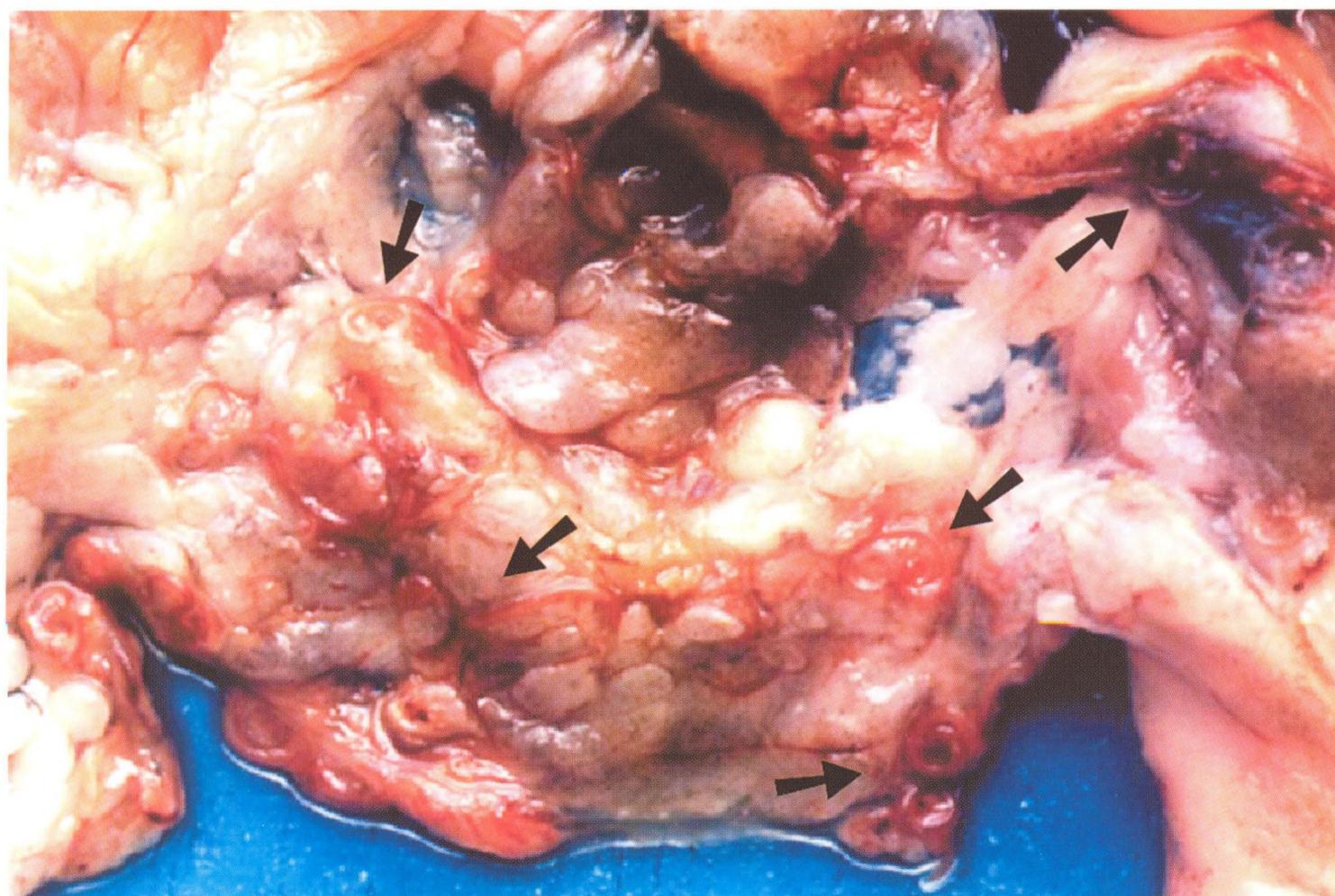


蛔蟲屬於體內或體外的寄生蟲，體長 1-2 公分，不分節。

感染器官	症狀	結果
鰭	感染器官可見紅色的蟲體附著	生長減緩
腹腔		市場價格下降

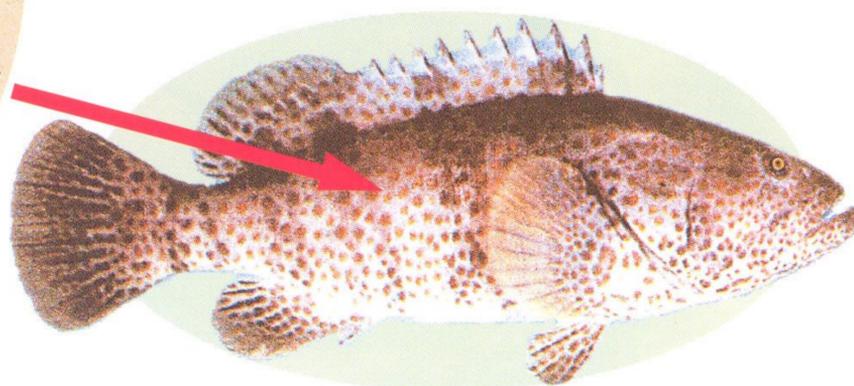
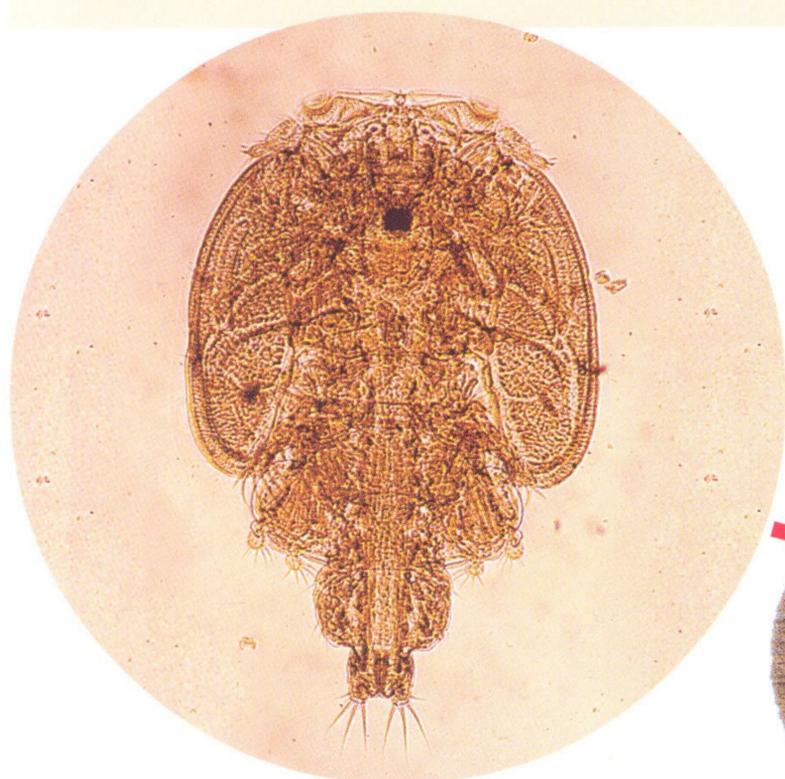


### 預防方法

- 避免投餵已腐爛及受感染的下雜魚。

橈足類的魚虱 *Caligus* 是卵圓形，長度約3mm，寬度約1.6mm，身體前端具有一對吸盤、另有四對肢腳。

感染器官	症狀	結果
體表	體表有不規則突起狀	體表及肌肉腐爛
鰓部	遲鈍的在水表層游泳	細菌二次感染
	食慾差	高度或大量死亡
	重度感染時魚體虛弱	



橈足類感染流行的時機：

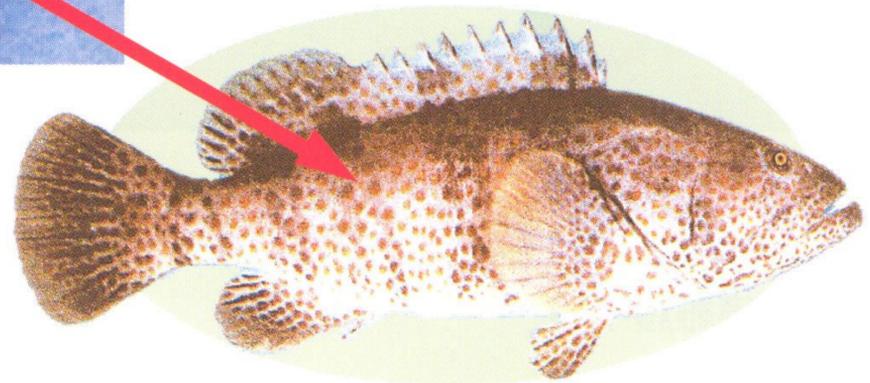
- 水體交換不良

### 處理方法

- 短期藥浴：以150ppm的雙氧水溶液（1公噸水加500毫升30% $H_2O_2$ ）浸泡30分鐘，並強烈打氣；或者
- 短暫以淡水浸泡10-15分鐘；或者
- 短期藥浴：以200-250ppm的福馬林溶液（1公噸水加200-250毫升福馬林）浸泡60分鐘，並強烈打氣
- 將處理完成的魚移至不含寄生蟲的乾淨魚池

等足類體型在10-50mm，蟲體由許多窄小體節組成，具一對眼。

感染器官	症狀	結果
鰓部	不攝餌	呼吸問題
體表	魚體有摩擦行為	死亡



等足類感染流行的時機：

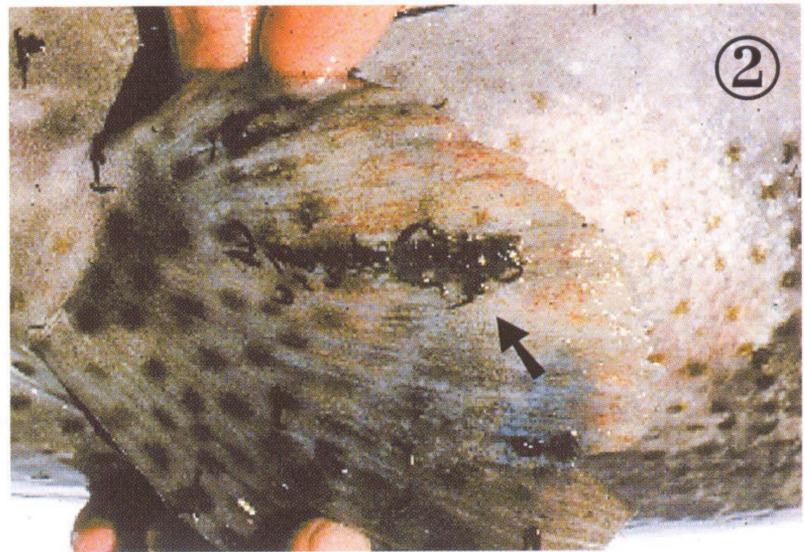
- 高養殖密度



- 以壓扁及其他物理方式移除並殺死蟲體。
- 短期藥浴：以 **200ppm的福馬林溶液**（1公噸水加200毫升福馬林）浸泡30-60分鐘，並強烈打氣。
- 將處理完成的魚移至不含寄生蟲的乾淨魚池。

水蛭類屬於具有假體節的體外寄生蟲，長度8-12mm，此蟲在頭、尾各有一個吸盤，用於攝食及移動。

感染器官	症狀	結果
<ul style="list-style-type: none"> <li> 體表</li> <li> 鰭</li> <li> 口部</li> <li> 眼部</li> </ul>	<ul style="list-style-type: none"> <li> 棕黑色的蟲體補綴式的佈滿圖中所感染的區域 ① 和 ②</li> </ul>	<ul style="list-style-type: none"> <li> 寄生蟲吸食及附著部位有時出現出血</li> <li> 細菌二次感染</li> </ul>



水蛭類感染流行的時機：

- 設備維護不良
- 水質不佳



### 處理方法

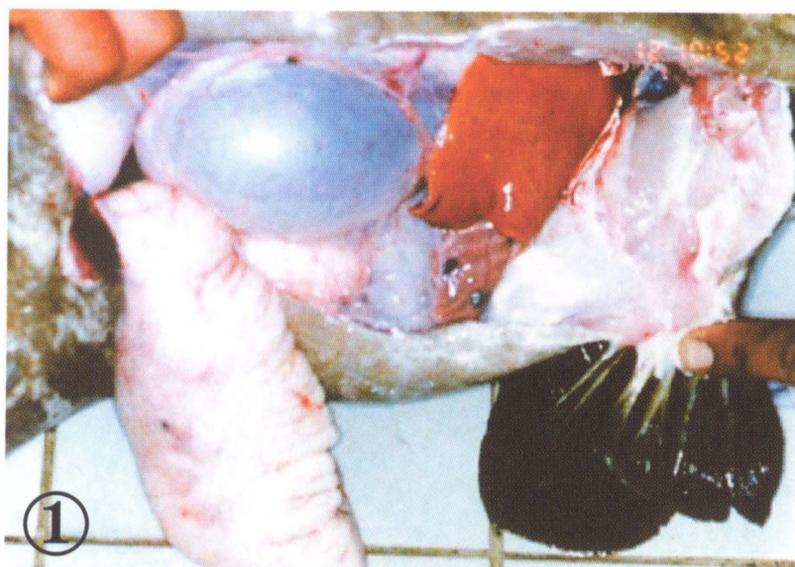


- 以人為方式利用濕布移除 ③
- 短期藥浴：以 50-100ppm福馬林 溶液（1公噸水加 50-100毫升 福馬林）浸泡60分鐘，並強烈打氣
- 將處理完成的魚移至不含寄生蟲的乾淨魚池。

## 營養性疾病

### 脂肪分解（酸敗氧化）

感染器官	症狀	結果
 肝臟	 肝臟色澤蒼白 ②  魚體虛弱  眼部混濁  魚體畸形	 生長不良  存活率低



肝臟顏色正常



肝臟色澤蒼白



### 預防方法

- 避免投餵腐敗（酸敗）的下雜魚
- 避免投餵發霉的人工飼料



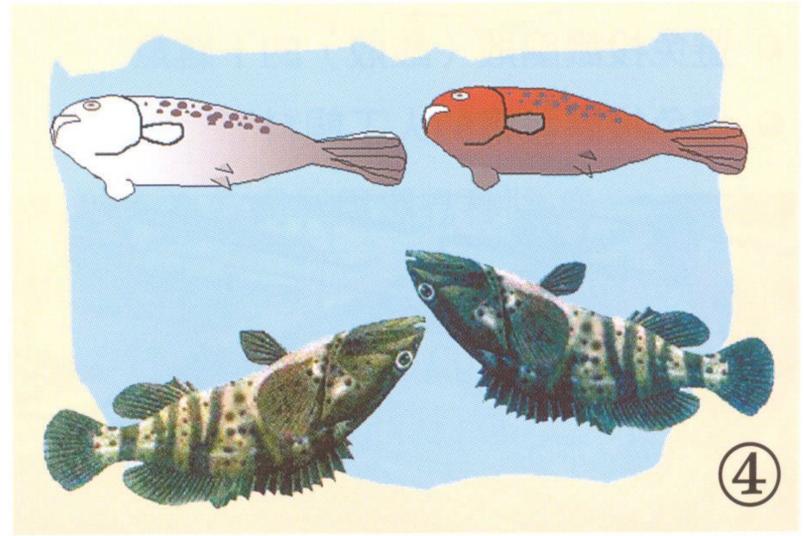
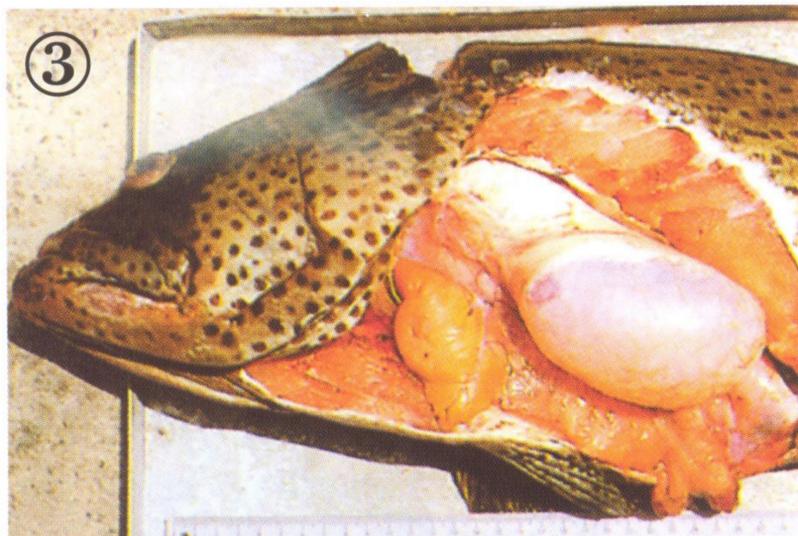
## 環境性疾病

我的魚腹部腫脹，  
是否要產卵了呢？  
但牠卻游泳異常。

不是的，牠游泳異常是因為魚鰾  
受緊迫所致；驟變的水質將會造  
成（引發）此類情形，而影響已  
達上市體型魚隻及種魚的價格。



感染器官	症狀	結果
<ul style="list-style-type: none"> <li> 鰾</li> <li> 鰓部</li> </ul>	<ul style="list-style-type: none"> <li> 如圖①、②及③所表示的過度膨脹情形</li> <li> 魚體在水表面游泳異常（倒泳④）</li> <li> 鰓絲有氣泡</li> </ul>	<ul style="list-style-type: none"> <li> 浮力過大</li> <li> 曬傷</li> <li> 死亡</li> </ul>



養殖環境會直接影響魚體健康，驟雨所帶入的部分營養物質會引發浮游生物大量繁殖。以箱網養殖魚而言，網目附著的有機泥狀物會降低水體交換率，如此將使網目內的水質較為惡化。

現在我該怎麼做呢？

別擔心，這裏有些好用的祕訣，可用來處理這類疾病。



對於已達上市體型的魚：

- 收獲並出售。
- 避免細菌的二次感染，以免發生大量死亡。

對種魚：

- 以無菌的注射針筒刺入膨脹部位。
- 輕放入水中，輕壓以排除內部氣體。
- 一旦魚鰾的多餘氣體排出，移除插入針頭，並以 0.1% 的 **acriflavin** 或 **抗生素藥膏** 輕塗傷口。
- 將魚放回箱網或養殖池。
- 約 **3-6天** 的時間可獲得 **50%** 左右的痊癒率。



# 附錄1：

## 亞太地區養殖石斑魚類地區性名稱

石斑魚種名	英文名稱	地區性名稱	
		印尼	馬來西亞
<i>Epinephelus coioides</i>	Orange spotted grouper Green grouper	Kerapu lumpur	Kerapu
<i>Epinephelus malabaricus</i>	Malabar rockcod	Kerapu malabar	Kerapu hitam
<i>Epinephelus fuscoguttatus</i>	Flowery cod Blotchy rockcod Brown marled grouper	Kerapu macan	Kerapu hitam
<i>Epinephelus bleekeri</i>	Dusky tail grouper	Kerapu bintik	Kerapu
<i>Plectropomus leopardus</i>	Leopard coral trout Blue spotted seabass	Kerapu sunu Kerapu lodi	Kerapu merah Kerapu sunoh
<i>Plectropomus maculatus</i>	Barred-cheek coral trout Spotted coral trout	Kerapu sunu Kerapu lodi	Senderong Kerapu sunoh
<i>Cromileptis altivelis</i>	High-finned grouper Hump back rockcod Barramundi cod Polka-dot grouper	Kerapu bebek Kerapu tikus Sunu tikus	Kerapu tikus Kerapu sunoh
<i>Epinephelus fario</i>	Three spot grouper	Kerapu	
<i>Epinephelus fasciatus</i>	Black tip grouper	Kerapu batu	Kerapu bara Kerapu merah
<i>Epinephelus septemfasciatus</i>		Kerapu	
<i>Epinephelus lanceolatus</i>	Giant grouper	Kerapu ketang	Kerapu
<i>Epinephelus moara</i>		Kerapu merra	

地區性名稱

菲律賓	新加坡	中華台北	泰國	越南
apu-lapu		點帶石斑 紅點仔	Pla karang-jud-namtal	
apu-lapu	Chi hou Hua tun hou	瑪拉巴石斑 黑點仔	Pla karang-dum	Ca song diem dai
apu-lapu	Lao hu ban	虎斑	Pla karang-lai-hin-on	Ca song hoa nau
apu-lapu	Hua hou Jia zhi hou	芝麻斑	Pla karang-hang-tud Pla karang-jut leang	Ca song bolekori
apu-lapu	Hong hou	七星斑 東星、紅條	Pla karang lai seau	Ca mucham nho
apu-lapu	Jin hou	泰星 斑點鰓棘鱸	Pla kudsalak-lai-sae	Ca mucham to
apu-lapung enorita	Lao shu hou Nuo mi hou	老鼠斑	Pla kudsalak Pla oon roon	Ca lu heo Ca mu det
apu-lapu		青點石斑	Pla karang-naa-ngon	Ca mu song
apu-lapu		赤石斑 黑帶石斑	Pla karang-leong-fa Pla karang seua keeb yao	Ca mu bong Ca song soc ngang
		七帶石斑		
apu-lapu	Long dan	龍膽石斑 槍頭石斑	Pla moh-ta-le	Ca muk hoang Ca mu song
		莫阿拉石斑		

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