Summary sheet for photobacteriosis (ex Pasteurellosis)

Varvarigos P.

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# Summary sheet for photobacteriosis (ex Pasteurellosis)

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<table>
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<th>Aetiological agent/s</th>
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<td><em>Photobacterium damselae</em> subspecies <em>piscicida</em></td>
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## 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