13] |
|  | Macrouridae | *Malacocephalus* | *laevis* | 486 |  |  |  |  | ? | [14] |
|  | Melanonidae | *Melanonus* | *zugmayeri* | 490 |  |  |  |  | ? | [52] ; [14] |
|  | Merlucciidae | *Merluccius* | *productus* | 495 | Pelagic | Moderate | Inshore | Temperate | + | [7] |
|  | Moridae | *Antimora* | *rostrata* | 483 |  |  |  |  | ? | [14] |
|  | Moridae | *Halargyreus* | *johnsonii* | 490 |  |  |  |  | ? | [14] |
|  | Moridae | *Lepidion* | *eques* | 486 |  |  |  |  | ? | [14] |
|  | Moridae | *Mora* | *moro* | 488 |  |  |  |  | ? | [14] ; [50] |
| Gasterosteiformes | Gasterosteidae | *Gasterosteus* | *aculeatus* | 509 | Benthic | Shallow | Inshore | Temperate | + | [29] ; [7] |
|  | Gasterosteidae | *Spinachia* | *spinachia* | 510 | Benthic | Moderate | Inshore | Temperate | + | [38] |
|  | Gobiesocidae | *Gobiesox* | *maeandricus* | 500 | Benthic | Shallow | Inshore | Temperate | + | [7] |
| Gobiiformes | Gobiidae | *Asterropteryx* | *semipunctata* | 498 | Benthic | Shallow | Inshore | Tropical | + | [41] |
|  | Gobiidae | *Clevelandia* | *ios* | 520 | Pelagic | Shallow | Inshore | Temperate | + | [7] |
|  | Gobiidae | *Gobius* | *paganellus* | 512 | Benthic | Shallow | Inshore | Temperate | + | [38] |
|  | Gobiidae | *Gobiusculus* | *flavescens* | 508 | Pelagic | Shallow | Inshore | Temperate | + | [65] |
|  | Gobiidae | *Pomatoschistus* | *minutus* | 508 | Benthic | Moderate | Inshore | Temperate | + | [29] |
| Holocentriformes | Holocentridae | *Myripristis* | *berndti* | 495 |  |  |  |  | ? | [41] |
|  | Holocentridae | *Myripristis* | *berndti*§ | 506 | Pelagic | Shallow | Offshore | Tropical | + | [32] |
|  | Holocentridae | *Neoniphon* | *sammara* | 502 | Pelagic | Shallow | Inshore | Tropical | + | [41] |
|  | Holocentridae | *Sargocentron* | *xantherythrum* | 490 | Benthic | Moderate | Offshore | Tropical | + | [41] |
| Istiophoriformes | Istiophoridae | *Istiophorus* | *platypterus* | 484 |  |  |  |  | ? | [19] |
| Lepisosteiformes | Lepisostedidae | *Lepisosteus* | *platostomus* | 529 | Pelagic | Shallow | Freshwater | Temperate | + | [8] |
| Myctophiformes | Myctophidae | *Benthosema* | *suborbitale* | 487 |  |  |  |  | ? | [13] |
|  | Myctophidae | *Diaphus* | *holti* | 491 |  |  |  |  | ? | [50] |
|  | Myctophidae | *Diaphus* | *rafinesquei* | 488 |  |  |  |  | ? | [16] |
|  | Myctophidae | *Electrona* | *risso* | 482 |  |  |  |  | ? | [52] |
|  | Myctophidae | *Lampanyctus* | *crocodilus* | 487 |  |  |  |  | ? | [13] |
|  | Myctophidae | *Lampanyctus* | *festivus* | 489 |  |  |  |  | ? | [52] |
|  | Myctophidae | *Lobianchia* | *gemellarii* | 485 |  |  |  |  | ? | [50] |
|  | Myctophidae | *Nannobrachium* | *atrum*§ | 483 | Pelagic | Deep | Offshore | ‡ | + | [51] |
|  | Myctophidae | *Notoscopelus* | *resplendens* | 486 |  |  |  |  | ? | [13] |
|  | Myctophidae | *Taaningichthys* | *bathyphilus* | 487 | Pelagic | Deep | Offshore | ‡ | + | [51] |
| Notacanthiformes | Halosauridae | *Halosauropsis* | *macrochir* | 481 |  |  |  |  |  | [14] |
|  | Notacanthidae | *Notacanthus* | *bonapartei* | 481 |  |  |  |  | ? | [51] |
| Ophidiiformes | Ophidiidae | *Dicrolene* | *intronigra* | 479 |  |  |  |  | ? | [51] |
| Osmeriformes | Bathylagidae | *Bathylagus* | *greyae* | 488 |  |  |  |  | ? | [51] |
|  | Bathylagidae | *Bathylagus* | *longirostris* | 474 |  |  |  |  | ? | [51] |
|  | Microstomatidae | *Microstoma* | *microstoma* | 479 |  |  |  |  | ? | [50] |
|  | Microstomatidae | *Nansenia* | *longicauda* | 479 |  |  |  |  | ? | [50] |
|  | Osmeridae | *Hypomesus* | *pretiosus* | 500 | Benthic | Shallow | Inshore | Temperate | + | [7] |
|  | Osmeridae | *Osmerus* | *dentex* | 516 | Pelagic | Moderate | Inshore | Polar | + | [34] |
|  | Osmeridae | *Osmerus* | *eperlanus* | 518 | Pelagic | Shallow | Inshore | Temperate | + | [29] |
| Osteoglossiformes | Osmeridae | *Spirinchus* | *thaleichthys* | 499 | Benthic | Moderate | Inshore | Temperate | + | [7] |
| Perciformes | Acanthuridae | *Acanthurus* | *achilles* | 496 |  |  |  |  | – | [41] |
|  | Acanthuridae | *Acanthurus* | *nigroris* | 494 | Benthic | Moderate | Offshore | Tropical | + | [41] |
|  | Acanthuridae | *Acanthurus* | *triostegus* | 493 | Benthic | Moderate | Offshore | Tropical | + | [41] |
|  | Acanthuridae | *Ctenochaetus* | *strigosus* | 486 | Benthic | Moderate | Offshore | Tropical | + | [41] |
|  | Acanthuridae | *Naso* | *lituratus* | 497 | Pelagic | Shallow | Offshore | Tropical | + | [41] |
|  | Acanthuridae | *Naso* | *unicornis* | 494 | Benthic | Moderate | Offshore | Tropical | + | [41] |
|  | Acanthuridae | *Zebrasoma* | *flavescens* | 494 | Benthic | Shallow | Offshore | Tropical | + | [41] |
|  | Acanthuridae | *Zebrasoma* | *velifer*§ | 494 | Benthic | Shallow | Offshore | Tropical | + | [41] |
|  | Ammodytidae | *Ammodytes* | *hexapterus* | 470 |  |  |  |  | – | [7] |
|  | Ammodytidae | *Hyperoplus* | *lanceolatus* | 486 |  |  |  |  | ? | [29] |
|  | Apogonidae | *Pristiapogon* | *kallopterus*§ | 492 | Benthic | Moderate | Offshore | Tropical | + | [41] |
|  | Bathymasteridae | *Ronquilus* | *jordani* | 492 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Carangidae | *Trachurus* | *mediterraneus* | 502 | Pelagic | Moderate | Offshore | Temperate | + | [21] |
|  | Centracanthidae | *Micropterus* | *salmoides* | 528 | Benthic | Shallow | Freshwater | Temperate | + | [45] |
|  | Centracanthidae | *Spicara* | *smaris* | 502 | Benthic | Moderate | Offshore | Temperate | + | [21] |
|  | Chaetodontidae | *Chaetodon* | *kleinii* | 496 | Benthic | Moderate | Offshore | Tropical | + | [41] |
|  | Chaetodontidae | *Chaetodon* | *unimaculatus* | 496 | Benthic | Shallow | Offshore | Tropical | + | [41] |
|  | Chaetodontidae | *Forcipiger* | *flavissimus* | 488 | Benthic | Moderate | Inshore | Tropical | + | [41] |
|  | Chiasmodontidae | *Chiasmodon* | *niger* | 483 |  |  |  |  | ? | [50] |
|  | Embiotocidae | *Cymatogaster* | *aggregata* | 500 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Embiotocidae | *Embiotoca* | *jacksoni* | 505 | Benthic | Shallow | Inshore | Temperate | + | [12] |
|  | Embiotocidae | *Embiotoca* | *lateralis* | 499 | Benthic | Shallow | Inshore | Temperate | + | [7] |
|  | Embiotocidae | *Hypsurus* | *caryi* | 506 | Benthic | Shallow | Inshore | Temperate | + | [12] |
|  | Embiotocidae | *Micrometrus* | *aurora* | 519 |  |  |  |  | – | [12] |
|  | Embiotocidae | *Micrometrus* | *minimus* | 518 | Pelagic | Shallow | Inshore | Temperate | + | [12] |
|  | Embiotocidae | *Rhacochilus* | *vacca* | 507 | Benthic | Shallow | Inshore | Temperate | + | [7] |
|  | Embiotocidae | *Zalembius* | *rosaceus* | 494 | Benthic | Moderate | Inshore | Temperate | + | [12] |
|  | Epigonidae | *Epigonus* | *telescopus* | 492 |  |  |  |  | ? | [14] |
|  | Helostomatidae | *Helostoma* | *temminkii* | 523 |  |  |  |  | ? | [31] |
|  | Howellidae | *Howella* | *sherborni* | 463 |  |  |  |  | ? | [51] |
|  | Istiophoridae | *Makaira* | *nigricans* | 484 |  |  |  |  | ? | [19] |
|  | Kuhliidae | *Kuhlia* | *sandvicensis* | 491 |  |  |  |  | – | [41] |
|  | Labridae | *Bodianus* | *bilunnulatus* | 485 |  |  |  |  | – | [41] |
|  | Labridae | *Cirrhilabrus* | *solorensis* | 497 |  |  |  |  | ? | [20] |
|  | Labridae | *Symphodus* | *melops* | 520 | Benthic | Shallow | Inshore | Temperate | + | [38] |
|  | Latidae | *Lates* | *calcarifer* | 516 |  |  |  |  | ? | [64] |
|  | Lutjanidae | *Lutjanus* | *adetii* | 496 | Pelagic | Shallow | Offshore | Tropical | + | [43] |
|  | Lutjanidae | *Lutjanus* | *bohar* | 497 | Pelagic | Moderate | Offshore | Tropical | + | [43] |
|  | Lutjanidae | *Lutjanus* | *carponotatus* | 499 | Pelagic | Moderate | Offshore | Tropical | + | [43] |
|  | Lutjanidae | *Lutjanus* | *erythropterus* | 496 | Pelagic | Moderate | Offshore | Tropical | + | [43] |
|  | Lutjanidae | *Lutjanus* | *fulviflamma* | 505 |  |  |  |  | ? | [43] |
|  | Lutjanidae | *Lutjanus* | *johnii* | 498 |  |  |  |  | – | [43] |
|  | Lutjanidae | *Lutjanus* | *malabaricus* | 494 | Pelagic | Moderate | Offshore | Tropical | + | [43] |
|  | Lutjanidae | *Lutjanus* | *quinquelineatus* | 499 | Pelagic | Moderate | Offshore | Tropical | + | [43] |
|  | Lutjanidae | *Lutjanus* | *russellii* | 499 | Pelagic | Moderate | Offshore | Tropical | + | [43] |
|  | Lutjanidae | *Lutjanus* | *sebae* | 494 | Pelagic | Moderate | Offshore | Tropical | + | [43] |
|  | Mullidae | *Mulloidichthys* | *flavolineatus* | 486 |  |  |  |  | – | [41] |
|  | Mullidae | *Mullus* | *barbatus* | 497 | Benthic | Moderate | Inshore | Temperate | + | [21] |
|  | Mullidae | *Parupeneus* | *multifasceatus* | 494 |  |  |  |  | – | [41] |
|  | Mullidae | *Upeneus* | *tragula* | 498 |  |  |  |  | ? | [55] |
|  | Nototheniidae | *Dissostichus* | *mawsoni* | 504 | Pelagic | Deep | Offshore | ‡ | + | [53] |
|  | Nototheniidae | *Pagothenia* | *borchgrevinki* | 499 | Pelagic | Moderate | Offshore | Polar | + | [53] |
|  | Nototheniidae | *Trematomus* | *bernacchii* | 502 | Benthic | Deep | Offshore | ‡ | + | [53] |
|  | Nototheniidae | *Trematomus* | *hansoni* | 501 | Benthic | Deep | Offshore | ‡ | + | [53] |
|  | Nototheniidae | *Trematomus* | *loennbergii* | 500 | Benthic | Deep | Offshore | ‡ | + | [53] |
|  | Paralichthyidae | *Citharichthys* | *sordidus*§ | 489 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Percidae | *Perca* | *fluviatilis* | 540 | Pelagic | Shallow | Freshwater | Temperate | + | [38] |
|  | Percidae | *Perca* | *flavescens* | 550 |  |  |  |  | ? | [1] |
|  | Percidae | *Sander* | *lucioperca* | 524 | Pelagic | Shallow | Freshwater | Temperate | + | [29] |
|  | Pholidae | *Apodichthys* | *flavidus* | 504 | Benthic | Shallow | Inshore | Temperate | + | [7] |
|  | Pholidae | *Pholis* | *laeta* | 504 |  |  |  |  | – | [7] |
|  | Pholidae | *Pholis* | *omata* | 498 |  |  |  |  | – | [7] |
|  | Pomacentridae | *Abudefduf* | *abdominalis* | 492 | Pelagic | Shallow | Offshore | Tropical | + | [41] |
|  | Pomacentridae | *Chromis* | *hanui* | 477 |  |  |  |  | – | [41] |
|  | Pomacentridae | *Chromis* | *ovalis* | 492 |  |  |  |  | – | [41] |
|  | Pomacentridae | *Chromis* | *punctipinnis* | 498 | Pelagic | Shallow | Offshore | Temperate | + | [44] |
|  | Pomacentridae | *Chromis* | *vanderbilti* | 498 |  |  |  |  | – | [41] |
|  | Pomacentridae | *Chromis* | *verater* | 480 |  |  |  |  | – | [41] |
|  | Pomacentridae | *Dascyllus* | *albisella* | 490 | Benthic | Shallow | Freshwater | Tropical | + | [41] |
|  | Pomacentridae | *Dascyllus* | *trimaculatus* | 491 | Pelagic | Shallow | Offshore | Tropical | + | [44] |
|  | Pomacentridae | *Plectroglyphidodon* | *johnstonianus* | 495 |  |  |  |  | – | [41] |
|  | Pomacentridae | *Pomacentrus* | *melanochir* | 501 |  |  |  |  | – | [38] |
|  | Pomacentridae | *Stegastes* | *fasciolatus* | 495 | Benthic | Shallow | Offshore | Tropical | + | [41] |
|  | Ptilichthyidae | *Ptilichthys* | *goodei* | 497 |  |  |  |  | ? | [7] |
|  | Serranidae | *Centropristis* | *striata* | 498 |  |  |  |  | ? | [61] |
|  | Sparidae | *Acanthopagrus* | *butcheri* | 509 | Benthic | Moderate | Inshore | Temperate | + | [57] |
|  | Sparidae | *Diplodus* | *annularis* | 505 | Benthic | Moderate | Inshore | Temperate | + | [21] |
|  | Sphyraenidae | *Sphyraena* | *barracuda* | 498 | Pelagic | Shallow | Offshore | Temperate | + | [41] |
|  | Stichaeidae | *Acantholumpenus* | *mackayi* | 502 |  |  |  |  | – | [32] |
|  | Stichaeidae | *Anoplarchus* | *purpurescens* | 502 | Benthic | Shallow | Inshore | Temperate | + | [7] |
|  | Stichaeidae | *Chirolophis* | *japonicus* | 502 | Benthic | Moderate | Inshore | Temperate | + | [32] |
|  | Stichaeidae | *Ernogrammus* | *hexagrammus* | 506 | Benthic | Moderate | Inshore | Temperate | + | [32] |
|  | Stichaeidae | *Lumpenus* | *sagitta* | 496 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Stichaeidae | *Opisthocentrus* | *ocellatus* | 504 |  |  |  |  | – | [32] |
|  | Stichaeidae | *Pholidapus* | *dybowsky* | 522 | Benthic | Moderate | Inshore | Temperate | + | [32] |
|  | Stichaeidae | *Phytichthys* | *chirus* | 522 |  |  |  |  | – | [7] |
|  | Stichaeidae | *Stichaeopsis* | *nana* | 522 |  |  |  |  | – | [32] |
|  | Stichaeidae | *Stichaeus* | *grigorjevi* | 502 | Pelagic | Deep | Inshore | ‡ | + | [32] |
|  | Stichaeidae | *Stichaeus* | *nozawae* | 502 |  |  |  |  | – | [32] |
|  | Stichaeidae | *Xiphister* | *mucosus* | 504 |  |  |  |  | – | [7] |
|  | Stichaeidae | *Xiphister* | *atropurpureus* | 503 |  |  |  |  | – | [7] |
|  | Trichodontidae | *Trichodon* | *trichodon* | 503 | Pelagic | Moderate | Inshore | Temperate | + | [7] |
|  | Zanclidae | *Zanclus* | *cornutus* | 492 | Pelagic | Moderate | Offshore | Tropical | + | [41] |
|  | Zoarcidae | *Lycodes* | *pacificus* | 483 | Benthic | Deep | Inshore | ‡ | + | [7] |
|  | Zoarcidae | *Zoarces* | *viviparus* | 513 | Benthic | Shallow | Inshore | Temperate | + | [29] |
| Pleuronectiformes | Eurypharyngidae | *Eurypharynx* | *pelecanoides* | 474 |  |  |  |  | ? | [51] |
|  | Pleuronectidae | *Cleisthenes* | *herzensteini* | 500 | Benthic | Moderate | Inshore | Temperate | + | [32] |
|  | Pleuronectidae | *Isopsetta* | *isolepis* | 492 | Pelagic | Moderate | Inshore | Temperate | + | [7] |
|  | Pleuronectidae | *Lepidopsetta* | *bilineata* | 492 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Pleuronectidae | *Lepidopsetta* | *polyxystra* | 493 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Pleuronectidae | *Limanda* | *aspera* | 503 | Benthic | Deep | Inshore | ‡ | + | [32] |
|  | Pleuronectidae | *Limanda* | *limanda* | 502 | Benthic | Moderate | Inshore | Temperate | + | [38] |
|  | Pleuronectidae | *Lyopsetta* | *exilis* | 482 | Pelagic | Deep | Inshore | ‡ | + | [7] |
|  | Pleuronectidae | *Microstomus* | *kitt* | 502 | Benthic | Moderate | Inshore | Temperate | + | [38] |
|  | Pleuronectidae | *Microstomus* | *pacificus* | 505 |  |  |  |  | ? | [7] |
|  | Pleuronectidae | *Parophrys* | *vetulus* | 498 | Benthic | Deep | Inshore | ‡ | + | [7] |
|  | Pleuronectidae | *Platichthys* | *flesus* | 510 | Pelagic | Shallow | Inshore | Temperate | + | [29] |
|  | Pleuronectidae | *Platichthys* | *stellatus* | 508 | Pelagic | Shallow | Inshore | Temperate | + | [7] |
|  | Pleuronectidae | *Pleuronectes* | *platessa* | 515 | Benthic | Moderate | Inshore | Temperate | + | [38] |
|  | Pleuronectidae | *Psettichthys* | *melanostictus* | 497 |  |  |  |  | ? | [7] |
|  | Pleuronectidae | *Pseudopleuronectes* | *americanus* | 506 |  |  |  |  | ? | [42] |
|  | Pleuronectidae | *Pseudopleuronectes* | *herzensteini*§ | 500 | Benthic | Moderate | Inshore | Temperate | + | [32] |
|  | Pleuronectidae | *Pseudopleuronectes* | *obscurus*§ | 525 | Benthic | Moderate | Inshore | Temperate | + | [32] |
|  | Scopthalmidae | *Lepidorhombus* | *boscii*§ | 489 |  |  |  |  | ? | [14] |
| Saccopharyngiformes | Salmonidae | *Oncorhynchus* | *gorbuscha* | 506 |  |  |  |  | ? | [10] |
| Salmoniformes | Abyssocottidae | *Abyssocottus* | *korotneffi* | 481 | Benthic | Deep | Freshwater | ‡ | + | [6] |
|  | Salmonidae | *Oncorhynchus* | *keta* | 524 | Pelagic | Moderate | Inshore | Temperate | + | [17] |
|  | Salmonidae | *Oncorhynchus* | *keta* | 505 |  |  |  |  | ? | [10] |
|  | Salmonidae | *Oncorhynchus* | *kisutch* | 531 | Pelagic | Moderate | Inshore | Temperate | + | [17] |
|  | Salmonidae | *Oncorhynchus* | *kisutch* | 505 |  |  |  |  | ? | [10] |
|  | Salmonidae | *Oncorhynchus* | *mykiss* | 521 |  |  |  |  | ? | [25] |
|  | Salmonidae | *Oncorhynchus* | *tshawytscha* | 524 | Pelagic | Moderate | Inshore | Temperate | + | [17] |
|  | Salmonidae | *Oncorhynchus* | *tshawytscha* | 508 |  |  |  |  | ? | [10] |
|  | Salmonidae | *Salmo* | *salar* | 515 |  |  |  |  | ? | [10] |
|  | Salmonidae | *Salmo* | *trutta trutta* | 532 | Pelagic | Shallow | Inshore | Temperate | + | [4] |
| Scombriformes | Scombridae | *Thunnus* | *albacares* | 483 | Pelagic | Moderate | Offshore | Temperate | + | [40] |
|  | Stromateidae | *Peprilus* | *stimillimus* | 496 | Pelagic | Shallow | Inshore | Temperate | + | [7] |
|  | Trichiuridae | *Aphanopus* | *carbo* | 477 |  |  |  |  | – | [14] |
| Scorpaeniformes | Abyssocottidae | *Asprocottus* | *herzensteini*§ | 488 | Pelagic | Moderate | Freshwater | Temperate | + | [6] |
|  | Abyssocottidae | *Cottinella* | *boulengeri* | 482 | Benthic | Deep | Freshwater | ‡ | + | [6] |
|  | Abyssocottidae | *Cyphocottus* | *eurystomus* | 489 | Pelagic | Deep | Freshwater | ‡ | + | [6] |
|  | Abyssocottidae | *Limnocottus* | *bergianus* | 490 | Benthic | Deep | Freshwater | ‡ | + | [6] |
|  | Abyssocottidae | *Limnocottus* | *griseus* | 485 | Benthic | Deep | Freshwater | ‡ | + | [6] |
|  | Abyssocottidae | *Limnocottus* | *pallidus* | 488 | Benthic | Deep | Freshwater | ‡ | + | [6] |
|  | Abyssocottidae | *Procottus* | *jettelesii* | 505 | Benthic | Moderate | Freshwater | Temperate | + | [6] |
|  | Agonidae | *Bothragonus* | *swani* | 500 |  |  |  |  | – | [7] |
|  | Agonidae | *Podothecus* | *acipenserinus* | 500 | Benthic | Deep | Inshore | ‡ | + | [7] |
|  | Comephoridae | *Comephorus* | *baicalensis* | 501 |  |  |  |  | ? | [6] |
|  | Comephoridae | *Comephorus* | *dybowskii* | 498 |  |  |  |  | ? | [6] |
|  | Cottidae | *Artedius* | *fenestralis* | 498 | Pelagic | Shallow | Inshore | Temperate | + | [7] |
|  | Cottidae | *Artedius* | *harringtoni* | 501 | Benthic | Shallow | Inshore | Temperate | + | [7] |
|  | Cottidae | *Ascelichthys* | *rhodorus* | 501 |  |  |  |  | – | [7] |
|  | Cottidae | *Bero* | *elegance* | 507 |  |  |  |  | – | [32] |
|  | Cottidae | *Clinocottus* | *globiceps* | 523 | Benthic | Shallow | Inshore | Temperate | + | [7] |
|  | Cottidae | *Enophrys* | *bison* | 501 | Benthic | Deep | Inshore | ‡ | + | [7] |
|  | Cottidae | *Enophrys* | *diceraus* | 500 |  |  |  |  | – | [32] |
|  | Cottidae | *Gymnocanthus* | *intermedius* | 504 |  |  |  |  | – | [32] |
|  | Cottidae | *Gymnocanthus* | *pistilliger* | 501 |  |  |  |  | – | [32] |
|  | Cottidae | *Hemilepidotus* | *hemilepidotus* | 501 | Pelagic | Deep | Inshore | ‡ | + | [7] |
|  | Cottidae | *Icelinus* | *borealis* | 495 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Cottidae | *Jordania* | *zonope* | 500 | Benthic | Shallow | Inshore | Temperate | + | [7] |
|  | Cottidae | *Leptocottus* | *armatus* | 509 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Cottidae | *Megalocottus* | *platycephalus* | 514 |  |  |  |  | – | [32] |
|  | Cottidae | *Microcottus* | *sellaris* | 505 | Benthic | Shallow | Inshore | Temperate | + | [32] |
|  | Cottidae | *Myoxocephalus* | *jaok* | 507 |  |  |  |  | – | [32] |
|  | Cottidae | *Myoxocephalus* | *potyacanthocephalus* | 500 | Pelagic | Moderate | Inshore | Temperate | + | [7] |
|  | Cottidae | *Myoxocephalus* | *scorpius* | 506 | Pelagic | Moderate | Inshore | Polar | + | [6] |
|  | Cottidae | *Myoxocephalus* | *stelleri* | 506 | Pelagic | Shallow | Inshore | Temperate | + | [32] |
|  | Cottidae | *Oligocottus* | *maculosus* | 520 | Benthic | Shallow | Inshore | Temperate | + | [7] |
|  | Cottidae | *Ruscarius* | *meanyi* | 496 | Pelagic | Moderate | Inshore | Temperate | + | [7] |
|  | Cottidae | *Scorpaenichthys* | *marmoratus* | 500 | Pelagic | Moderate | Inshore | Temperate | + | [7] |
|  | Cottidae | *Taurulus* | *bubalis* | 507 | Benthic | Moderate | Inshore | Temperate | + | [6] |
|  | Cottidae | *Triglopsis* | *quadricornis* | 512 | Benthic | Moderate | Inshore | Polar | + | [29] |
|  | Cottocomephoridae | *Batrachocottus* | *baicalensis* | 509 | Benthic | Deep | Freshwater | ‡ | + | [6] |
|  | Cottocomephoridae | *Batrachocottus* | *multiradiatus* | 489 | Benthic | Deep | Freshwater | ‡ | + | [6] |
|  | Cottocomephoridae | *Batrachocottus* | *nikolskii* | 488 | Benthic | Deep | Freshwater | ‡ | + | [6] |
|  | Cottocomephoridae | *Cottocomephorus* | *grewingkii* | 503 | Pelagic | Moderate | Freshwater | Temperate | + | [6] |
|  | Cottocomephoridae | *Cottocomephorus* | *inermis* | 494 | Pelagic | Moderate | Freshwater | Temperate | + | [6] |
|  | Cottocomephoridae | *Leocottus* | *kesslerii*§ | 516 | Pelagic | Moderate | Freshwater | Temperate | + | [6] |
|  | Cottocomephoridae | *Paracottus* | *knerii* | 520 | Pelagic | Shallow | Freshwater | Temperate | + | [6] |
|  | Cyclopteridae | *Eumicrotremus* | *orbis* | 494 | Pelagic | Shallow | Inshore | Temperate | + | [7] |
|  | Hemiramphidae | *Dermogenys* | *pusilla* | 507 | Pelagic | Shallow | Freshwater | Tropical | + | [54] |
|  | Hemitripteridae | *Blepsias* | *cirrhosus* | 500 | Benthic | Moderate | Inshore | Temperate | + | [32] |
|  | Hemitripteridae | *Hemitripterus* | *americanus* | 505 |  |  |  |  | ? | [11] |
|  | Hemitripteridae | *Hemitripterus* | *villosus* | 503 | Benthic | Moderate | Inshore | Temperate | + | [32] |
|  | Hemitripteridae | *Nautichthys* | *oculofasciatus* | 501 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Hexagrammidae | *Hexagrammos* | *decagrammus* | 497 | Pelagic | Shallow | Inshore | Temperate | + | [7] |
|  | Hexagrammidae | *Hexagrammos* | *octogrammus* | 523 | Pelagic | Moderate | Inshore | Temperate | + | [32] |
|  | Hexagrammidae | *Hexagrammos* | *stelleri* | 496 | Benthic | Deep | Inshore | Temperate | + | [7] |
|  | Hexagrammidae | *Ophiodon* | *elongatus* | 499 | Pelagic | Deep | Inshore | ‡ | + | [7] |
|  | Hexagrammidae | *Pleurogrammus* | *azonus* | 504 |  |  |  |  | – | [32] |
|  | Ictaluridae | *Ameiurus* | *catus* | 541 | Benthic | Shallow | Freshwater | Temperate | + | [58] |
|  | Liparidae | *Liparis* | *dennyi* | 494 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Liparidae | *Liparis* | *florae* | 495 | Benthic | Shallow | Inshore | Temperate | + | [7] |
|  | Liparidae | *Liparis* | *pulchellus* | 490 | Benthic | Moderate | Inshore | Temperate | + | [7] |
|  | Liparidae | *Liparis* | *greeni* | 495 |  |  |  |  | – | [7] |
|  | Psychrolutidae | *Cottunculus* | *thomsonii* | 486 |  |  |  |  | ? | [14] |
|  | Psychrolutidae | *Dasycottus* | *setiger* | 485 | Benthic | Deep | Inshore | ‡ | + | [7] |
|  | Psychrolutidae | *Gilbertidia* | *sigalutes* | 496 |  |  |  |  | – | [7] |
|  | Psychrolutidae | *Psychrolutes* | *paradoxus* | 483 |  |  |  |  | – | [7] |
|  | Rhamphocottidae | *Rhamphocottus* | *richardsonii* | 493 | Pelagic | Moderate | Inshore | Temperate | + | [7] |
|  | Scorpaenidae | *Dendrochirus* | *zebra* | 501 | Pelagic | Shallow | Offshore | Tropical | + | [38] |
|  | Scorpaenidae | *Scorpaena* | *porcus* | 506 | Benthic | Deep | Inshore | ‡ | + | [21] |
|  | Sebastidae | *Sebastes* | *auriculatus* | 498 | Pelagic | Moderate | Inshore | Temperate | + | [7] |
|  | Sebastidae | *Sebastes* | *caurinus* | 496 | Pelagic | Moderate | Inshore | Temperate | + | [7] |
|  | Sebastidae | *Sebastes* | *empaeus* | 493 | Pelagic | Moderate | Offshore | Temperate | + | [7] |
|  | Sebastidae | *Sebastes* | *flavidus* | 497 |  |  |  |  | ? | [7] |
|  | Sebastidae | *Trachyscorpia* | *cristulata* | 485 |  |  |  |  | ? | [14] |
|  | Triglidae | *Chelidonichthys* | *lucerna*§ | 502 | Benthic | Moderate | Inshore | Temperate | + | [38] |
|  | Triglidae | *Eutrigla* | *gurnardus* | 502 | Benthic | Deep | Inshore | ‡ | + | [38] |
| Siluriformes | Gonostomatidae | *Gonostoma* | *atlanticum* | 484 |  |  |  |  | ? | [52] |
|  | Ictaluridae | *Ameiurus* | *melas* | 541 | Benthic | Shallow | Freshwater | Temperate | + | [58] |
|  | Ictaluridae | *Ictalurus* | *punctatus*§ | 542 |  |  |  |  | – | [58] |
| Stomiiformes | Aulostomidae | *Aulostomus* | *chinensis* | 494 | Pelagic | Moderate | Offshore | Temperate | + | [41] |
|  | Gonostomatidae | *Gonostoma* | *denudatum* | 482 |  |  |  |  | ? | [50] |
|  | Gonostomatidae | *Sigmops* | *bathyphilus*§ | 481 |  |  |  |  | ? | [51] |
|  | Gonostomatidae | *Sigmops* | *elongatus*§ | 484 |  |  |  |  | ? | [50] |
|  | Phosichthyidae | *Ichthyococcus* | *ovatus* | 487 |  |  |  |  | ? | [52] |
|  | Sternoptychidae | *Argyropelecus* | *aculeatus* | 475 |  |  |  |  | ? | [50] |
|  | Sternoptychidae | *Argyropelecus* | *gigas* | 477 |  |  |  |  | ? | [51] |
|  | Sternoptychidae | *Polyipnus* | *polli* | 483 |  |  |  |  | ? | [13] |
|  | Sternoptychidae | *Sternoptyx* | *diaphana* | 478 |  |  |  |  | ? | [51] |
|  | Sternoptychidae | *Sternoptyx* | *pseudobscura* | 479 |  |  |  |  | ? | [51] |
|  | Sternoptychidae | *Valenciennellus* | *tripunctulatus* | 480 |  |  |  |  | ? | [51] |
|  | Stomiidae | *Bathophilus* | *brevis* | 483 |  |  |  |  | ? | [52] |
|  | Stomiidae | *Borostomias* | *elucens* | 482 |  |  |  |  | ? | [52] |
|  | Stomiidae | *Chauliodus* | *danae* | 484 |  |  |  |  | ? | [51] |
|  | Stomiidae | *Echiostoma* | *barbatum* | 483 |  |  |  |  | ? | [51] |
|  | Stomiidae | *Eustomias* | *obscurus* | 485 |  |  |  |  | ? | [51] |
|  | Stomiidae | *Idiacanthus* | *fasciola* | 483 |  |  |  |  | ? | [51] |
|  | Stomiidae | *Malacosteus* | *niger* | 522 |  |  |  |  | ? | [5] ; [51] |
|  | Stomiidae | *Melanostomias* | *niger* | 483 |  |  |  |  | ? | [51] |
|  | Stomiidae | *Neonesthes* | *capensis* | 483 |  |  |  |  | ? | [51] |
|  | Stomiidae | *Pachystomias* | *microdon* | 522 |  |  |  |  | ? | [51] |
|  | Stomiidae | *Photonectes* | *braueri* | 483 |  |  |  |  | ? | [51] |
|  | Stomiidae | *Rhadinesthes* | *decimus* | 480 |  |  |  |  | ? | [51] |
| Stylephoriformes | Stylephoridae | *Stylephorus* | *chordatus* | 470 |  |  |  |  | ? | [52] |
| Sygnathiformes | Balistidae | *Canthidermis* | *maculata*§ | 486 | Pelagic | Moderate | Offshore | Temperate | + | [41] |
|  | Syngnathidae | *Hippocampus* | *angustus*§ | 500 | Pelagic | Shallow | Offshore | Temperate | + | [47] |
|  | Syngnathidae | *Hippocampus* | *barbouri* | 499 | Pelagic | Shallow | Offshore | Tropical | + | [47] |
|  | Syngnathidae | *Nerophis* | *ophidion* | 500 |  |  |  |  | ? | [29] |
|  | Syngnathidae | *Stigmatopora* | *argus* | 502 | Pelagic | Shallow | Inshore | Temperate | + | [47] |
|  | Syngnathidae | *Syngnathus* | *leptorhynchus* | 499 | Pelagic | Shallow | Inshore | Temperate | + | [7] |
| Tetraodontiformes | Balistidae | *Sufflamen* | *bursa* | 487 | Benthic | Shallow | Offshore | Tropical | + | [41] |
|  | Monacanthidae | *Pergavor* | *aspricaudus* | 492 |  |  |  |  | – | [41] |
|  | Monacanthidae | *Pergavor* | *spilosoma* | 494 |  |  |  |  | – | [41] |
|  | Ostraciidae | *Ostracion* | *meleagris* | 495 |  |  |  |  | – | [41] |
|  | Tetraodontidae | *Arothron* | *meleagris* | 493 |  |  |  |  | – | [41] |
| Trachichthyiformes | Anoplogastridae | *Anoplogaster* | *cornuta* | 482 |  |  |  |  | ? | [50] |
|  | Trachichthyidae | *Hoplostethus* | *atlanticus* | 482 |  |  |  |  | ? | [14] |
|  | Trachichthyidae | *Hoplostethus* | *mediterraneus mediterraneus* | 483 |  |  |  |  | ? | [14] |
| Zeiformes | Parazenidae | *Cyttopsis* | *roseus* | 478 |  |  |  |  | ? | [13] |

†, Adult designations include mature specimens present (+) in the phylogeny ( Rabosky *et al.*, 2013), absent from the phylogeny (–), or specimen age is unknown (?).  ‡, Deep-water species excluded from the temperature analysis; §, species whose names appear differently in the publication; synonymized names of species listed in the phylogeny were used.

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