

BIOSECURITY SCIENCES LABORATORY

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SUBMITTER :

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Your submitter code is :
MCCEBEE

Please quote this code on future accessions.

Pathology Report

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Date Sent : 20/03/07
Date Received: 21/03/07
Reason for Submission: diagnostic

Accession No: **07-109120**
Species : crustacea
Pathologist : R. Chong

Property No: QIAB5000
Owner : E Mcconnell
282 Wuraga Road
Beenleigh

Qld 4207

DIAGNOSIS

Animal ID: WWorths

Diagnosis : No diagnosis

Comment :

History

Reported to DPI&F green prawn product labelled as Australian black tiger prawn purchased on the 17.3.07 from Beenleigh Woolworths observed to have multiple white spots on the shell in all of 1 kg of prawns purchased.

Diagnosis

These prawn samples are NEGATIVE for both white spot syndrome virus (WSSV) and Taura syndrome virus (TSV).

Pathology of the white spots indicate that bacterial or fungal infection processes were not involved. Through the exclusion of infectious causes, the abnormal calcium deposits on the shell leading to

Results provided on samples as received. Responsibility for sampling and delivery rests with submitter.

Contribution

SUBMITTER
Principal Manager, Fisheries Policy,
Fisheries Division, Floor 2 PIB

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03/28/2007



Queensland Department of Primary Industries and Fisheries
Biosecurity Veterinary Laboratories: 13389

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white spots can be explained as related to exposure of the prawns in the pond environment to high alkalinity or pH conditions. This has been reported in the literature (Asia Diagnostic Guide to Aquatic Animal Diseases, 2001. NACA/FAO Fisheries Technical Paper 402/2, pp. 178-185). Therefore the mere presence of white spots on prawns is not pathognomonic (definitive or confirmatory) for WSSV infection.

Based on these laboratory results, there is no significant biosecurity risk of this prawn disease to wild prawns or farmed prawns.

POST MORTEM EXAMINATION

Prawn species consistent with *P.monodon*. Prawn heads in advanced state of autolysis. 1. 7/7 prawn heads with multiple calcareous (calcium) deposits on the endocuticle. Cannot scrape off with a scalpel. These white spots are coalescing. 2. White spots also on the walking legs. 3. White spots on the cephalothorax, abdominal segment cuticle predominantly. 4. No gross evidence of bacterial shell disease or necrosis, no melanisation. Wet mount morphological examination of the white spots : 1. No lichen-like concentric layering of the spot as is reported for bacterial white spot syndrome (BWSS). 2. No erosive bacterial colonies or associated melanisation. 3. No evidence of fungal hyphae or fungal infection.

VIROLOGY

Comment :

Two samples of mixed penaeid tissues were tested for WSSV DNA and TSV RNA using the Intelligene IQ2000 PCR commercial kits.

Both samples tested PCR negative for WSSV DNA. Internal controls indicated that DNA was of sufficient integrity for PCR. Positive and negative controls worked as expected.

One sample tested PCR negative for TSV RNA. Internal controls indicated that RNA from this sample was of sufficient integrity for PCR. The internal control indicated that RNA from the other sample was

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degraded and unsuitable for testing. Positive and negative controls worked as expected.

NATA accreditation currently does not cover the Intelligene IQ2000 WSSV and TSV PCR test methods conducted at DPI&F, although molecular diagnostic conditions and procedures necessary for the conduct of these tests are NATA accredited .

See AAHL report for NATA accreditation status of WSSV PCR tests conducted by AAHL.

Unless otherwise specified all other test results on this DPI&F report are NATA accredited.

HISTOLOGICAL EXAMINATION

No evidence of white spot syndrome virus (WSSV) or Taura syndrome (TSV) inclusion bodies in the gills, carapace subcuticular epithelium and muscle epithelium.

No evidence of erosive bacterial shell disease.

Note - advanced tissue autolysis, unable to examine other prawn tissues.

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for Manager, Regional Veterinary Laboratory
28/03/07