Electronic Supplementary Material 1. List of coral genera and fish species in the South China Sea based on Gomez *et al*., 1994; Nañola *et al*., 2006; Nañola *et al*., 2010; Huang *et al*., 2015; and Licuanan *et al*., 2017. Check marks indicate that these taxa were present in the upper mesophotic coral ecosystems of Luzon Strait, Palawan and KIG (Kalayaan Island Group) within the West Philippine Sea.

|  |  |
| --- | --- |
| Species | Presence or absence |
|  |  |
| **Coral genera** |  |
|  |  |
| Acanthastrea |  |
| Acropora |  |
| Alveopora |  |
| Astreopora |  |
| Caulastrea |  |
| Ctenactis |  |
| Cycloseris |  |
| Cynarina |  |
| Cyphastrea |  |
| Diploastrea |  |
| Duncanopsammia |  |
| Echinopora |  |
| Euphyllia |  |
| Favia |  |
| Favites |  |
| Fungia |  |
| Galaxea |  |
| Gardineroseris |  |
| Goniastrea |  |
| Goniopora |  |
| HelioFungia |  |
| Heliopora |  |
| Herpolitha |  |
| Hydnophora |  |
| Isopora |  |
| Leptoria |  |
| Leptoseris |  |
| Lithophyllon |  |
| Lobophyllia |  |
| Merulina |  |
| Millepora |  |
| Montastrea |  |
| Montipora |  |
| Mycedium |  |
| Oxypora |  |
| Pachyseris |  |
| Pectinia |  |
| Physogyra |  |
| Platygyra |  |
| Plerogyra |  |
| Pocillopora |  |
| Podabacia |  |
| Porites |  |
| Scapophyllia |  |
| Scolymia |  |
| Seriatopora |  |
| Stylophora |  |
| Trachyphyllia |  |
| Tubipora |  |
| Turbinaria |  |
| Zoopilus |  |
|  |  |
| **Fish species** |  |
|  |  |
| *Abudefduf sexfasciatus* |  |
| *Acanthurus auranticavus* |  |
| *Acanthurus japonicus* |  |
| *Acanthurus nigrofuscus* |  |
| *Acanthurus pyroferus* |  |
| *Acanthurus thompsoni* |  |
| *Amblyglyphidodon aureus* |  |
| *Amblyglyphidodon leucogaster* |  |
| *Amphiprion clarkii* |  |
| *Amphiprion frenatus* |  |
| *Anampses twistii* |  |
| *Aphareus furca* |  |
| *Apolemichthys trimaculatus* |  |
| *Balistapus undulatus* |  |
| *Balistoides conspicillum* |  |
| *Bodianus anthioides* |  |
| *Bodianus axillaris* |  |
| *Bodianus diana* |  |
| *Bodianus loxozonus* |  |
| *Bodianus mesothorax* |  |
| *Canthigaster papua* |  |
| *Carangoides orthogrammus* |  |
| *Caranx melampygus* |  |
| *Centropyge ferrugatus* |  |
| *Centropyge heraldi* |  |
| *Centropyge vroliki* |  |
| *Cephalopholis argus* |  |
| *Cephalopholis boenak* |  |
| *Cephalopholis urodeta* |  |
| *Cetoscarus bicolor* |  |
| *Chaetodon baronessa* |  |
| *Chaetodon kleinii* |  |
| *Chaetodon melannotus* |  |
| *Chaetodon octofasciatus* |  |
| *Chaetodon xanthurus* |  |
| *Cheilinus chlorourus* |  |
| *Cheilinus fasciatus* |  |
| *Cheilodipterus macrodon* |  |
| *Chelmon rostratus* |  |
| *Chlorurus microrhinos* |  |
| *Chlorurus sordidus* |  |
| *Chromis atripes* |  |
| *Chromis chrysura* |  |
| *Chromis lineata* |  |
| *Chromis margaritifer* |  |
| *Chromis ovatiformes* |  |
| *Chromis retrofasciata* |  |
| *Chromis scotochiloptera* |  |
| *Chromis xanthura* |  |
| *Chrysiptera rollandi* |  |
| *Cirrhilabrus cyanopleura* |  |
| *Cirrhitichthys falco* |  |
| *Ctenochaetus binotatus* |  |
| *Ctenochaetus striatus* |  |
| *Dascyllus reticulatus* |  |
| *Dascyllus trimaculatus* |  |
| *Epibulus insidiator* |  |
| *Epinephelus fasciatus* |  |
| *Forcipiger flavissimus* |  |
| *Forcipiger longirostris* |  |
| *Genicanthus watanabei* |  |
| *Gnathodentex aureolineatus* |  |
| *Gomphosus varius* |  |
| *Halichoeres hortulanus* |  |
| *Halichoeres melanochir* |  |
| *Halichoeres nebulosus* |  |
| *Halichoeres scapularis* |  |
| *Hemiglyphidodon plagiometopon* |  |
| *Hemitaurichthys polylepis* |  |
| *Heniochus chrysostomus* |  |
| *Heniochus pleurotaenia* |  |
| *Labracinus cyclophthalmus* |  |
| *Labrichthys unilineatus* |  |
| *Labroides dimidiatus* |  |
| *Lethrinus olivaceus* |  |
| *Lutjanus carponotatus* |  |
| *Lutjanus kasmira* |  |
| *Macolor macularis* |  |
| *Macropharyngodon meleagris* |  |
| *Meiacanthus atrodorsalis* |  |
| *Melichthys vidua* |  |
| *Monotaxis grandoculis* |  |
| *Mulloidichthys vanicolensis* |  |
| *Myripristis kuntee* |  |
| *Myripristis murdjan* |  |
| *Naso caeruleacauda* |  |
| *Naso hexacanthus* |  |
| *Naso lituratus* |  |
| *Naso lopezi* |  |
| *Nemateleotris magnifica* |  |
| *Neoglyphidodon nigroris* |  |
| *Neopomacentrus anabatoides* |  |
| *Odonus niger* |  |
| *Oxycheilinus digramma* |  |
| *Oxycheilinus unifasciatus* |  |
| *Paracirrhites forsteri* |  |
| *Parupeneus bifasciatus* |  |
| *Parupeneus cyclostomus* |  |
| *Parupeneus multifasciatus* |  |
| *Parupeneus pleurostigma* |  |
| *Pentapodus caninus* |  |
| *Pentapodus trivittatus* |  |
| *Plectorhinchus lessonii* |  |
| *Plectorhinchus pictus* |  |
| *Plectorhinchus vittatus* |  |
| *Plectroglyphidodon lacrymatus* |  |
| *Pomacanthus imperator* |  |
| *Pomacanthus semicircularis* |  |
| *Pomacanthus sexstriatus* |  |
| *Pomacentrus alexanderae* |  |
| *Pomacentrus lepidogenys* |  |
| *Pomacentrus moluccensis* |  |
| *Pomacentrus nigromarginatus* |  |
| *Pomacentrus philippinus* |  |
| *Pomacentrus stigma* |  |
| *Pomacentrus vaiuli* |  |
| *Pseudanthias pascalus* |  |
| *Pseudanthias tuka* |  |
| *Ptereleotris evides* |  |
| *Pterocaesio pisang* |  |
| *Pterocaesio tile* |  |
| *Pterois volitans* |  |
| *Pygoplites diacanthus* |  |
| *Rhinecanthus aculeatus* |  |
| *Sargocentron caudimaculatum* |  |
| *Scarus forsteni* |  |
| *Scarus niger* |  |
| *Scarus rivulatus* |  |
| *Scolopsis bilineata* |  |
| *Scolopsis ciliatus* |  |
| *Stethojulis bandanensis* |  |
| *Sufflamen bursa* |  |
| *Sufflamen chrysopterus* |  |
| *Thalassoma amblycephalum* |  |
| *Thalassoma hardwicke* |  |
| *Thalassoma lutescens* |  |
| Xanthichthys auromarginatus |  |
| Zanclus cornutus |  |