

## Diagnostic Services

**Laboratory test**                      **Cost per sample (PHP)**

### Direct microscopy of wet mounts or tissue smears

Larval assessment MBV or HPV detection (1-20 PLs)	200
Larval assessment + fry analysis (NPPMC1 format)	250
Parasite detection and identification (1-5 specimens)	150

### Polymerase chain reaction (PCR)

#### Shrimp viruses

• WSSV, MBV, IHHNV	
- One-step	500
- Nested	900
• TSV, YHV, GAV, IMNV	
- One-step	600
- Nested	1000
• WTD	
- XSV (one-step)	600
- MrNV (one-step)	600

#### Shrimp bacteria

• AHPND/EMS	
- One-step	900

#### Fish viruses

• Iridovirus, KHV	
- One-step	600
- Nested	900
• SVCV, VNN	
- One-step	600
- Nested	1000
- with cell culture	2000

### Microbiology: bacteriology/mycology

Bacterial isolation (1-5 specimens)	300
Bacterial identification (per isolate)	500
Bacterial count	
- Water	300
- Fry/larval/postlarval samples (1-10 pcs)	300
- Juveniles/fingerlings	300
Marine Fungal isolation	300

### Histopathology (H&E stain of routine paraffin sections)

Whole mount (per slide)	300
Typical section (per slide or tissue)	300
Serial section (per slide)	300

\* Prices are subject to change without prior notice

For inquiries and details on how to send your samples for diagnosis

Email: [fishhealth@seafdec.org.ph](mailto:fishhealth@seafdec.org.ph)

or call : (63-33) 330-7000 local 1177  
fax : (63-33) 330-7011

**GAV** = gill-associated virus  
**H&E** = hematoxylin and eosin  
**HPV** = hepatopancreatic parvovirus  
**IHHNV** = infectious hypodermal and haematopoietic necrosis virus  
**IMNV** = infectious myonecrosis virus  
**KHV** = koi herpesvirus  
**MBV** = monodon-type baculovirus  
**SVCV** = spring viremia of carp virus  
**TSV** = taura syndrome virus  
**VNN** = viral nervous necrosis  
**WSSV** = white spot syndrome virus  
**WTD** = white tail disease  
**YHV** = yellow-head virus



# Laboratory Services

Rates as of July 2015

Southeast Asian Fisheries Development Center  
Aquaculture Department  
[www.seafdec.org.ph](http://www.seafdec.org.ph)

## Analytical Services

Sample	Analysis	Method	Quantity	Cost per sample (PHP)	
<b>Chemical analysis</b>					
Feeds, feed ingredients, etc.	Proximate		>50 g	2,265	
	Moisture	Halogen Moisture Analyzer		160-310	
	Crude protein	Kjeltec		665	
	Crude fat	Soxtec		540	
	Crude fiber	Fibertec		785-1,325	
	Ash	Combustion at 550°C		275	
	Calcium	Permanganate titration		835-1,110*	
	Phosphorus			1,240-1,515*	
	Water	pH	pH meter	50 mL	135
		Alkalinity	Titrimetry	200 mL	210
Ammonia		Phenate	500 mL	250	
Chlorophyll		Spectrophotometry	500 mL	465	
Dissolved oxygen		Winkler	300 mL	285	
Nitrite/nitrate		Colorimetry	500 mL	265-375	
Phosphate		Ascorbic acid method	500 mL	210	
Total hardness		Ethylene diamine tetraacetic acid titration	500 mL	195	
Total suspended solids		Gravimetry	500 mL	245	
Soil		pH		100 g	225
	Organic matter	Walkley-Black	-do-	320	
	Iron	Colorimetry	-do-	425	
	Available sulfur	Turbidimetry	-do-	400	
	Available phosphorus	Olsen's method	-do-	430	

\* Lower amount if sample is taken from ash, higher amount if the original sample is used

	C, N, S	Combustion by CNS 2000 Analyzer	-do-	1,000
Total lipid and fatty acid methyl ester	Sample preparation	Bligh & Dyer	50 g	2,315
	Injection	Gas chromatograph		1,400
<b>Microbiological analysis**</b>				
Food, products, water, etc.	Standard aerobic plate count or viable total count		500g/500mL	240
	Coliform count		-do-	300
	<i>Salmonella</i>		-do-	480
	<i>Shigella</i>		-do-	480
	<i>S. aureus</i>		-do-	360
	Yeast/mold count		-do-	300
	Water potability		-do-	700
	<i>E. coli</i>		-do-	480

### Electron microscopy

Biological/ Non-biological samples	Morphology (with 6 photomicrograph)	Transmission electron microscopy	1 mm in at least 1 dimension	6,960
	Morphology (with 6 photomicrograph)	Scanning electron microscopy	5 mm x 5 mm	3,180

\*\* Reference for methods: Bacteriological Analytical Manual

### \* Attention students!

- We provide **20% discount** on analytical service fees for student researches.
- Hourly rates for equipment rentals are also available upon request should students prefer to conduct experiments themselves. Student thesis research to be conducted at SEAFDEC/AQD should have an approved Letter of Agreement between the school or university and AQD. Please email Research Division Head Dr. Evelyn Grace Ayson (edjayson@seafdec.org.ph) for details.

\* Quantity is the minimum amount/ number of samples to be submitted

\* Prices are subject to change without prior notice

For inquiries and details on how to send your samples for analysis

Email: [analyses@seafdec.org.ph](mailto:analyses@seafdec.org.ph)

or call : (63-33) 330-7000 local 1111

fax : (63-33) 330-7011