



REGULATION OF  
THE MINISTER OF MARINE AFFAIRS AND FISHERIES REPUBLIC OF INDONESIA  
NUMBER 41/PERMEN-KP/2014  
CONCERNING  
IMPORT PROHIBITION OF HAZARDOUS FISH SPECIES FROM OVERSEAS INTO THE  
TERRITORY OF REPUBLIC INDONESIA  
BY THE GRACE OF GOD ALMIGHTY  
THE MINISTER OF MARINE AFFAIRS AND FISHERY REPUBLIC OF INDONESIA,

Considering :

- a. that in order to preserve fish resources and its environment as well as to prevent the occurrence of matters which are hazardous to human, it is viewed as necessary to regulate import prohibition of hazardous fish from overseas into the territory of Republic of Indonesia;
- b. that Regulation of the Minister of Marine Affairs and Fisheries Republic of Indonesia Number PER.17/MEN/2009 concerning Import Prohibition of Several Hazardous Fishes from Overseas into the Territory of Republic of Indonesia need to be improved according to fish cultivation development;
- c. that based on the consideration as intended in item a and item b, requires the stipulation of Regulation of the Minister of Marine Affairs and Fisheries concerning Import Prohibition of Hazardous Fish Species from Overseas into the Territory of Republic of Indonesia;

In view of :

1. Law Number 31 Year 2004 concerning Fishery (State Gazette Year 2004 Number 118, Addendum Number 4433) as amended by Law Number 45 Year 2009 (State Gazette Year 2009 Number 154 Addendum Number 5073);

2. Presidential Regulation Number 47 Year 2009 concerning Formation and Organization of State Ministry as amended lastly by Presidential Regulation Number 13 Year 2014 (State Gazette Year 2014 Number 24);
3. Presidential Regulation Number 24 Year 2010 concerning Position, Task and Function of State Ministry, as well as Organization Structure, Task and Function of Echelon I State Ministries as amended lastly by Presidential Regulation Number 14 Year 2014 (State Gazette Year 2014 Number 25);
4. Decree of the President of Republic of Indonesia Number 84/P Year 2009 as amended by Decree of the President of Republic of Indonesia Number 54/P Year 2014;
5. Regulation of the Minister of Marine Affairs and Fisheries Number PER/.15/MEN/2010 concerning Organization and Work Procedure of the Ministry of Marine Affairs and Fisheries;

**DECIDES:**

To stipulate : **REGULATION OF THE MINISTER OF MARINE AFFAIRS AND FISHERIES CONCERNING IMPORT PROHIBITION OF HAZARDOUS FISH SPECIES INTO THE TERRITORY OF REPUBLIC OF INDONESIA.**

Article 1

In this Ministerial Regulation what is referred to as:

1. Hazardous fish species is certain fish species originating from outside of the territory of Republic of Indonesia that can be detrimental and/or harmful for the sustainability of fish resources, the environment and humans.
2. Fish is all types of organism in which all or part of its life cycle is in an aquatic environment.
3. Every person is individuals or corporation.
4. Corporation is a group of people and/or organized property in the form of legal entity or non-legal entity.
5. Minister is the Minister that organize government affairs in fisheries.
6. Director General is the Director General that performs technical task in fishery cultivation.

## Article 2

- (1) Every person is prohibited from importing hazardous fish species from overseas into the territory of Republic of Indonesia.
- (2) Hazardous fish species as intended in paragraph (1), is as listed in the Attachment which is an integral part of this Ministerial Regulation.
- (3) Exemption of importation of hazardous fish species as intended in paragraph (1), is for scientific purpose only that is research and/or exhibition/demonstration.
- (4) Exemption of importation of hazardous fish species as intended in paragraph (3), must obtain import permit from the Minister after obtaining technical consideration from the Director General.

## Article 3

Further provision regarding characteristic, description and picture of hazardous fish species is stipulated by Decree of the Director General.

## Article 4

At the time of enactment of this Ministerial Regulation, Regulation of the Minister of Marine Affairs and Fisheries Number PER.17/MEN/2009 concerning Import Prohibition of Several Hazardous Fish Species from Overseas into the Territory of Republic of Indonesia is revoked and declared invalid.

## Article 5

This Ministerial Regulation is enacted on the date of its legislation.

For public cognizance, ordering the promulgation of this Ministerial Regulation by placing it in the State Gazette of Republic of Indonesia.

Stipulated in Jakarta

in 17 September 2014

MINISTER OF MARINE AFFAIRS AND FISHERIES

REPUBLIC OF INDONESIA,

SHARIF C. SUTARDJO

Legislated in Jakarta

on 23 September 2014

MINISTER OF JUSTICE AND HUMAN RIGHTS

REPUBLIC OF INDONESIA,

AMIR SYAMSUDIN

STATE GAZETTE OF REPUBLIC OF INDONESIA YEAR 2014 NUMBER 1370

ATTACHMENT  
REGULATION OF THE MINISTER OF MARINE AFFAIRS  
AND FISHERIES OF THE REPUBLIC OF INDONESIA  
NUMBER 41/PERMEN-KP/2014  
CONCERNING IMPORT PROHIBITION OF HAZARDOUS FISH  
SPECIES FROM OVERSEAS INTO THE TERRITORY OF  
REPUBLIC OF INDONESIA

IMPORT PROHIBITON OF HAZARDOUS FISH SPECIES FROM OVERSEAS INTO THE TERRITORY OF REPUBLIC INDONESIA

| NO | SCIENTIFIC NAME OF FISH TYPE     | COMMON/TRADE  | FAMILI      | GROUP  | NOTE     |
|----|----------------------------------|---|-------------|--------|----------|
| 1  | <i>Acanthogobius flavimanus</i>  | yellowfin goby  | Gobiidae    | pisces | Figure 1 |
| 2  | <i>Aequidens rivulatus</i>       | green terror, gold saum   | Cichlidae   | pisces | Figure 2 |
| 3  | <i>Alosa pseudoharengus</i>      | alewife, bigeye herring, branch herring, freshwater herring, gray herring, grayback, kyack, mooneye, sawbelly, white herring                            | Clupeidae   | pisces | Figure 3 |
| 4  | <i>Amatitlania nigrofasciata</i> | convict cichlid   | Cichlidae   | pisces | Figure 4 |
| 5  | <i>Ameiurus nebulosus</i>        | brown bullhead, bullhead, catfish, common bullhead, common catfish, horned pout, hornpout, marbled bullhead, minister, mudcat, northern brown bullhead. | Ictaluridae | pisces | Figure 5 |
| 6  | <i>Amphilophus alfari</i>        | pastel chiclid  | Cichlidae   | pisces | Figure 6 |
| 7  | <i>Amphilophus citrinellus</i>   | midas chiclid   | Cichlidae   | pisces | Figure 7 |
| 8  | <i>Anguilla rostrata</i>         | american eel  | Anguillidae | pisces | Figure 8 |

| NO | SCIENTIFIC NAME OF FISH TYPE  | COMMON/TRADE NAME  | FAMILI                  | GROUP           | NOTE      |
|----|---|--|-------------------------|-----------------|-----------|
| 9  | <i>Arapaima gigas</i>   | <i>giant arapaima, pirarucu, paiche</i>  | <i>Arapaimidae</i>      | <i>pisces</i>   | Figure 9  |
| 10 | <i>Arapaima leptosome</i>   | <i>torpedo-shaped Arapaima</i>   | <i>Arapaimidae</i>      | <i>pisces</i>   | Figure 10 |
| 11 | <i>Astyanax fasciatus</i>   | <i>banded astyanax</i>   | <i>Characidae</i>       | <i>pisces</i>   | Figure 11 |
| 12 | <i>Atractosteus</i> spp.  | <i>alligator gar, cuban gar, tropical gar</i>  | <i>Lepisosteidae</i>    | <i>pisces</i>   | Figure 12 |
| 13 | <i>Atractosteus spatula</i>   | -  | -                       | <i>pisces</i>   | Figure 13 |
| 14 | <i>Batillaria attramentaria</i>                                       | <i>asian estaurine mudsnail, Asian horn snail, japanese false cerith, Japanese mud snail, Japanese snail</i>   | <i>Batillariidae</i>    | <i>mollusca</i> | Figure 14 |
| 15 | <i>Bellamya chinensis</i>   | <i>asian apple snail, asian freshwater snail, chinese mystery snail, chinese mysterysnail, mystery snail, oriental mystery snail, trapdoor snail</i> | <i>Viviparidae</i>      | <i>mollusca</i> | Figure 15 |
| 16 | <i>Boonea bisuturalis</i>   | <i>two-groove odostome</i>   | <i>Pyramidellidae</i>   | <i>mollusca</i> | Figure 16 |
| 17 | <i>Bramocharax bransfordii</i>  | <i>long jaw tetra</i>  | <i>Characidae</i>       | <i>pisces</i>   | Figure 17 |
| 18 | <i>Branchioica bertonii</i><br>( <i>Paravandellia oxyptera</i> )      | <i>pantanal parasitic catfish</i>  | <i>Trichomycteridae</i> | <i>pisces</i>   | Figure 18 |
| 19 | <i>Branchioica magdalenae</i><br>( <i>Paravandellia phaneronema</i> ) | <i>pencil catfish</i>  | <i>Trichomycteridae</i> | <i>pisces</i>   | Figure 19 |
| 20 | <i>Brycon hilarii</i>   | <i>piraputanga fish</i>  | <i>Characidae</i>       | <i>pisces</i>   | Figure 20 |
| 21 | <i>Catlocarpio siamensis</i>  | <i>siamese giant carp</i>  | <i>Cyprinidae</i>       | <i>pisces</i>   | Figure 21 |

| NO | SCIENTIFIC NAME OF FISH TYPE   | COMMON/TRADE NAME   | FAMILI              | GROUP             | NOTE      |
|----|--------------------------------|---|---------------------|-------------------|-----------|
| 22 | <i>Carcinus maenas</i>         | <i>european green crab, european shore crab, green crab, shore crab</i>       | <i>Balanidae</i>    | <i>crustacean</i> | Figure 22 |
| 23 | <i>Ceratostoma inornatum</i>   | <i>asian drill, asian oyster drill, Japanese oyster drill</i>                 | <i>Muricidae</i>    | <i>mollusca</i>   | Figure 23 |
| 24 | <i>Channa argus</i>            | <i>northern snakehead, ocellated snakehead, amur snakehead</i>                | <i>Channidae</i>    | <i>pisces</i>     | Figure 24 |
| 25 | <i>Channa marulius</i>         | <i>bullseye snakehead, giant snakehead, great snakehead, indian snakehead</i> | <i>Channidae</i>    | <i>pisces</i>     | Figure 25 |
| 26 | <i>Charybdis hellerii</i>      | <i>indo-pacific swimming crab, spiny hands</i>                                | <i>Portunidae</i>   | <i>crustacean</i> | Figure 26 |
| 27 | <i>Charybdis japonica</i>      | <i>asian crab, asian paddle crab, blue crab, paddle crab, swimming crab</i>   | <i>Portunidae</i>   | <i>crustacean</i> | Figure 27 |
| 28 | <i>Chthamalus proteus</i>      | <i>atlantic barnacle, caribbean barnacle</i>                                  | <i>Chthamalidae</i> | <i>crustacean</i> | Figure 28 |
| 29 | <i>Cichla ocellaris</i>        | <i>peacock bass, peacock cichlid</i>  | <i>Cichlidae</i>    | <i>pisces</i>     | Figure 29 |
| 30 | <i>Cichla piquiti</i>          | <i>blue azul</i>  | <i>Cichlidae</i>    | <i>pisces</i>     | Figure 30 |
| 31 | <i>Cichla melaniae</i>         | <i>lower xingu peacock</i>  | <i>Cichlidae</i>    | <i>pisces</i>     | Figure 31 |
| 32 | <i>Cichla sp.</i>              | <i>peacock bass/peacock cichlid</i>   | <i>Cichlidae</i>    | <i>pisces</i>     | Figure 32 |
| 33 | <i>Cichlasoma trimaculatum</i> | <i>trimac cichlid</i>   | <i>Cichlidae</i>    | <i>pisces</i>     | Figure 33 |
| 34 | <i>Cichlasoma urophthalmus</i> | <i>mayan cichlid, mexican mojarra</i>   | <i>Cichlidae</i>    | <i>pisces</i>     | Figure 34 |

| NO | SCIENTIFIC NAME OF FISH TYPE          | COMMON/TRADE NAME   | FAMILI                 | GROUP             | NOTE      |
|----|---------------------------------------|---|------------------------|-------------------|-----------|
| 35 | <i>Colomesus psittacus</i>            | <i>banded puffer, banded pipefish, parrot pufferfish</i>  | <i>Tetraodontidae</i>  | <i>pisces</i>     | Figure 35 |
| 36 | <i>Coreoperca kawamebari</i>          | <i>japanese perch</i>   | <i>Percichthyidae</i>  | <i>pisces</i>     | Figure 36 |
| 37 | <i>Corbicula fluminea</i>             | <i>asian clam, Asiatic clam, prosperity clam</i>  | <i>Corbiculidae</i>    | <i>mollusca</i>   | Figure 37 |
| 38 | <i>Crassostrea gigas</i>              | <i>giant oyster, giant pacific oyster, immigrant oyster, Japanese oyster, miyagi oyster, Pacific oyster</i> | <i>Ostreidae</i>       | <i>mollusca</i>   | Figure 38 |
| 39 | <i>Crepidula fornicata</i>            | <i>american limpet</i>  | <i>Calyptraeidae</i>   | <i>mollusca</i>   | Figure 39 |
| 40 | <i>Cyprinella lutrensis</i>           | <i>red shiner</i>   | <i>Cyprinidae</i>      | <i>pisces</i>     | Figure 40 |
| 41 | <i>Dreissena bugensis</i>             | <i>quagga mussel</i>  | <i>Dreissenidae</i>    | <i>mollusca</i>   | Figure 41 |
| 42 | <i>Dreissena polymorpha</i>           | <i>zebra mussel</i>   | <i>Dreissenidae</i>    | <i>mollusca</i>   | Figure 42 |
| 43 | <i>Electrophorus electricus</i>       | <i>electric eel</i>   | <i>Electrophoridae</i> | <i>pisces</i>     | Figure 43 |
| 44 | <i>Eleutherodactylus coqui</i>        | <i>caribbean tree frog, common coqui</i>  | <i>Leptodactylidae</i> | <i>amphibian</i>  | Figure 44 |
| 45 | <i>Eleutherodactylus johnstonei</i>   | <i>lesser antillean whistling frog, johnstone's robber frog, hylode de johnstone (French)</i>               | <i>Leptodactylidae</i> | <i>amphibian</i>  | Figure 45 |
| 46 | <i>Eleutherodactylus planirostris</i> | <i>greenhouse frog</i>  | <i>Leptodactylidae</i> | <i>amphibian</i>  | Figure 46 |
| 47 | <i>Elminius modestus</i>              | <i>australian barnacle</i>  | <i>Balanidae</i>       | <i>crustacean</i> | Figure 47 |
| 48 | <i>Eriocheir sinensis</i>             | <i>chinese freshwater edible crab, chinese mitten crab, Chinese river crab</i>                              | <i>Varunidae</i>       | <i>crustacean</i> | Figure 48 |

| NO | SCIENTIFIC NAME OF FISH TYPE      | COMMON/TRADE NAME   | FAMILI              | GROUP             | NOTE      |
|----|-----------------------------------|---|---------------------|-------------------|-----------|
| 49 | <i>Esox americanus</i>            | <i>redfin pickerel</i>  | <i>Esocidae</i>     | <i>pisces</i>     | Figure 49 |
| 50 | <i>Esox lucius</i>                | <i>northern pike</i>  | <i>Esocidae</i>     | <i>pisces</i>     | Figure 50 |
| 51 | <i>Esox masquinongy</i>           | <i>muskellunge, allegheny river pike</i>                                | <i>Esocidae</i>     | <i>pisces</i>     | Figure 51 |
| 52 | <i>Euglandina rosea</i>           | <i>cannibal snail, rosy wolf snail</i>                                  | <i>Spiraxidae</i>   | <i>mollusca</i>   | Figure 52 |
| 53 | <i>Gastrophryne carolinensis</i>  | <i>eastern narrow-mouthed toad</i>                                      | <i>Microhylidae</i> | <i>amphibian</i>  | Figure 53 |
| 54 | <i>Gemma gemma</i>                | <i>amethyst gem clam, gem clam</i>                                      | <i>Veneridae</i>    | <i>mollusca</i>   | Figure 54 |
| 55 | <i>Geukensia demissa</i>          | <i>atlantic ribbed marsh mussel, ribbed horse mussel, ribbed mussel</i> | <i>Mytilidae</i>    | <i>mollusca</i>   | Figure 55 |
| 56 | <i>Glyptoperichthys gibbiceps</i> | <i>sailfin pleco, leopard pleco</i>                                     | <i>Loricariidae</i> | <i>pisces</i>     | Figure 56 |
| 57 | <i>Gymnocephalus cernuus</i>      | <i>eurasian rufe</i>  | <i>Percidae</i>     | <i>pisces</i>     | Figure 57 |
| 58 | <i>Helix aspersa</i>              | <i>brown garden snail, European brown snail</i>                         | <i>Helicidae</i>    | <i>mollusca</i>   | Figure 58 |
| 59 | <i>Hemichromis elongatus</i>      | <i>banded jewel cichlid</i>   | <i>Cichlidae</i>    | <i>pisces</i>     | Figure 59 |
| 60 | <i>Hemigrapsus sanguineus</i>     | <i>asian shore crab, japanese shore crab</i>                            | <i>Varunidae</i>    | <i>crustacean</i> | Figure 60 |
| 61 | <i>Hydrocynus vittatus</i>        | <i>african tigerfish</i>  | <i>Alestidae</i>    | <i>pisces</i>     | Figure 61 |
| 62 | <i>Hydrocynus goliath</i>         | <i>goliath tigerfish</i>  | <i>Alestidae</i>    | <i>pisces</i>     | Figure 62 |
| 63 | <i>Hydrolycus armatus</i>         | <i>tetra vampir, fish puppy</i>   | <i>Cynodontidae</i> | <i>pisces</i>     | Figure 63 |

| NO | SCIENTIFIC NAME OF FISH TYPE                                  | COMMON/TRADE NAME   | FAMILI                                    | GROUP            | NOTE       |
|----|---|---|---|------------------|------------|
| 64 | <i>Ilyanassa obsoleta</i>                                     | <i>black dog whelk, common mudsnail, eastern mud nassa, eastern mud whelk, eastern mudsnail, mud basket snail, mud dog whelk, obsolete basket snail, worn-out dog whelk</i> | <i>Nassariidae</i>                        | <i>mollusca</i>  | Picture 64 |
| 65 | <i>Lates niloticus</i>  | <i>nile perch, victoria perch.</i>  | <i>Latidae</i>                            | <i>pisces</i>    | Picture 65 |
| 66 | <i>Lepisosteus oculatus</i>                                   | -   | -   | <i>pisces</i>    | Picture 66 |
| 67 | <i>Lepisosteus spp.</i>                                       | <i>spotted gar, longnose gar, shortnose gar, florida gar</i>  | <i>Lepisosteidae</i>                      | <i>pisces</i>    | Picture 67 |
| 68 | <i>Lepomis auritus</i>  | <i>redbreast sunfish</i>  | <i>Centrarchidae</i>                      | <i>pisces</i>    | Picture 68 |
| 69 | <i>Leuciscus idus</i>   | <i>golden orfe, ide, orfe, silver orfe.</i>   | <i>Cyprinidae</i>                         | <i>pisces</i>    | Picture 69 |
| 70 | <i>Limnoperna fortunei</i>                                    | <i>golden mussel</i>  | <i>Mytilidae</i>                          | <i>mollusca</i>  | Picture 70 |
| 71 | <i>Lithobates catesbeianus</i><br>( <i>Rana catesbeiana</i> ) | <i>bullfrog</i>   | <i>Ranidae</i>                            | <i>amphibian</i> | Picture 71 |
| 72 | <i>Litoria aurea</i>  | <i>golden-bell frog, green frog, green- and-golden bell frog, green-and- golden swamp frog</i>  | <i>Hylidae</i>                            | <i>amphibian</i> | Picture 72 |
| 73 | <i>Littorina littorea</i>                                     | <i>common periwinkle</i>  | <i>Littorinidae</i>                       | <i>mollusca</i>  | Picture 73 |
| 74 | <i>Megalops atlanticus</i>                                    | <i>atlantic tarpon</i>  | <i>Megalopidae</i><br>( <i>Elopidae</i> ) | <i>pisces</i>    | Picture 74 |
| 75 | <i>Melanochromis auratus</i>                                  | <i>auratus, malawi golden cichlid</i>   | <i>Cichlidae</i>                          | <i>pisces</i>    | Picture 75 |

| NO | SCIENTIFIC NAME OF FISH TYPE      | COMMON/TRADE NAME  | FAMILI              | GROUP             | NOTE       |
|----|-----------------------------------|--|---------------------|-------------------|------------|
| 76 | <i>Metynnis agrenteus</i>         | <i>silver dollar</i>   | <i>Characidae</i>   | <i>pisces</i>     | Picture 76 |
| 77 | <i>Micropterus salmoides</i>      | <i>black bass, green bass, large-mouth bass, largemouth bass, largemouth black bass, northern largemouth bass.</i>   | <i>Latidae</i>      | <i>pisces</i>     | Picture 77 |
| 78 | <i>Misgurnus anguillicaudatus</i> | <i>weather loach</i>   | <i>Cobitidae</i>    | <i>pisces</i>     | Picture 78 |
| 79 | <i>Morone americana</i>           | <i>silver perch, white perch, wreckfish</i>  | <i>Moronidae</i>    | <i>pisces</i>     | Picture 79 |
| 80 | <i>Musculista senhousia</i>       | <i>asian date mussel, asian mussel, cuckoo mussel, date mussel, green bagmussel, green mussel, hototogisu, Japanese mussel, senhouse mussel, Senhouse's mussel</i> | <i>Mytilidae</i>    | <i>mollusca</i>   | Picture 80 |
| 81 | <i>Mya arenaria</i>               | <i>eastern soft-shell clam</i>   | <i>Littorinidae</i> | <i>mollusca</i>   | Picture 81 |
| 82 | <i>Mytilopsis leucophaeata</i>    | <i>brackish water mussel, conrad's false mussel, dark false mussel</i>   | <i>Dreissenidae</i> | <i>mollusca</i>   | Picture 82 |
| 83 | <i>Mytilopsis sallei</i>          | <i>black striped mussel</i>  | <i>Dreissenidae</i> | <i>mollusca</i>   | Picture 83 |
| 84 | <i>Mytilus galloprovincialis</i>  | <i>bay mussel, blue mussel, mediterranean mussel</i>   | <i>Mytilidae</i>    | <i>mollusca</i>   | Picture 84 |
| 85 | <i>Neogobius melanostomus</i>     | <i>black spotted goby, round goby</i>  | <i>Gobiidae</i>     | <i>pisces</i>     | Picture 85 |
| 86 | <i>Orconectes rusticus</i>        | <i>rusty crayfish</i>  | <i>Cambaridae</i>   | <i>crustacean</i> | Picture 86 |
| 87 | <i>Orconectes virilis</i>         | <i>northern crayfish, virile crayfish</i>  | <i>Cambaridae</i>   | <i>crustacean</i> | Picture 87 |

| NO  | SCIENTIFIC NAME OF FISH TYPE      | COMMON/TRADE NAME  | FAMILI                  | GROUP             | NOTE        |
|-----|-----------------------------------|--|-------------------------|-------------------|-------------|
| 88  | <i>Osteopilus septentrionalis</i> | <i>cuban treefrog</i>  | <i>Hylidae</i>          | <i>amphibian</i>  | Picture 88  |
| 89  | <i>Ostrea edulis</i>              | <i>common oyster, edible oyster, european flat oyster, european oyster</i>     | <i>Ostreidae</i>        | <i>mollusca</i>   | Picture 89  |
| 90  | <i>Pacifastacus leniusculus</i>   | <i>californian crayfish, pacific crayfish, signal crayfish</i>                 | <i>Astacidae</i>        | <i>crustacean</i> | Picture 90  |
| 91  | <i>Paracanthopoma parva</i>       | -  | <i>Trichomycteridae</i> | <i>pisces</i>     | Picture 91  |
| 92  | <i>Parachromis managuensis</i>    | <i>jaguar guapote</i>  | <i>Cichlidae</i>        | <i>pisces</i>     | Picture 92  |
| 93  | <i>Parambassis sp</i>             | <i>hump head glassfish, glassperch</i>   | <i>Ambassidae</i>       | <i>pisces</i>     | Picture 93  |
| 94  | <i>Perca fluviatilis</i>          | <i>perch, european perch, eurasian perch, river perch</i>                      | <i>Percidae</i>         | <i>pisces</i>     | Picture 94  |
| 95  | <i>Perna perna</i>                | <i>brown mussel, mexilhao mussel</i>   | <i>Mytilidae</i>        | <i>mollusca</i>   | Picture 95  |
| 96  | <i>Petromyzon marinus</i>         | <i>great sea lamprey, lake lamprey, lamprey, lamprey eel, sea lamprey</i>      | <i>Petromyzontidae</i>  | <i>pisces</i>     | Picture 96  |
| 97  | <i>Phalloceros caudimaculatus</i> | <i>caudo, speckled mosquitofish, spottail mosquitofish, spotted livebearer</i> | <i>Poeciliidae</i>      | <i>pisces</i>     | Picture 97  |
| 98  | <i>Phoxinus phoxinus</i>          | <i>eurasian minnow, minnow, common minnow</i>                                  | <i>Cyprinidae</i>       | <i>pisces</i>     | Picture 98  |
| 99  | <i>Plectrochilus diabolicus</i>   | -  | <i>Trichomycteridae</i> | <i>pisces</i>     | Picture 99  |
| 100 | <i>Plectrochilus machadoi</i>     | -  | <i>Trichomycteridae</i> | <i>pisces</i>     | Picture 100 |

| NO  | SCIENTIFIC NAME OF FISH TYPE    | COMMON/TRADE NAME  | FAMILI                  | GROUP             | NOTE        |
|-----|---------------------------------|--|-------------------------|-------------------|-------------|
| 101 | <i>Plectrochilus saguineus</i>  | -  | <i>Trichomycteridae</i> | <i>pisces</i>     | Picture 101 |
| 102 | <i>Plectrochilus wieneri</i>    | <i>canero (Spanish)</i>  | <i>Trichomycteridae</i> | <i>pisces</i>     | Picture 102 |
| 103 | <i>Pomacea canaliculata</i>     | <i>apple snail, channeled apple snail, golden apple snail, golden kuhol, miracle snail</i>   | <i>Ampullariidae</i>    | <i>mollusca</i>   | Picture 103 |
| 104 | <i>Pomacea insularum</i>        | <i>channeled apple snail, island apple snail</i>   | <i>Ampullariidae</i>    | <i>mollusca</i>   | Picture 104 |
| 105 | <i>Porcellio scaber</i>         | <i>woodlouse</i>   | <i>Porcellionidae</i>   | <i>crustacean</i> | Picture 105 |
| 106 | <i>Potamocorbula amurensis</i>  | <i>amur river clam, amur river corbula, asian bivalve, asian clam, brackish- water corbula, chinese clam, marine clam</i>                          | <i>Cardiidae</i>        | <i>mollusca</i>   | Picture 106 |
| 107 | <i>Potamopyrgus antipodarum</i> | <i>jenkin's spire shell, New Zealand mudsnail</i>  | <i>Hydrobiidae</i>      | <i>mollusca</i>   | Picture 107 |
| 108 | <i>Pristobrycon striolatus</i>  | <i>pristo striolatus, striolatus, caribito</i>   | <i>Characidae</i>       | <i>pisces</i>     | Picture 108 |
| 109 | <i>Probarbus jullieni</i>       | <i>stripped barb</i>   | <i>Cyprinidae</i>       | <i>pisces</i>     | Picture 109 |
| 110 | <i>Procambarus clarkii</i>      | <i>louisiana crayfish, red swamp crayfish</i>  | <i>Cambaridae</i>       | <i>crustacean</i> | Picture 110 |
| 111 | <i>Pseudodiaptomus inopinus</i> | <i>asian calanoid copepod</i>  | <i>Diaptomidae</i>      | <i>crustacean</i> | Picture 111 |
| 112 | <i>Pterois volitans</i>         | <i>firefish, lionfish, lionfish scorpion, ornate butterfly-cod, red firefish, red lionfish, scorpion fish, turkeyfish, volitan lion, zebrafish</i> | <i>Scorpaenidae</i>     | <i>pisces</i>     | Picture 112 |

| NO  | SCIENTIFIC NAME OF FISH TYPE   | COMMON/TRADE NAME  | FAMILI              | GROUP            | NOTE        |
|-----|--|--|---------------------|------------------|-------------|
| 113 | <i>Pterygoplichthys anisitsi</i>                                       | southern sailfin catfish   | <i>Loricariidae</i> | <i>pisces</i>    | Picture 113 |
| 114 | <i>Pterygoplichthys disjunctivus</i>                                   | vermiculated sailfin catfish                                       | <i>Loricariidae</i> | <i>pisces</i>    | Picture 114 |
| 115 | <i>Pterygoplichthys multiradiatus</i>                                  | sailfish catfish   | <i>Loricariidae</i> | <i>pisces</i>    | Picture 115 |
| 116 | <i>Pterygoplichthys pardalis</i>                                       | amazon sailfin catfish   | <i>Loricariidae</i> | <i>pisces</i>    | Picture 116 |
| 117 | <i>Pterygoplichthys spp.</i>   | sailfin catfish  | <i>Loricariidae</i> | <i>pisces</i>    | Picture 117 |
| 118 | <i>Pygocentrus cariba</i>  | black spot piranha   | <i>Characidae</i>   | <i>pisces</i>    | Picture 118 |
| 119 | <i>Pygocentrus nattereri</i>   | red piranha, red bellied piranha                                   | <i>Characidae</i>   | <i>pisces</i>    | Picture 119 |
| 120 | <i>Pygopristsis denticulata</i><br>( <i>Serrasalmus denticulatus</i> ) | golden piranha, big toothed piranha                                | <i>Characidae</i>   | <i>pisces</i>    | Picture 120 |
| 121 | <i>Pylodictis olivaris</i>   | flathead catfish   | <i>Ictaluridae</i>  | <i>pisces</i>    | Picture 121 |
| 122 | <i>Rangia cuneata</i>  | atlantic rangia, common rangia,<br>wedge clam                      | <i>Mactridae</i>    | <i>mollusca</i>  | Picture 122 |
| 123 | <i>Rapana venosa</i>   | asian rapa whelk, rapa whelk, veined<br>rapa whelk, veined whelk   | <i>Muricidae</i>    | <i>mollusca</i>  | Picture 123 |
| 124 | <i>Rhinella marina</i><br>( <i>Bufo marinus</i> )                      | bufo toad, bullfrog, cane toad, giant<br>American toad, giant toad | <i>Bufo</i>         | <i>amphibian</i> | Picture 124 |
| 125 | <i>Rutilus rutilus</i>   | roach  | <i>Cyprinidae</i>   | <i>pisces</i>    | Picture 125 |
| 126 | <i>Sarotherodon occidentalis</i>                                       | perch africaine, west african tilapia                              | <i>Cichlidae</i>    | <i>pisces</i>    | Picture 126 |
| 127 | <i>Scardinius erythrophthalmus</i>                                     | rudd, redeye, pearl roach  | <i>Cyprinidae</i>   | <i>pisces</i>    | Picture 127 |

| NO  | SCIENTIFIC NAME OF FISH TYPE    | COMMON/TRADE NAME  | FAMILI                | GROUP             | NOTE        |
|-----|---------------------------------|--|-----------------------|-------------------|-------------|
| 128 | <i>Scinax ruber</i>             | <i>red snouted treefrog</i>  | <i>Hylidae</i>        | <i>amphibian</i>  | Picture 128 |
| 129 | <i>Scinax x-signatus</i>        | <i>african clawed frog, clawed frog, clawed toad, common platanna, upland clawed frog</i>  | <i>Hylidae</i>        | <i>amphibian</i>  | Picture 129 |
| 130 | <i>Semaprochilodus Insignis</i> | <i>american flagtail</i>   | <i>Callichthyidae</i> | <i>pisces</i>     | Picture 130 |
| 131 | <i>Serrasalmus gibbus</i>       | <i>gibbus piranha</i>  | <i>Loricariidae</i>   | <i>pisces</i>     | Picture 131 |
| 132 | <i>Serrasalmus rhombeus</i>     | <i>red eye piranha</i>   | <i>Loricariidae</i>   | <i>pisces</i>     | Picture 132 |
| 133 | <i>Serrasalmus sanchezi</i>     | <i>ruby-red piranha, ruby-red throated piranha</i>   | <i>Loricariidae</i>   | <i>pisces</i>     | Picture 133 |
| 134 | <i>Serrasalmus serrulatus</i>   | <i>serrated piranha, little saw piranha</i>  | <i>Loricariidae</i>   | <i>pisces</i>     | Picture 134 |
| 135 | <i>Serrasalmus spilopleura</i>  | <i>speckled piranha, gold spilopleura, ruby red piranha</i>  | <i>Loricariidae</i>   | <i>pisces</i>     | Picture 135 |
| 136 | <i>Sparus aurata</i>            | <i>gilthead, gilthead bream, gilthead, silver seabream, snapper, gilthead bream, gilt-head seabream</i>  | <i>Sparidae</i>       | <i>pisces</i>     | Picture 136 |
| 137 | <i>Sphaeroma quoianum</i>       | <i>australasian isopod, australian- new zealand boring isopod, burrowing australian isopod, burrowing isopod, mud-dwelling isopod, new zealand burrowing isopod, new zealand isopod, new zealand pillbug</i> | <i>Sphaeromatidae</i> | <i>crustacean</i> | Picture 137 |
| 138 | <i>Tetraodon duboisi</i>        | <i>ocellated puffer</i>  | <i>Tetraodontidae</i> | <i>pisces</i>     | Picture 138 |

| NO  | SCIENTIFIC NAME OF FISH TYPE       | COMMON/TRADE NAME   | FAMILI                  | GROUP           | NOTE       |
|-----|------------------------------------|---|-------------------------|-----------------|------------|
| 139 | <i>Tetraodon lineatus</i>          | <i>nile puffer, globe fish, fahaka puffer, coral butterfly, lined puffer</i>                | <i>Tetraodontidae</i>   | <i>pisces</i>   | Figure 139 |
| 140 | <i>Tetraodon mbu</i>               | <i>fresh water puffer fish, mbu puffer, giant puffer</i>                                    | <i>Tetraodontidae</i>   | <i>pisces</i>   | Figure 140 |
| 141 | <i>Tetraodon miurus</i>            | <i>stanleypool puffer</i>   | <i>Tetraodontidae</i>   | <i>pisces</i>   | Figure 141 |
| 142 | <i>Tilapia mariae</i>              | <i>spotted mangrove cichlid, black mangrove cichlid</i>                                     | <i>Cichlidae</i>        | <i>pisces</i>   | Figure 142 |
| 143 | <i>Tilapia sparrmanii</i>          | <i>banded tilapia</i>   | <i>Cichlidae</i>        | <i>pisces</i>   | Figure 143 |
| 144 | <i>Tilapia thollani</i>            | <i>slebra</i>   | <i>Cichlidae</i>        | <i>pisces</i>   | Figure 144 |
| 145 | <i>Tilapia zillii</i>              | <i>cichlid, redbelly tilapia, striped tilapia</i>   | <i>Cichlidae</i>        | <i>pisces</i>   | Figure 145 |
| 146 | <i>Tinca tinca</i>                 | <i>doctor fish, green tench</i>   | <i>Cyprinidae</i>       | <i>pisces</i>   | Figure 146 |
| 147 | <i>Tridentiger trigonocephalus</i> | <i>chameleon goby</i>   | <i>Gobiidae</i>         | <i>pisces</i>   | Figure 147 |
| 148 | <i>Urosalpinx cinerea</i>          | <i>american oyster drill, american tingle, american whelk tingle, atlantic oyster drill</i> | -                       | <i>mollusca</i> | Figure 148 |
| 149 | <i>Vandellia balzanii</i>          | -   | <i>Trichomycteridae</i> | <i>pisces</i>   | Figure 149 |
| 150 | <i>Vandellia beccarii</i>          | <i>nuoliloismonni (Finlandia)</i>   | <i>Trichomycteridae</i> | <i>pisces</i>   | Figure 150 |
| 151 | <i>Vandellia cirrhosa</i>          | <i>candiru</i>  | <i>Trichomycteridae</i> | <i>pisces</i>   | Figure 151 |

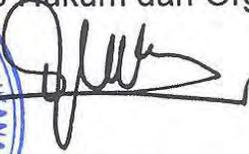
| NO  | SCIENTIFIC NAME OF FISH TYPE | COMMON/TRADE NAME   | FAMILI         | GROUP            | NOTE       |
|-----|------------------------------|---|----------------|------------------|------------|
| 152 | <i>Xenopus laevis</i>        | <i>african clawed frog (English), clawed frog (English), clawed toad (English), common platanna (English), glatter krallenfrosch (German), upland clawed frog (English)</i> | <i>Pipidae</i> | <i>amphibian</i> | Figure 152 |

MENTERI KELAUTAN DAN PERIKANAN  
REPUBLIC INDONESIA,

Ttd.

SHARIF C. SUTARDJO

Salinan sesuai dengan aslinya  
Kepala Biro Hukum dan Organisasi,



Hanung Cahyono



|   |  |  |
|---|--|--|
| <p>1.</p>                                  | <p>2.</p>                           | <p>3.</p>                           |
| <p><i>Acanthogobius flavimanus</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p>  | <p><i>Aequidens rivulatus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>  | <p><i>Alosa pseudoharengus</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p> |
| <p>4.</p>                                  | <p>5.</p>                           | <p>6.</p>                           |
| <p><i>Amatitlania nigrofasciata</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p> | <p><i>Ameiurus nebulosus</i></p> <p>Referensi:<br/><a href="http://ceb.wikipedia.org">http://ceb.wikipedia.org</a></p> | <p><i>Amphilophus alfari</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p>   |
| <p>7.</p>                                 | <p>8.</p>                         | <p>9.</p>                          |
| <p><i>Amphilophus citrinellus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>   | <p><i>Anguilla rostrata</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>    | <p><i>Arapaima gigas</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p>       |

|  |   |   |
|--|---|---|
| <p>10.</p>                              | <p>11.</p>                                   | <p>12.</p>   |
| <p><i>Arapaima leptosome</i></p> <p>Referensi:<br/><a href="http://carnivoraforum.com">http://carnivoraforum.com</a></p> | <p><i>Astyanax fasciatus</i></p> <p>Referensi : <a href="http://freshaquarium.about.com">http://freshaquarium.about.com</a></p> | <p><i>Atractosteus spp.</i></p> <p>Referensi:<br/><a href="http://www.texasfishingguides.org">http://www.texasfishingguides.org</a></p> |
| <p>13.</p>                              | <p>14</p>                                    | <p>15.</p>   |
| <p><i>Atractosteus spatula</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p>   | <p><i>Batillaria attramentaria</i></p> <p>Referensi:<br/><a href="http://www.wallawalla.edu">http://www.wallawalla.edu</a></p>  | <p><i>Bellamyia chinensis</i></p> <p>Referensi:<br/><a href="http://www.issg.org">http://www.issg.org</a></p>                           |
| <p>16.</p>                            | <p>17.</p>                                 | <p>18.</p>  |
| <p><i>Boonea bisuturalis</i></p> <p>Referensi:<br/><a href="http://www.gastropods.com">http://www.gastropods.com</a></p> | <p><i>Bramocharax bransfordii</i></p> <p>Referensi:<br/><a href="http://opefe.com">http://opefe.com</a></p>                     | <p><i>Branchioicabertonii (Paravandellioxyptera)</i></p>  |

|  |  |   |
|--|--|---|
| <p>19.</p>   | <p>20.</p>                                  | <p>21.</p>                                     |
| <p><i>Branchioicamagdalenae (Paravandelliaphaneronema)</i></p>   | <p><i>Brycon hilarii</i></p> <p>Referensi:<br/><a href="http://eol.org">http://eol.org</a></p>                                 | <p><i>Catlocarpio siamensis</i></p> <p>Referensi: <a href="http://megafishingthailand.com">http://megafishingthailand.com</a></p> |
| <p>22.</p>                        | <p>23.</p>                                  | <p>24.</p>                                     |
| <p><i>Carcinus maenas</i></p> <p>Referensi :<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> | <p><i>Ceratostoma inornatum</i></p> <p>Referensi:<br/><a href="http://ibis.geog.ubc.ca">http://ibis.geog.ubc.ca</a></p>        | <p><i>Channa argus</i></p> <p>Referensi:<br/><a href="http://nas.er.usgs.gov">http://nas.er.usgs.gov</a></p>                      |
| <p>25.</p>                       | <p>26.</p>                                  | <p>27.</p>                                    |
| <p><i>Channa marulius</i></p> <p>Referensi:<br/><a href="http://nas.er.usgs.gov">http://nas.er.usgs.gov</a></p>    | <p><i>Charybdis hellerii</i></p> <p>Referensi:<br/><a href="http://www.wildsingapore.com">http://www.wildsingapore.com</a></p> | <p><i>Charybdis japonica</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>              |

|   |   |   |
|---|---|---|
| <p>28.</p>                               | <p>29.</p>                                   | <p>30.</p>                             |
| <p><i>Chthamalus proteus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>      | <p><i>Cichla ocellaris</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>              | <p><i>Cichla piquiti</i></p> <p>Referensi:<br/><a href="http://www.acuteangling.com">http://www.acuteangling.com</a></p>  |
| <p>31.</p>                               | <p>32.</p>                                   | <p>33.</p>                             |
| <p><i>Cichla melaniae</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p>         | <p><i>Cichla sp.</i></p> <p>Referensi:<br/><a href="http://es.wikipedia.org">http://es.wikipedia.org</a></p>                    | <p><i>Cichlasoma trimaculatum</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> |
| <p>34.</p>                             | <p>35.</p>                                 | <p>36.</p>                           |
| <p><i>Cichlasoma urophthalmus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> | <p><i>Colomesus psittacus</i></p> <p>Referensi:<br/><a href="http://commons.wikimedia.org">http://commons.wikimedia.org</a></p> | <p><i>Coreoperca kawamebari</i></p> <p>Referensi :<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>  |

|  |   |  |
|--|---|--|
| <p>37.</p>    | <p>38.</p>                             | <p>39.</p>                                |
| <p><i>Corbicula fluminea</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                               | <p><i>Crassostrea gigas</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>       | <p><i>Crepidula fornicata</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>        |
| <p>40.</p>    | <p>41.</p>                             | <p>42.</p>                                |
| <p><i>Cyprinella lutrensis</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                             | <p><i>Dreissena bugensis</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>      | <p><i>Dreissena polymorpha</i></p> <p>Referensi :<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>      |
| <p>43.</p>   | <p>44.</p>                           | <p>45.</p>                              |
| <p><i>Electrophorus electricus</i></p> <p>Referensi: <a href="http://animals.nationalgeographic.com">http://animals.nationalgeographic.com</a></p> | <p><i>Eleutherodactylus coqui</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> | <p><i>Eleutherodactylus johnstonei</i></p> <p>Referensi:<br/><a href="http://amphibiaweb.org">http://amphibiaweb.org</a></p> |

|  |  |   |
|--|--|---|
| <p>46.</p>                                    | <p>47.</p>                              | <p>48.</p>                         |
| <p><i>Eleutherodactylu splanirostris</i></p> <p>Referensi:<br/><a href="http://nas.er.usgs.gov">http://nas.er.usgs.gov</a></p> | <p><i>Elminiusmodestus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>         | <p><i>Eriocheirsinisensis</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> |
| <p>49.</p>                                    | <p>50.</p>                              | <p>51.</p>                         |
| <p><i>Esox americanus</i></p> <p>Referensi :<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>             | <p><i>Esox lucius</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>              | <p><i>Esoxmasquinongy</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>     |
| <p>52.</p>                                  | <p>53.</p>                            | <p>54.</p>                       |
| <p><i>Euglandinarosea</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>              | <p><i>Gastrophrynecarolinensis</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> | <p><i>Gemma gemma</i></p> <p>Referensi:<br/><a href="http://people.bu.edu">http://people.bu.edu</a></p>               |

|   |  |  |
|---|--|--|
| <p>55.</p>   | <p>56.</p>                              | <p>57.</p>                                    |
| <p><i>Geukensia demissa</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                 | <p><i>Glyptoperichthys gibbiceps</i></p> <p>Referensi:<br/><a href="http://www.scotcat.com">http://www.scotcat.com</a></p> | <p><i>Gymnocephalus cernuus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>          |
| <p>58.</p>   | <p>59.</p>                              | <p>60.</p>                                    |
| <p><i>Helix aspersa</i></p> <p>Referensi:<br/><a href="http://commons.wikimedia.org">http://commons.wikimedia.org</a></p>           | <p><i>Hemichromis elongatus</i></p> <p>Referensi:<br/><a href="http://www.aquafish.net">http://www.aquafish.net</a></p>    | <p><i>Hemigrapsus sanguineus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>         |
| <p>61.</p>                                       | <p>62.</p>                            | <p>63.</p>                                  |
| <p><i>Hydrocynus vittatus</i></p> <p>Referensi:<br/><a href="http://www.aquascapeonline.com">http://www.aquascapeonline.com</a></p> | <p><i>Hydrocynus goliath</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>       | <p><i>Hydrolycus armatus</i></p> <p>Referensi:<br/><a href="http://forums.waterwolves.com">http://forums.waterwolves.com</a></p> |

|   |  |  |
|---|--|--|
| <p>64.</p>                                     | <p>65.</p>    | <p>66.</p>                                  |
| <p><i>Ilyanassa obsoleta</i></p> <p>Referensi:<br/><a href="http://www.jaxshells.org">http://www.jaxshells.org</a></p>          | <p><i>Lates niloticus</i></p> <p>Referensi:<br/><a href="http://eol.org">http://eol.org</a></p>  | <p><i>Lepisosteus oculatus</i></p> <p>Referensi: <a href="http://txmarspecies.tamug.edu">http://txmarspecies.tamug.edu</a></p> |
| <p>67.</p>                                     | <p>68.</p>    | <p>69.</p>                                  |
| <p><i>Lepisosteus spp.</i></p> <p>Referensi:<br/><a href="http://aquarismojumbo.com">http://aquarismojumbo.com</a></p>          | <p><i>Lepomis auritus</i></p> <p>Referensi:<br/><a href="http://www.tpwd.state.tx.us">http://www.tpwd.state.tx.us</a></p>                              | <p><i>Leuciscus idus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>               |
| <p>70.</p>                                   | <p>71.</p>    | <p>72.</p>                                |
| <p><i>Limnoperna fortunei</i></p> <p>Referensi:<br/><a href="http://www.seagrant.wisc.edu">http://www.seagrant.wisc.edu</a></p> | <p><i>Lithobates catesbeianus</i><br/><i>catesbeiana</i>) (<i>Rana</i></p> <p>Referensi:<br/><a href="http://www.issg.org">http://www.issg.org</a></p> | <p><i>Litoria aurea</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                |

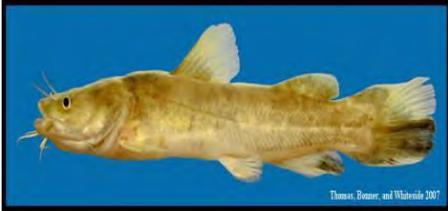
|  |   |   |
|--|---|---|
| <p>73.</p>                          | <p>74.</p>                                   | <p>75.</p>   |
| <p><i>Littorina littorea</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> | <p><i>Megalops atlanticus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>           | <p><i>Melanochromis auratus</i></p> <p>Referensi:<br/><a href="http://www.malawicichlidhomepage.com">http://www.malawicichlidhomepage.com</a></p> |
| <p>76.</p>                          | <p>77.</p>                                   | <p>78.</p>   |
| <p><i>Metynnis agrenteus</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p> | <p><i>Micropterus salmoides</i></p> <p>Referensi:<br/><a href="http://www.tpwd.state.tx.us">http://www.tpwd.state.tx.us</a></p> | <p><i>Misgurnus anguillicaudatus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                      |
| <p>79.</p>                        | <p>80.</p>                                 | <p>81.</p>   |
| <p><i>Morone americana</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>   | <p><i>Musculista senhousia</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>          | <p><i>Mya arenaria</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                                    |

|  |   |   |
|--|---|---|
| <p>82.</p>                                  | <p>83.</p>   | <p>84.</p>                               |
| <p><i>Mytilopsis leucophaeata</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>    | <p><i>Mytilopsis sallei</i></p> <p>Referensi:<br/><a href="http://www.dpi.nsw.gov.au">http://www.dpi.nsw.gov.au</a></p>                       | <p><i>Mytilus galloprovincialis</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> |
| <p>85.</p>                                  | <p>86.</p>   | <p>87.</p>                               |
| <p><i>Neogobius melanostomus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>     | <p><i>Orconectes rusticus</i></p> <p>Referensi: <a href="http://animaldiversity.ummz.umich.edu">http://animaldiversity.ummz.umich.edu</a></p> | <p><i>Orconectes virilis</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>        |
| <p>88.</p>                                | <p>89.</p>   | <p>90.</p>                             |
| <p><i>Osteopilus septentrionalis</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> | <p><i>Ostrea edulis</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                               | <p><i>Pacifastacus leniusculus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>  |

|  |   |  |
|--|---|--|
| 91.  | 92.<br>                     | 93.<br>               |
| <i>Paracanthopoma parva</i>  | <i>Parachromis managuensis</i><br>Referensi:<br><a href="http://en.wikipedia.org">http://en.wikipedia.org</a> | <i>Parambassis sp</i><br>Referensi:<br><a href="http://livefishdirect.com">http://livefishdirect.com</a> |
| 94.<br>                                   | 95.<br>                     | 96.<br>               |
| <i>Perca fluviatilis</i><br>Referensi:<br><a href="http://en.wikipedia.org">http://en.wikipedia.org</a>                    | <i>Perna perna</i><br>Referensi:<br><a href="http://en.wikipedia.org">http://en.wikipedia.org</a>             | <i>Petromyzon marinus</i><br>Referensi:<br><a href="http://nas.er.usgs.gov">http://nas.er.usgs.gov</a>   |
| 97.<br>                                 | 98.<br>                  | 99.  |
| <i>Phalloceros caudimaculatus</i><br>Referensi:<br><a href="http://www.seriouslyfish.com">http://www.seriouslyfish.com</a> | <i>Phoxinus phoxinus</i><br>Referensi: <a href="http://www.arkive.org">http://www.arkive.org</a>              | <i>Plectrochilus diabolicus</i>  |

|   |  |  |
|---|--|--|
| 100.  | 101.   | 102.   |
| <i>Plectrochilus machadoi</i>   | <i>Plectrochilus sanguineus</i>  | <i>Plectrochilus wieneri</i>   |
| 103.<br>                           | 104.<br>                    | 105.<br>            |
| <i>Pomacea canaliculata</i><br>Referensi:<br><a href="http://en.wikipedia.org">http://en.wikipedia.org</a>          | <i>Pomacea insularum</i><br>Referensi:<br><a href="http://www.applesnail.net">http://www.applesnail.net</a>    | <i>Porcellio scaber</i><br>Referensi:<br><a href="http://en.wikipedia.org">http://en.wikipedia.org</a> |
| 106.<br>                         | 107.<br>                   | 108.<br>          |
| <i>Potamocorbula amurensis</i><br>Referensi:<br><a href="http://www.exoticguide.org">http://www.exoticguide.org</a> | <i>Potamopyrgus antipodarum</i><br>Referensi:<br><a href="http://en.wikipedia.org">http://en.wikipedia.org</a> | <i>Pristobrycon striolatus</i><br>Referensi:<br><a href="http://fishbase.org">http://fishbase.org</a>  |

|  |   |   |
|--|---|---|
| <p>109.</p>   | <p>110.</p>   | <p>111.</p>                                    |
| <p><i>Probarbus jullieni</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                               | <p><i>Procambarus clarkii</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                 | <p><i>Pseudodiptomus inopinus</i></p> <p>Referensi:<br/><a href="http://depts.washington.edu">http://depts.washington.edu</a></p> |
| <p>112.</p>   | <p>113.</p>   | <p>114.</p>                                    |
| <p><i>Pterois volitans</i></p> <p>Referensi: <a href="http://en.wikipedia.org/wiki/Red_lionfish">http://en.wikipedia.org/wiki/Red_lionfish</a></p> | <p><i>Pterygoplichthys anisitsi</i></p> <p>Referensi:<br/><a href="http://www.planetcatfish.com">http://www.planetcatfish.com</a></p> | <p><i>Pterygoplichthys disjunctivus</i></p> <p>Referensi:<br/><a href="http://nas.er.usgs.gov">http://nas.er.usgs.gov</a></p>     |
| <p>115.</p>   | <p>116.</p>                                       | <p>117.</p>                                  |
| <p><i>Pterygoplichthys multiradiatus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                   | <p><i>Pterygoplichthys pardalis</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>           | <p><i>Pterygoplichthys spp.</i></p> <p>Referensi:<br/><a href="http://nas.er.usgs.gov">http://nas.er.usgs.gov</a></p>             |

|   |   |  |
|---|---|--|
| <p>118.</p>    | <p>119.</p>                       | <p>120.</p>   |
| <p><i>Pygocentrus cariba</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                    | <p><i>Pygocentrus nattereri</i></p> <p>Referensi: <a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> | <p><i>Pygopristis denticulata (Serrasalmus denticulatus)</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> |
| <p>121.</p>    | <p>122.</p>                       | <p>123.</p>   |
| <p><i>Pylodictis olivaris</i></p> <p>Referensi:<br/><a href="http://txstate.fishesoftexas.org">http://txstate.fishesoftexas.org</a></p> | <p><i>Rangia cuneata</i></p> <p>Referensi:<br/><a href="http://invasions.si.edu">http://invasions.si.edu</a></p>    | <p><i>Rapana venosa</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                                      |
| <p>124.</p>    | <p>125.</p>                     | <p>126.</p>   |
| <p><i>Rhinella marina (Bufo marinus)</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>        | <p><i>Rutilus rutilus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>   | <p><i>Sarotherodon occidentalis</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p>                          |

|  |  |   |
|--|--|---|
| <p>127.</p>   | <p>128.</p>                        | <p>129.</p>                          |
| <p><i>Scardinius erythrophthalmus</i></p> <p>Referensi:<br/><a href="http://www.arkive.org">http://www.arkive.org</a></p>                  | <p><i>Scinax ruber</i></p> <p>Referensi:<br/><a href="http://amphibiaweb.org">http://amphibiaweb.org</a></p>         | <p><i>Scinax x-signatus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>     |
| <p>130.</p>   | <p>131.</p>                        | <p>132.</p>                          |
| <p><i>Semaprochilodus Insignis</i></p> <p>Referensi:<br/><a href="http://www.tropicalfishsite.com">http://www.tropicalfishsite.com</a></p> | <p><i>Serrasalmus gibbus</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p> | <p><i>Serrasalmus rhombeus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>  |
| <p>133.</p>   | <p>134.</p>                     | <p>135.</p>                        |
| <p><i>Serrasalmus sanchezi</i></p> <p>Referensi: <a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                         | <p><i>Serrasalmus serrulatus</i></p> <p>Referensi : <a href="http://www.opefe.com">http://www.opefe.com</a></p>      | <p><i>Serrasalmus spilopleura</i></p> <p>Referensi:<br/><a href="http://www.fishbase.us">http://www.fishbase.us</a></p> |

|  |   |   |
|--|---|---|
| <p>136.</p>                         | <p>137.</p>                                   | <p>138.</p>    |
| <p><i>Sparus aurata</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>      | <p><i>Sphaeroma quoianum</i></p> <p>Referensi:<br/><a href="http://www.clr.pdx.edu">http://www.clr.pdx.edu</a></p>              | <p><i>Tetraodon duboisi</i></p> <p>Referensi:<br/><a href="http://www.amazon-exotic-import.de">http://www.amazon-exotic-import.de</a></p> |
| <p>139.</p>                         | <p>140.</p>                                   | <p>141.</p>    |
| <p><i>Tetraodon lineatus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> | <p><i>Tetraodon mbu</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>                 | <p><i>Tetraodon miurus</i></p> <p>Referensi:<br/><a href="http://www.seriouslyfish.com">http://www.seriouslyfish.com</a></p>              |
| <p>142.</p>                       | <p>143.</p>                                 | <p>144.</p>    |
| <p><i>Tilapia mariae</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>     | <p><i>Tilapia sarrmanii</i></p> <p>Referensi:<br/><a href="http://fishbase.sinica.edu.tw">http://fishbase.sinica.edu.tw</a></p> | <p><i>Tilapia thollani</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p>                        |

|  |   |  |
|--|---|--|
| <p>145.</p>                         | <p>146.</p>                         | <p>147.</p>                               |
| <p><i>Tilapia zillii</i></p> <p>Referensi:<br/><a href="http://www.fishbase.org">http://www.fishbase.org</a></p>     | <p><i>Tinca tinca</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>         | <p><i>Tridentiger trionocephalus</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> |
| <p>148.</p>                         | <p>149.</p>                         | <p>150.</p>                               |
| <p><i>Urosalpinx cinerea</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p> | <p><i>Vandellia balzanii</i></p> <p>Referensi:<br/><a href="http://www.discoverlife.org">www.discoverlife.org</a></p> |  |
| <p>151.</p>                       | <p>152.</p>                       |  |
| <p><i>Vandellia cirrhosa</i></p> <p>Referensi:<br/><a href="http://www.issg.org">www.issg.org</a></p>                | <p><i>Xenopus laevis</i></p> <p>Referensi:<br/><a href="http://en.wikipedia.org">http://en.wikipedia.org</a></p>      |  |

