



BADAN KARANTINA INDONESIA

KEPUTUSAN KEPALA BADAN KARANTINA INDONESIA
NOMOR 677 TAHUN 2025

TENTANG
PENETAPAN JENIS HAMA DAN PENYAKIT IKAN KARANTINA, ORGANISME
PENYEBAB, GOLONGAN DAN MEDIA PEMBAWA

DENGAN RAHMAT TUHAN YANG MAHA ESA

KEPALA BADAN KARANTINA INDONESIA,

Menimbang : bahwa untuk melaksanakan ketentuan Pasal 2 ayat (4) Peraturan Badan Karantina Nomor 2 Tahun 2025 tentang Jenis Hama dan Penyakit Hewan Karantina, Hama dan Penyakit Ikan Karantina, Organisme Pengganggu Tumbuhan Karantina, Media Pembawa, dan Media Pembawa Yang Dilarang, perlu menetapkan Keputusan Kepala Badan Karantina Indonesia tentang Penetapan Jenis Hama dan Penyakit Ikan Karantina, Organisme Penyebab, Golongan dan Media Pembawa;

Mengingat : 1. Peraturan Pemerintah Nomor 29 Tahun 2023 tentang Peraturan Pelaksanaan Undang-Undang Nomor 21 Tahun 2019 tentang Karantina Hewan, Ikan, dan Tumbuhan (Lembaran Negara Republik Indonesia Tahun 2023 Nomor 73, Tambahan Lembaran Negara Republik Indonesia Nomor 6878);

2. Peraturan Presiden Nomor 45 Tahun 2023 tentang Badan Karantina Indonesia (Lembaran Negara Republik Indonesia Tahun 2023 Nomor 97);

3. Peraturan Badan Karantina Indonesia Nomor 1 Tahun 2023 tentang Organisasi dan Tata Kerja Badan Karantina Indonesia (Berita Negara Republik Indonesia Tahun 2023 Nomor 842);

4. Peraturan Badan Karantina Indonesia Nomor 2 Tahun 2023 tentang Organisasi dan Tata Kerja Unit Pelaksana Teknis Badan Karantina Indonesia (Berita Negara Republik Indonesia Tahun 2023 Nomor 843);

5. Peraturan Badan Karantina Nomor 2 Tahun 2025 tentang Jenis Hama dan Penyakit Hewan Karantina, Hama dan Penyakit Ikan Karantina, Organisme Pengganggu Tumbuhan Karantina, Media Pembawa, dan Media Pembawa Yang Dilarang (Berita Negara Republik Indonesia Tahun 2025 Nomor 137);

MEMUTUSKAN:

Menetapkan : KEPUTUSAN KEPALA BADAN KARANTINA INDONESIA TENTANG PENETAPAN JENIS HAMA DAN PENYAKIT IKAN KARANTINA, ORGANISME PENYEBAB, GOLONGAN DAN MEDIA PEMBAWA.

KESATU : Menetapkan jenis hama dan penyakit ikan karantina, organisme penyebab, golongan dan media pembawa sebagaimana tercantum dalam Lampiran yang merupakan bagian tidak terpisahkan dari Keputusan Kepala Badan ini.

KEDUA : Keputusan Kepala Badan ini mulai berlaku pada tanggal di tetapkan.

Ditetapkan di Jakarta
Pada tanggal 13 Maret 2025

KEPALA BADAN KARANTINA INDONESIA,



SAHAT MANAOR PANGGABEAN

Salinan Keputusan Kepala Badan ini disampaikan kepada:

1. Pimpinan Unit Kerja Eselon I lingkup Badan Karantina Indonesia;
2. Pimpinan Unit Pelaksana Teknis lingkup Badan Karantina Indonesia;

LAMPIRAN
KEPUTUSAN BADAN KARANTINA INDONESIA
NOMOR 677 TAHUN 2025
TENTANG
PENETAPAN JENIS HAMA DAN PENYAKIT IKAN
KARANTINA, ORGANISME PENYEBAB, GOLONGAN
DAN MEDIA PEMBAWA

DAFTAR JENIS HAMA DAN PENYAKIT IKAN KARANTINA, ORGANISME PENYEBAB, GOLONGAN DAN MEDIA PEMBAWA

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
I. Kelompok Pisces				
A. Virus				
1.	Infection with ictalurid herpesvirus-1	Ictalurid herpesvirus-1	I	Blue catfish (<i>Ictalurus furcatus</i>) Channel catfish (<i>Ictalurus punctatus</i>) European catfish (<i>Silurus glanis</i>) White catfish (<i>Ictalurus catus</i> , <i>I. catus</i>) <i>I. punctatus</i> x <i>I. furcatus</i>
2.	Infection with ictalurid herpesvirus-2	Ictalurid herpesvirus-2	I	Black bullhead (<i>Ictalurus melas</i>)
3.	Infection with spring viraemia of carp virus	Spring viraemia of carp virus (SVCV)	I	Bighead carp (<i>Aristichthys nobilis</i>) Bream (<i>Abramis brama</i>) Catla (<i>Gibelion catla</i>) Common carp (<i>Cyprinus carpio</i>) Crucian carp (<i>Carassius carassius</i>) European catfish (<i>Silurus glanis</i>) Golden shiner (<i>Notemigonus crysoleucas</i>) Goldfish (<i>Carassius auratus</i>) Grass carp (<i>Ctenopharyngodon idella</i>) Guppy (<i>Poecilia reticulata</i> , <i>Lebistes reticulatus</i>) Koi carp (<i>Cyprinus carpio koi</i>) Mrigal carp (<i>Cirrhinus cirrhosus</i>) Orfe (<i>Leuciscus idus</i>) Roach (<i>Rutilus rutilus</i>) Rohu (<i>Labeo rohita</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Silver carp (<i>Hypophthalmichthys molitrix</i>) Tench (<i>Tinca tinca</i>) Zebra Fish (<i>Danio rerio</i>) Sheatfish/European catfish (<i>Silurus glanis</i>)
4.	Infection with infectious haematopoietic necrosis virus	Infectious haematopoietic necrosis virus (IHNV)	I	Arctic char (<i>Salvelinus alpinus</i>) Atlantic salmon (<i>Salmo salar</i>) Brook trout (<i>Salvelinus fontinalis</i>) Brown trout (<i>Salmo trutta</i>) Chinook salmon (<i>Oncorhynchus tshawytscha</i>) Chum salmon (<i>Oncorhynchus keta</i>) Coho salmon (<i>Oncorhynchus kisutch</i>) Cutthroat trout (<i>Salmo clarki</i>) Lake trout (<i>Salvelinus namaycush</i>) Masu salmon (<i>Oncorhynchus masou</i>) Marble trout (<i>Salmo marmoratus</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>) Sockeye salmon (<i>Oncorhynchus nerka</i>)
5.	Infection with Megalocytivirus	Red sea bream iridovirus (RSIV)	I	Banggai cardinal fish (<i>Pterapogon kauderni</i>) Bastard halibut (<i>Paralichthys olivaceus</i>) Blackhead seabream (<i>Acanthopagrus schlegeli</i>) Brown-marbled grouper (<i>Epinephelus fuscoguttatus</i>) Chicken grunt (<i>Parapristipoma trilineatum</i>) Chinese emperor (<i>Lethrinus haematopterus</i>) Chinese perch (<i>Siniperca chuatsi</i>) Chub mackerel (<i>Scomber japonicus</i>) Cobia (<i>Rachycentron canadum</i>) Continental seabass (<i>Lateolabrax sp.</i>) Crescent sweetlips (<i>Plectorhinchus cinctus</i>) Crimson sea bream (<i>Evynnis japonica</i>) Croceine croaker (<i>Pseudosciaena crocea</i>) Flathead grey mullet (<i>Mugil cephalus</i>) Greater amberjack (<i>Seriola dumerili</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Grouper (<i>Epinephelus</i> spp.) Hybrid of striped sea bass and white bass (<i>Morone saxatilis</i> × <i>M. chrysops</i>) Hybrid of yellowtail amberjack and japanese amberjack (<i>S. lalandi</i> × <i>S. quinquerediata</i>) Japanese amberjack (<i>Seriola quinquerediata</i>) Japanese jack mackerel (<i>Trachurus japonicus</i>) Japanese parrotfish (<i>Oplegnathus fasciatus</i>) Japanese sea bass (<i>Lateolabrax japonicus</i>) Japanese spanish mackerel (<i>Scomberomorus niphonius</i>) Largemouth bass (<i>Micropterus salmoides</i>) Northern bluefin tuna (<i>Thunnus thynnus</i>) Red drum (<i>Sciaenops ocellatus</i>) Red sea bream (<i>Pagrus major</i>) Korean rockfish (<i>Sebastes schlegelii</i>) Sea bass (<i>Lates calcarifer</i>) Spangled emperor (<i>Lethrinus nebulosus</i>) Spotted halibut (<i>Verasper variegatus</i>) Spotted knifejaw (<i>Oplegnathus punctatus</i>) Skipjack trevally (<i>Pseudocaranx dentex</i>) Snubnose pompano (<i>Trachinotus blochii</i>) Torafugu (<i>Takifugu rubripes</i>) Yellowfin sea bream (<i>Acanthopagrus latus</i>) Yellowtail amberjack (<i>Seriola lalandi</i>)
		Infectious spleen and kidney necrosis virus (ISKNV) / <i>Megalocytivirus pagrus 1</i>	I	Banggai cardinal fish (<i>Pterapogon kauderni</i>) Barramundi perch (<i>Lates calcalifer</i>) Betta (<i>Betta spp.</i>) Brown marbled grouper (<i>Epinephelus fuscoguttatus</i>) Chinese perch (<i>Siniperca chuatsi</i>) Dwarf gouramy (<i>Trichogaster lalius</i>) Flathead mullet (<i>Mugil cephalus</i>) Giant gouramy (<i>Osphronemus goramy</i>) Giant grouper (<i>Epinephelus lanceolatus</i>) Guppy (<i>Poecilia reticulata</i>) Large mouth bass (<i>Micropterus salmoides</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Murray cod (<i>Maccullochella peelii peelii</i>) Orange spotted grouper (<i>Epinephelus coioides</i>) Red drum (<i>Sciaenops ocellatus</i>) Southern platyfish (<i>Xiphophorus maculatus</i>) Marble sleepy goby (<i>Oxyeleotris marmoratus</i>)
		Turbot reddish body iridovirus (TRBIV)	I	Bastard halibut (<i>Paralichthys olivaceus</i>) Barred knifejaw (<i>Oplegnathus fasciatus</i>) Sea perch (<i>Lateolabrax japonicas</i>) Stone flounder (<i>Kareius bicoloratus</i>) Turbot (<i>Scophthalmus maximus</i>)
6.	Grouper iridoviral disease	Grouper iridovirus (GIV)/ Grouper iridovirus of Taiwan (TGIV)/Singapore grouper iridovirus (SGIV)	I	Brown marbled grouper (<i>Epinephelus fuscoguttatus</i>) Coral trout (<i>Plectropomus leopardus</i>) Estuary cod (<i>Epinephelus tauvina</i>) Giant grouper, Kerapu kertang (<i>Epinephelus lanceolatus</i>) Grouper and estuary cod (<i>Epinephelus</i> spp). Malabar grouper (<i>Epinephelus malabaricus</i>) Spotted coral grouper (<i>Plectropomus maculatus</i>) Tiger grouper hybrid, Kerapu cantang (<i>Epinephelus fuscoguttatus x E. lanceolatus</i>) Yellow grouper (<i>Epinephelus awoara</i>)
7.	Infection with epizootic haematopoietic necrosis virus	Epizootic hematopoietic necrosis virus (EHNV)	I	Black bullhead (<i>Ameirus melas</i>) Macquarie perch (<i>Macquaria australasica</i>) Mosquito fish (<i>Gambusia affinis</i>) Mountain galaxias (<i>Galaxias olidus</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>) Redfin perch (<i>Perca fluviatilis</i>) Sheatfish (<i>Silurus glanis</i>) Silver perch (<i>Bidyanus bidyanus</i>) Turbot (<i>Scophthalmus maximus</i>)
8.	Viral encephalopathy and retinopathy (VER)/Viral nervous necrosis (VNN)	Nervous necrosis virus	I	Asian sea bass (<i>Lates calcarifer</i>) Atlantic cod (<i>Gadus morhua</i>) Atlantic halibut (<i>Hippoglossus hippoglossus</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Australian catfish (<i>Tandanus tandanus</i>) Barfin flounder (<i>Verasper moseri</i>) Barred knifejaw or rock bream (<i>Oplegnathus fasciatus</i>) Brown marbled grouper/Blackspotted grouper (<i>Epinephelus fuscoguttatus</i>) Brown spotted grouper (<i>Epinephelus malabaricus</i>) Chinese catfish (<i>Parasilurus asotus</i>) Cobia (<i>Rachycentron canadum</i>) Common sole (<i>Solea solea</i>) Convict surgeonfish (<i>Acanthurus triostegus</i>) Crimson snapper (<i>Lutjanus erythropterus</i>) Dragon grouper (<i>Epinephelus lanceolatus</i>) Dusky grouper (<i>Epinephelus marginatus</i>) European eel (<i>Anguilla anguilla</i>) European sea bass (<i>Dicentrarchus labrax</i>) Gilthead sea bream (<i>Sparus aurata</i>) Golden grey mullet (<i>Liza aurata</i>) Greasy grouper (<i>Epinephelus tauvina</i>) Grey mullet (<i>Mugil cephalus</i>) Guppy (<i>Poecilia reticulata</i>) Haddock (<i>Melanogrammus aeglefinus</i>) Humpback grouper (<i>Chromileptes altivelis</i>) Japanese flounder (<i>Paralichthys olivaceus</i>) Japanese or red tilefish (<i>Branchiostegus japonicus</i>) Japanese puffer fish (<i>Takifugu rubripes</i>) Japanese sea bass (<i>Lateolabrax japonicus</i>) Kelp grouper (<i>Epinephelus moara</i>) Mangrove red snapper (<i>Lutjanus argentimaculatus</i>) Milkfish (<i>Chanos chanos</i>) Narrowstripe cardinalfish (<i>Apogon exostigma</i>) Nile tilapia (<i>Oreochromis niloticus</i>) Orange-spotted grouper (<i>Epinephelus coioides</i>) Orbicular batfish (<i>Platax orbicularis</i>) Pacific bluefin tuna (<i>Thunnus orientalis</i>) Purplish amberjack (<i>Seriola dumerili</i>) Red drum (<i>Sciaenops ocellatus</i>) Red mullet (<i>Mullus barbatus</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Red spotted grouper (<i>Epinephelus akaara</i>) Russian sturgeon (<i>Acipenser gueldenstaedti</i>) Sevenband grouper (<i>Epinephelus septemfasciatus</i>) Shi drum (<i>Umbrina cirrosa</i>) Sleepy cod (<i>Oxyeleotris lineolata</i>) Snub nose pompano (<i>Trachinotus blochii</i>) Spotted knifejaw (<i>Oplegnathus punctatus</i>) Striped jack (<i>Pseudocaranx dentex</i>) Striped trumpeter (<i>Latris lineata</i>) Thread-sale filefish (<i>Stephanolepis cirrhifer</i>) Tilapia (<i>Oreochromis niloticus</i>) Turbot (<i>Psetta maxima</i>) White grouper (<i>Epinephelus aeneus</i>) White weakfish (<i>Atractoscion nobilis</i>) White weakfish (<i>Sebastes oblongus</i>) Wolf fish (<i>Anarchichas minor</i>) Yellow grouper (<i>Epinephelus awoara</i>) Yellow-wax pompano (<i>Trachinotus falcatus</i>)
9.	Infection with koi herpesvirus	Koi herpesvirus (KHV)	I	Common carp (<i>Cyprinus carpio</i>) Crucian carp × Koi carp hybrids Crucian carp × Common carp Goldfish (<i>Carassius auratus</i>) Goldfish × Common carp hybrids Goldfish × Koi carp hybrids
10.	Infection with viral haemorrhagic septicaemia virus	Viral haemorrhagic septicemia virus (VHSV)	I	Alaska pollock (<i>Theragra chalcogramma</i>) Atlantic cod (<i>Gadus morhua</i>) Atlantic halibut (<i>Hippoglossus hippoglossus</i>) Atlantic herring (<i>Clupea harengus</i>) Atlantic salmon (<i>Salmo salar</i>) Blue whiting (<i>Micromesistius poutassou</i>) Brown trout (<i>Salmo trutta</i>) Chinook salmon (<i>Oncorhynchus tshawytscha</i>) Chub mackerel (<i>Scomber japonicus</i>) Coho salmon (<i>Oncorhynchus kisutch</i>) Common dab (<i>Limanda limanda</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Chub mackerel (<i>Scomber japonicus</i>) Coho salmon (<i>Oncorhynchus kisutch</i>) Common dab (<i>Limanda limanda</i>) Ebro barbel (<i>Barbus graellsii</i>) European sprat (<i>Sprattus sprattus</i>) European plaice (<i>Pleuronectes platessa</i>) European river lamprey (<i>Lampetra fluviatilis</i>) European seabass (<i>Dicentrarchus labrax</i>) Fathead minnow (<i>Pimephales promelas</i>) European flounder (<i>Platichthys flesus</i>) Fourbeard rockling (<i>Enchelyopus cimbrius</i>) Freshwater drum (<i>Aplodinotus grunniens</i>) Grayling (<i>Thymallus thymallus</i>) Greenland halibut (<i>Reinhardtius hippoglossoides</i>) Japanese flounder (<i>Paralichthys olivaceus</i>) Lesser argentine (<i>Argentina sphyraena</i>) Muskellunge (<i>Esox masquinongy</i>) North pacific hake (<i>Merluccius productus</i>) Norway pout (<i>Trisopterus esmarkii</i>) Oncorhynchus mykiss × Oncorhynchus kisutch Oncorhynchus mykiss × Salvelinus alpinus triploid Oncorhynchus mykiss × Salvelinus fontinalis Oncorhynchus mykiss × Salvelinus namaycush Oncorhynchus mykiss × Oncorhynchus kisutch triploid Pacific herring (<i>Clupea pallasii</i>) Poor cod (<i>Trisopterus minutus</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>) Round goby (<i>Neogobius melanostomus</i>) Sand eel (<i>Ammodytes spp.</i>) Sand goby (<i>Pomatoschistus minutus</i>) Shiner perch (<i>Cymatogaster aggregata</i>) South american pilchard (<i>Sardinops sagax</i>) Surf smelt (<i>Hypomesus pretiosus</i>) Three-spined stickleback (<i>Gasterosteus aculeatus</i>) Yellowback seabream (<i>Dentex tumifrons</i>) Turbot (<i>Scophthalmus maximus</i>) Whitefish (<i>Coregonus spp.</i>) Whiting (<i>Merlangius merlangus</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Yellow Perch (<i>Perca flavescens</i>)
11.	Infection with HPR-deleted or HPR0 infectious salmon anaemia virus	Highly polymorphic region (HPR)-deleted ISAV (HPR-deleted ISAV)	I	Atlantic salmon (<i>Salmo salar</i>) Brown trout (<i>Salmo trutta</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>)
12.	Infection with salmonid alphavirus	Salmonid alphavirus (SAV)	I	Arctic charr (<i>Salvelinus alpinus</i>) Atlantic salmon (<i>Salmo salar</i>) Brown trout (<i>Salmo trutta</i>) Common dab (<i>Limanda limanda</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>)
13.	Infection with tilapia lake virus	Tilapia lake virus (TiLV)	I	Blue tilapia (<i>Oreochromis aureus</i>) Gourami (<i>Osphronemus goramy</i>) Hybrid tilapia (<i>Oreochromis niloticus x Oreochromis aureus</i>) Mango tilapia (<i>Sarotherodon galilaeus</i>) Nile tilapia (<i>Oreochromis niloticus</i>) Red tilapia (<i>Oreochromis sp.</i>) Redbelly tilapia (<i>Tilapia zillii</i>) River barb (<i>Barbonymus schwanenfeldii</i>) Wild tilapia (<i>Tristramellasiomonis intermedia</i>)
B. Bakteri				
1.	Enteric septicaemia of catfish (ESC)	<i>Edwardsiella ictaluri</i>	II	African catfish (<i>Clarias gariepinus</i>) Amberjack (<i>Seriola sp.</i>) Blue catfish (<i>Ictalurus furcatus</i>) Blue spot mullet (<i>Valamugil sehel</i>) Brown bullhead (<i>Ictalurus nebulosus</i>) Catfish/walking catfish (<i>Clarias batrachus</i>) Chanel catfish (<i>Ictalurus punctatus</i>) Danio (<i>Danio devario</i>) Eel (<i>Anguilla sp.</i>) Flounder (<i>Paralichthys sp.</i>) Gold fish (<i>Carrasius auratus</i>) Green knifefish (<i>Eigemannia virens</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Jambal catfish (<i>Pangasius djambal</i>) Nile tilapia (<i>Oreochromis niloticus</i>) Striped catfish (<i>Pangasianodon hypophthalmus</i>)
2.	Furunculosis/Carp erythrodermatitis	<i>Aeromonas salmonicida</i>	II	Atlantic cod (<i>Gadus morhua</i>) Blue devil/Caerulian damsel (<i>Pomacentrus caeruleus</i>) Brook trout (<i>Salvelinus fontinalis</i>) Brown trout (<i>Salmo trutta</i>) Bullhead (<i>Cottus gobio</i>) Catfish (<i>Clarias</i> sp) Common carp (<i>Cyprinus carpio</i>) Eel (<i>Anguilla</i> spp.) Giant gouramy (<i>Osphronemus goramy</i>) Gilthead seabream (<i>Sparus aurata</i>) Goldfish (<i>Carassius auratus</i>) Nile tilapia (<i>Oreochromis niloticus</i>) Pacific Halibut (<i>Hippoglossus stenolepis</i>) Northern Pike (<i>Esox lucius</i>) Rainbow Trout (<i>Oncorhynchus mykiss</i>) Salmon (<i>Salmonidae</i>) Scrawled Butterflyfish (<i>Chaetodon meyeri</i>) Shortjaw Cisco (<i>Coregonus zenithicus</i>) Spotted Minnows (<i>Galaxiidae</i>) Turbot (<i>Scophthalmus maximus</i>)
3.	Streptococciasis	<i>Streptococcus iniae</i>	II	Eel (<i>Anguilla</i> spp.) Grouper (<i>Cromileptes altivelis</i>) Nila (<i>Oreochromis niloticus</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>) Yellow tail (<i>Seriola lalandi</i>)
		<i>Streptococcus agalactiae</i>	II	Chinook salmon (<i>Oncorhynchus tshawytscha</i>) Hybrid stripedbass (<i>Ictalurus melas</i>) Nile tilapia (<i>Oreochromis niloticus</i>) Mullet (<i>Liza klunzingeri</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>) Barcoo grunter (<i>Scortum barcoo</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Rosy barb (<i>Puntius conchonus</i>) Sea bream (<i>Sparus auratus</i>) Sutchi catfish (<i>Pangasius hypophthalmus</i>) Yellow bullhead (<i>Ictalurus natalis</i>) Zebra danio (<i>Danio rerio</i>)
4.	Enteric red mouth disease (ERM)	<i>Yersinia ruckeri</i>	II	Atlantic salmon (<i>Salmo salar</i>) Brook trout (<i>Salvelinus fontinalis</i>) Channel catfish (<i>Ictalurus punctatus</i>) Chinook salmon (<i>Oncorhynchus tshawytscha</i>) Common carp (<i>Cyprinus carpio</i>) Eel (<i>Anguilla anguilla</i>) Gold fish (<i>Carassius auratus</i>) Jelawat (<i>Leptobarbus hoevenii</i>) Perch (<i>Perca fluviatilis</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>) Salmon (<i>Salmonidae</i>) Sea bass (<i>Lates calcarifer</i>) Sole (<i>Solea solea</i>) Sturgeon (<i>Acipenser baeri</i>) Tilapias (<i>Oreochromis niloticus</i>) Turbot (<i>Scophthalmus maximus</i>) Walking catfish (<i>Clarias batrachus</i>)
5.	Bacterial kidney disease (BKD)	<i>Renibacterium salmoninarum</i>	II	Atlantic salmon (<i>Salmo salar</i>) Bartail flathead (<i>Platycephalus indicus</i>) Brook trout (<i>Salvelinus fontinalis</i>) Brown trout (<i>Salmo trutta</i>) Fathead minnow (<i>Pimephales promelas</i>) Greenling (<i>Hexagrammos otakii</i>) Pacific herring (<i>Clupea pallasii</i>) Sablefish (<i>Anoplopoma fimbria</i>) Salmonidae chinook (<i>Onchorhynchus tshawytscha</i>) Salmonidae coho (<i>Onchorhynchus kisutch</i>) Salmonidae chun (<i>Onchorhynchus</i> sp.) Salmonidae shock eye (<i>Onchorhynchus nerka</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Salmonidae pink (<i>Onchorhynchus gorbusha</i>) Salmonidae cherry (<i>Onchorhynchus roasou</i>) Shiner perch (<i>Cymatogaster aggregata</i>)
C. Parasit				
1.	Infection with <i>Gyrodactylus salaris</i>	<i>Gyrodactylus salaris</i>	I	Arctic charr (<i>Salvelinus alpinus</i>) Atlantic salmon (<i>Salmo salar</i>) Brook trout (<i>Salvelinus fontinalis</i>) Brown trout (<i>Salmo trutta</i>) Grayling (<i>Thymallus thymallus</i>) North american lake trout (<i>Salvelinus namaycush</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>)
2.	Whirling disease	<i>Myxobolus cerebralis</i>	I	Koi (<i>Cyprinus carpio koi</i>) Koki (<i>Carrasius auratus</i>) Lake trout (<i>Salvelinus namaycush</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>) Salmonidae (Salmon, Trout)
D. Jamur				
1.	Infection with <i>Aphanomyces invadans</i> (epizootic ulcerative syndrome)	<i>Aphanomyces invadans</i>	I	African butter catfish (<i>Schilbe mystus</i>) African pike (<i>Hepsetus odoe</i>) American shad (<i>Alosa sapidissima</i>) Atlantic menhaden (<i>Brevoortia tyrannus</i>) Australian bass (<i>Macquaria novemaculeata</i>) Ayu sweetfish (<i>Plecoglossus altivelis</i>) Banded tilapia (<i>Tilapia sparrmanii</i>) Barcoo grunter (<i>Scortum barcoo</i>) Bar-eyed goby (<i>Glossogobius giuris</i>) Barramundi or sea bass (<i>Lates calcarifer</i>) Black bream (<i>Acanthopagrus berda</i>) Black bullhead (<i>Ameiurus melas</i>) Black drum (<i>Pogonias cromis</i>) Blotched snakehead (<i>Channa maculate</i>) Bluegill (<i>Lepomis macrochirus</i>) Blunt-toothed african catfish (<i>Clarias ngamensis</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Bony bream (<i>Nematalosa erebi</i>) Brown bullhead (<i>Ameiurus nebulosus</i>) Bulldog (<i>Marcusenius macrolepidotus</i>) Catla (<i>Catla catla</i>) Ceylon snakehead (<i>Channa orientalis</i>) Chanda perch (<i>Ambassis agassiz</i>) Channel catfish (<i>Ictalurus punctatus</i>) Churchill (<i>Petrocephalus catostoma</i>) Climbing perch (<i>Anabas testudineus</i>) Dashtail barb (<i>Barbus poechii</i>) Drums or croakers (<i>Bairdiella chrysoura</i>) Dusky flathead (<i>Platycephalus fuscus</i>) Dusky tripletooth goby (<i>Tridentiger obscares obscares</i>) Dwarf gourami (<i>Colisa lalia</i>) Flathead grey mullet (<i>Mugil cephalus</i>) Flying barb (<i>Esomus</i> sp.) Fork-tailed catfish (<i>Arius</i> sp.) Freshwater cod (<i>Maccullochella ikei</i>) Giant gourami (<i>Osphronemus goramy</i>) Giant snakehead (<i>Channa micropeltes</i>) Goby (<i>Glossogobius</i> sp.) Golden perch (<i>Macquaria ambigua</i>) Goldfish (<i>Carassius auratus</i>) Great snakehead fish (<i>Channa marulius</i>) Green bream (<i>Sargochromis codringtonii</i>) Greenhead tilapia (<i>Oreochromis machrochir</i>) hybrid (<i>Channa maculata</i> x <i>Channa argus</i>) Ketu-bangladeshi (<i>Rohtee</i> sp.) Kissing gourami (<i>Helostoma temminckii</i>) Largemouth black bass (<i>Micropterus salmoides</i>) Long tom (<i>Strongylura krefftii</i>) Longbeard barb (<i>Barbus unitaeniatus</i>) Mangrove jack (<i>Lutjanus argentimaculatus</i>) Marble goby (<i>Oxyeleotris marmoratus</i>) Mouth almighty (<i>Glossamia aprion</i>) Mrigal carp (<i>Cirrhinus mrigala</i>) Mulletts (<i>Mugil spp.</i> ; <i>Liza spp.</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Murray cod (<i>Macchullochella peelii</i>) Narrow banded sole (<i>Aseraggodes macleayanus</i>) Nursery fish (<i>Kurtus gulliveri</i>) Ocellated Snakehead (<i>Channa pleurophthalmus</i>) Pinkeye mullet (<i>Myxus petard</i>) Pink bream (<i>Sargochromis giardi</i>) Pool barb (<i>Puntius sophore</i>) Primitive acher fish (<i>Toxotes lorentzi</i>) Rainbow bream (<i>Sargochromis carlottae</i>) Rainbow fish (<i>Melanotaenia splendida</i>) Rainbow trout (<i>Oncorhynchus mykiss</i>) Redbreast tilapia (<i>Tilapia rendalli</i>) Red-eye labeo (<i>Labeo cylindricus</i>) Rohu (<i>Labeo rohita</i>) Sand whiting (<i>Sillago ciliata</i>) Saratoga (<i>Scleropages jardini</i>) Sharptooth african catfish (<i>Clarias gariepinus</i>) Sheepshead (<i>Archosargus probatocephalus</i>) Silver barb (<i>Puntius gonionotus</i>) Silver catfish (<i>Schilbe intermedius</i>) Silver perch (<i>Bidyanus bidyanus</i>) Sharptooth tetra (<i>Micralestes acutidens</i>) Sleepy cod (<i>Oxyeleotris lineolatus</i>) Snakeskin gourami (<i>Trichogaster pectoralis</i>) Spangled perch (<i>Leiopotherapon unicolor</i>) Spiny turbot (<i>Psettodes</i> sp.) Spotbanded scat scat (<i>Selenotoca multifasciata</i>) Spotted archerfish (<i>Toxotes chatareus</i>) Spotted scat (<i>Scatophagus argus</i>) Spotted snakehead (<i>Channa punctatus</i>) Straightfin barb (<i>Barbus peludinosus</i>) Striped grunter (<i>Amniataba percoides</i>) Striped robber (<i>Brycinus lateralis</i>) Striped snakehead (<i>Channa striatus</i>) Swamp eel (<i>Fluta alba</i>) Thamalakane barb (<i>Barbus thamalakanensis</i>) Therapon (<i>Therapon</i> sp.)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Thinface largemouth (<i>Serranochromis angusticeps</i>) Three-spot gourami (<i>Trichogaster trichopterus</i>) Three-spotted tilapia (<i>Oreochromis andersoni</i>) Tigerfish (<i>Hydrocynus vittatus</i>) Upper zambezi labeo (<i>Labeo lunatus</i>) Walking catfish (<i>Clarias batrachus</i>) Wells catfish (<i>Silurus glanis</i>) White mullet (<i>Mugil curema</i>) Yellowfin sea bream (<i>Acanthopagrus australis</i>) Yellow-belly bream (<i>Serranochromis robustus</i>)
II. Kelompok Crustacea				
A. Virus				
1.	Infection with infectious hypodermal and haematopoietic necrosis virus	Infectious hypodermal and haematopoietic necrosis virus (IHHNV)	I	Argentine stiletto shrimp (<i>Artemesia longinaruis</i>) Blue shrimp (<i>Penaeus stylirostris</i>) Cuata swimcrab (<i>Callinectes arcuatus</i>) Giant river prawn (<i>Macrobranchium rosenbergii</i>) Giant tiger prawn (<i>Penaeus monodon</i>) Green Tiger Prawn (<i>Penaeus semisulcatus</i>) Japanese Shore Crab (<i>Hemigrapsus penicillatus</i>) Kuruma prawn (<i>Penaeus japonicus</i>) Northern Pink Shrimp (<i>Penaeus duorarum</i>) Northern White Shrimp (<i>Penaeus setiferus</i>) Western White Shrimp (<i>Penaeus occidentalis</i>) Whiteleg Shrimp (<i>Litopenaeus vannamei</i>) Yellowleg Shrimp (<i>Penaeus californiensis</i>)
2.	Infection with yellow head virus genotype 1	Yellow head virus (YHV)	I	Blue shrimp (<i>Penaeus stylirostris</i>) Daggerblade grass shrimp (<i>Palaemonetes pugio</i>) Giant tiger prawn (<i>Penaeus monodon</i>) Jinga shrimp (<i>Metapenaeus affinis</i>) Whiteleg shrimp (<i>Litopenaeus vannamei</i>)
3.	Infection with Taura syndrome virus	Taura syndrome virus (TSV)	I	Blue shrimp (<i>Penaeus stylirostris</i>) Giant tiger prawn (<i>Penaeus monodon</i>) Greasyback shrimp (<i>Metapenaeus ensis</i>) Northern brown shrimp (<i>Penaeus aztecus</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Northern white shrimp (<i>Penaeus setiferus</i>) Whiteleg shrimp (<i>Litopenaeus vannamei</i>)
4.	Infection with white spot syndrome virus	White spot syndrome virus (WSSV)	I	Kelompok Crustacea perairan khususnya Decapoda (Udang, Kepiting, Crayfish, Lobster) yang hidup di laut, payau dan air tawar Polychaetes
5.	Infection with <i>Macrobrachium rosenbergii</i> nodavirus (white tail disease)	<i>Macrobrachium rosenbergii</i> nodavirus (MrNV), MrNV (primary) and extra small virus (XSV) (associate)	I	Giant river prawn (<i>Macrobrachium rosenbergii</i>)
6.	Infection with infectious myonecrosis virus	Infectious myonecrosis virus (IMNV)	I	Brown tiger prawn (<i>Penaeus esculentus</i>) Banana prawn (<i>Fenneropenaeus merguensis</i>) Whiteleg shrimp (<i>Litopenaeus vannamei</i>)
7.	Viral covert mortality disease (VCMD) of shrimp atau Infection with covert mortality nodavirus	Covert mortality nodavirus (CMNV)	I	Chinese white shrimp (<i>Penaeus chinensis</i>) Giant river prawn (<i>Macrobrachium rosenbergii</i>) Giant tiger prawn (<i>Penaeus monodon</i>) Japanese flounder (<i>Paralichthys olivaceus</i>) Kuruma prawn (<i>Marsupenaeus japonicus</i>) Large yellow croaker (<i>Larimichthys crocea</i>) <i>Mugilogobius abei</i> Ridgetail prawn (<i>Palaemon carinicauda</i>) Sea cucumber (<i>Apostichopus japonicus</i>) Whiteleg shrimp (<i>Litopenaeus vannamei</i>) Zebrafish (<i>Danio rerio</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
8.	Infection with decapod iridescent virus 1	Decapod iridescent virus - 1 (DIV-1)	I	Chinese mitten crab (<i>Eriocheir sinensis</i>) Chinese white shrimp (<i>Fenneropenaeus chinensis</i>) Fleshy prawn (<i>Penaeus chinensis</i>) Freshwater prawn (<i>Macrobrachium superbum</i>) Giant river/freshwater prawn (<i>Macrobrachium rosenbergii</i>) Giant tiger prawn/Black tiger shrimp (<i>Penaeus monodon</i>) Kuruma shrimp (<i>Penaeus japonicus</i>) Oriental river prawn (<i>Macrobrachium nipponense</i>) Red claw Crayfish (<i>Cherax quadricarinatus</i>) Red swamp Crayfish (<i>Procambarus clarkii</i>) Ridgetail white prawn (<i>Exopalaemon carinicauda</i>) Striped shore crab (<i>Pachygrapsus crassipes</i>) Swimming crab (<i>Portunus trituberculatus</i>) Water fleas (<i>Order cladocera</i>) Whiteleg shrimp/Pacific white shrimp (<i>Litopenaeus vannamei</i>)
B. Bakteri				
1.	Acute hepatopancreatic necrosis disease	<i>Vibrio parahaemolyticus</i> (Vp AHPND)	I	Fleshy prawn (<i>Penaeus chinensis</i>) Giant tiger prawn (<i>Penaeus monodon</i>) Kuruma prawn (<i>Penaeus japonicus</i>) Whiteleg shrimp (<i>Litopenaeus vannamei</i>) Polychaetes
2.	Infection with <i>Hepatobacter penaei</i> (necrotising hepatopancreatitis)	<i>Hepatobacter penaei</i>	I	Whiteleg shrimp (<i>Litopenaeus vannamei</i>)
C. Parasit				
1.	Hepatopancreatic microsporidiosis caused by <i>Enterocytozoon hepatopenaei</i>	<i>Enterocytozoon hepatopenaei</i>	I	Giant tiger prawn/ Black tiger shrimp (<i>Penaeus monodon</i>) Kuruma prawn (<i>Marsupenaeus japonicus</i>) Whiteleg shrimp (<i>Litopenaeus vannamei</i>) Polychaetes

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
D. Jamur				
1.	Infection with <i>Aphanomyces astaci</i> (crayfish plague)	<i>Aphanomyces astaci</i>	I	Chinese mitten crab (<i>Eriocheir sinensis</i>) Crayfish congener (<i>Orconectes</i> spp.) Louisiana swamp crayfish (<i>Procambarus clarkii</i>) Noble crayfish (<i>Astacus astacus</i>) Signal crayfish (<i>Pacifastacus leniusculus</i>) Slender clawed/Turkish crayfish (<i>Astacus leptodactylus</i>) White clawed crayfish (<i>Austropotamobius pallipes</i>)
Iii. Kelompok Molusca				
A. Virus				
1.	Infection with abalone herpesvirus	Abalone herpesvirus (AbHV)	I	Abalone (<i>Haliotis diversicolor</i>) Blacklip abalone (<i>Haliotis rubra</i>) Greenlip abalone (<i>Haliotis laevis</i>) <i>Haliotis aevigata</i> × <i>Haliotis rubra diversicolor</i>
2.	Infection with ostreid herpesvirus 1 microvariants	Ostreid herpesvirus-1 microvariants (OsHV-1 microvariants)	I	Pacific cupped oysters (<i>Crassostrea gigas</i>) Portuguese oyster (<i>Crassostrea angulata</i>)
B. Bakteri				
1.	Infections with <i>Xenohaliotis californiensis</i>	<i>Xenohaliotis californiensis</i>	I	Black abalone (<i>Haliotis cracherodii</i>) European abalone (<i>Haliotis tuberculata</i>) Flat abalone (<i>Haliotis wallalensis</i>) Green abalone (<i>Haliotis fulgens</i>) Japanese abalone (<i>Haliotis discus</i>) Pink abalone (<i>Haliotis corrugata</i>) Red abalone (<i>Haliotis rufescens</i>) White abalone (<i>Haliotis sorenseni</i>) Variously coloured abalone (<i>Haliotis diversicolor</i>)
C. Parasit				
1.	Infection with <i>Bonamia exitiosa</i>	<i>Bonamia exitiosa</i>	I	Chilean oyster (<i>Ostrea chilensis</i>) Dwarf oyster (<i>Ostrea stentina</i>) European flat oyster (<i>Ostrea edulis</i>) Southern mud oyster (<i>Ostrea angasi</i>)
2.	Infection with <i>Bonamia ostreae</i>	<i>Bonamia ostreae</i>	I	Argentinian flat oyster (<i>Ostrea puelchana</i>) Chilean oyster (<i>Ostrea chilensis</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				European flat oysters (<i>Ostrea edulis</i>) Southern mud oyster (<i>Ostrea angasi</i>)
3.	Infection with <i>Marteilia refringens</i>	<i>Marteilia refringens</i>	I	American oyster (<i>Crassostrea virginica</i>) Argentinian flat oyster (<i>Ostrea puelchana</i>) Asiatic oyster (<i>Ostrea denselamellosa</i>) Axe head mussel (<i>Xenostrobus securis</i>) Banded carpet shell (<i>Tapes rhomboides</i>) Blacklip abalone (<i>Haliotis rubra</i>) Blue mussel (<i>Mytilus edulis</i>) Common cockle (<i>Cerastoderma edule</i>) Copepode (<i>Paracartia grani</i>) Dwarf oyster (<i>Ostrea stentina</i>) European flat oyster (<i>Ostrea edulis</i>) Grooved carpet shell (<i>Ruditapes decussatus</i>) Grooved razor shell (<i>Solen marginatus</i>) Jackknife clam (<i>Ensis minor</i>) Japanese carpet shell (<i>Ruditapes philippinarum</i>) Mediterranean mussel (<i>Mytilus galloprovincialis</i>) New zealand dredge oyster (<i>Ostrea chilensis</i>) Razor clam (<i>Ensis siliqua</i>) Small carpet clam (<i>Tapes pullastra</i>) Southern mud oyster (<i>Ostrea angasi</i>)
4.	Infection with <i>Perkinsus olseni</i>	<i>Perkinsus olseni</i>	I	Akoya pearl oyster (<i>Pinctada martensii</i>) Black-lip abalone (<i>Haliotis rubra</i>) Black-lip pearl oyster (<i>Pinctada margaritifera</i>) Boring clam (<i>Tridacna crocea</i>) Grooved carpet shell (<i>Ruditapes decussatus</i>) Green-lip abalone (<i>Haliotis laevis</i>) Japanese cockle (<i>Ruditapes philippinarum</i>) Japanese pearl oyster (<i>Pinctada fucata</i>) Jedo venus (<i>Protothaca jedoensis</i>) Kumamoto oyster (<i>Crassostrea sikamea</i>)
				Mud ark (<i>Anadara trapezia</i>) New zealand cockle (<i>Austrovenus stutchburyi</i>) Small giant clam (<i>Tridacna maxima</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Suminoe oyster (<i>Crassostrea ariakensis</i>) Staircase abalone (<i>Haliotis scalaris</i>) Venerid commercial clam (<i>Pitar rostrata</i>) Whirling abalone (<i>Haliotis cyclobates</i>)
5.	Infection with <i>Perkinsus marinus</i>	<i>Perkinsus marinus</i>	I	American oyster (<i>Crassostrea virginica</i>) Baltic macoma (<i>Macoma balthica</i>) Cortez oyster (<i>Crassostrea corteziensis</i>) Mangrove oyster (<i>Crassostrea rhizophorae</i>) Pacific oyster (<i>Crassostrea gigas</i>) Softshell clam (<i>Mya arenaria</i>) Suminoe oyster (<i>Crassostrea ariakensis</i>)
6.	SSO disease (Seaside organism)	<i>Haplosporidium costale</i>	I	Eastern Oyster (<i>Crassostrea virginca</i>) Pacific Oysters (<i>Crassostrea gigas</i>)
7.	MSX disease (Multinucleate sphere X)	<i>Haplosporidium nelsoni</i>	I	Eastern oyster (<i>Crassostrea virginca</i>) Pacific oysters (<i>Crassostrea gigas</i>)
IV. Kelompok Amphibia				
A. Virus				
1.	Infection with <i>Ranavirus</i> species	<i>Bohle iridovirus</i> (BIV)	I	Burrowing frog (<i>Limnodynastes ornatus</i>) Cane toad (<i>Rhinella marina</i>) Eastern water dragons (<i>Intellagama lesueurii lesueurii</i>)
		<i>Ambystoma tigrinum virus</i> (ATV) Syn. <i>Regina ranavirus</i>	I	1) Semua katak dari Ordo Anura. 2) Semua salamander dari Ordo Caudata.
B. Jamur				
1.	Infection with <i>Batrachochytrium dendrobatidis</i>	<i>Batrachochytrium dendrobatidis</i>	I	1) Semua katak dari Ordo Anura. 2) Semua salamander dari Ordo Caudata.
2.	Infection with <i>Batrachochytrium salamandrivorans</i>	<i>Batrachochytrium salamandrivorans</i>	I	Alpine newt (<i>Ichthyosaura alpestris</i>) Blue-tailed Fire-bellied newt (<i>Cynops cyanurus</i>) Eastern newt (<i>Nothophthalmus viridescens</i>) Fire salamander (<i>Salamandra salamandra</i>) French cave salamander (<i>Hydromantes strinati</i>)

No.	Jenis Hama Dan Penyakit Ikan Karantina			Media Pembawa (Inang Rentan)
	Nama Penyakit	Organisme Penyebab	Golongan	
1	2	3	4	5
				Italian newt (<i>Lissotriton italicus</i>) Japanese fire-Bellied newt (<i>Cynops pyrrhogaster</i>) Northern spectacle salamander (<i>Salamandrina perspicillata</i>) Rough-skinned newt (<i>Taricha granulosa</i>) Sardinian brook salamander (<i>Euproctus platycephalus</i>) Spanish ribbed newt (<i>Pleurodeles waltl</i>) Tam dao salamander (<i>Paramesotriton deloustali</i>) Yellow spotted newt (<i>Neurergus crocatus</i>)

KEPALA BADAN KARANTINA INDONESIA,



SAHAT MANAOR PANGGABEAN