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in

Zrncic S. (ed.).  
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Zaragoza : CIHEAM

Options Méditerranéennes : Série B. Etudes et Recherches; n. 75

2020

pages 154-155

Article available on line / Article disponible en ligne à l'adresse :

<http://om.ciheam.org/article.php?IDPDF=00007953>

To cite this article / Pour citer cet article

Varvarigos P. **Summary sheet for photobacteriosis (ex Pasteurellosis)**. In : Zrncic S. (ed.). *Diagnostic Manual for the main pathogens in European seabass and Gilthead seabream aquaculture*. Zaragoza : CIHEAM, 2020. p. 154-155 (Options Méditerranéennes : Série B. Etudes et Recherches; n. 75)



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# Summary sheet for photobacteriosis (ex Pasteurellosis)

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## Aetiological agent/s

*Photobacterium damsela* subspecies *piscicida*

## Epidemiology

Host/s (species; age): All Mediterranean farmed fish: seabream (*Sparus auratus*) as well as all other sparids, seabass (*Dicentrarchus labrax*), meagre (*Argyrosomus regius*). The younger the fish the more sensitive they are.

Morbidity and mortality rates: Depend on age/size class. Juveniles up to 80%, fry up to 60%, on growers up to 40% when fish are not immunized and are left untreated.

Transmission: Horizontal as well as vertical (via infected eggs).

Factors (environmental, others) for disease outbreak: The disease is temperature-dependent. Outbreaks often occur at seawater temperatures between 18-26°C. Site and cage excessive stocking densities predispose horizontal transmission.

## Clinical signs

Sudden high mortality, lethargy and ataxia, skin darkening with eroded, whitish patches, most mortalities sinking to the bottom.

## Samples to be collected for diagnostics

Moribund whole fish or target organs, such as the spleen, head kidney, liver, brain.

## Presumptive diagnostics analysis

History of elevated water temperature and sudden high mortality, splenomegaly with or without pseudotuberculi, gill necrosis, liver congestion, bacteraemia evident on Giemsa-stained blood smears or splenic imprints.

Bacterial cultures from target tissues on TSA, BHI, MH, blood agar produce colonies with characteristic morphology in about 36h at 26°C. No growth on TCBS agar. Inoculation of API 20E test strips produces typical profile 2005004.

## Confirmatory diagnostic analysis

Seroagglutination of bacterial colonies, MALDI-TOF, PCR



Gill necrosis



Splenomegaly with pseudotuberculi