EMERGING PISCINE LACTOCOCCOSIS IN MEDITERRANEAN AQUACULTURE: DIFFERENT *Lactococcus* SPECIES AFFECTING EUROPEAN SEABASS, GILTHEAD SEABREAM, AND RAINBOW TROUT

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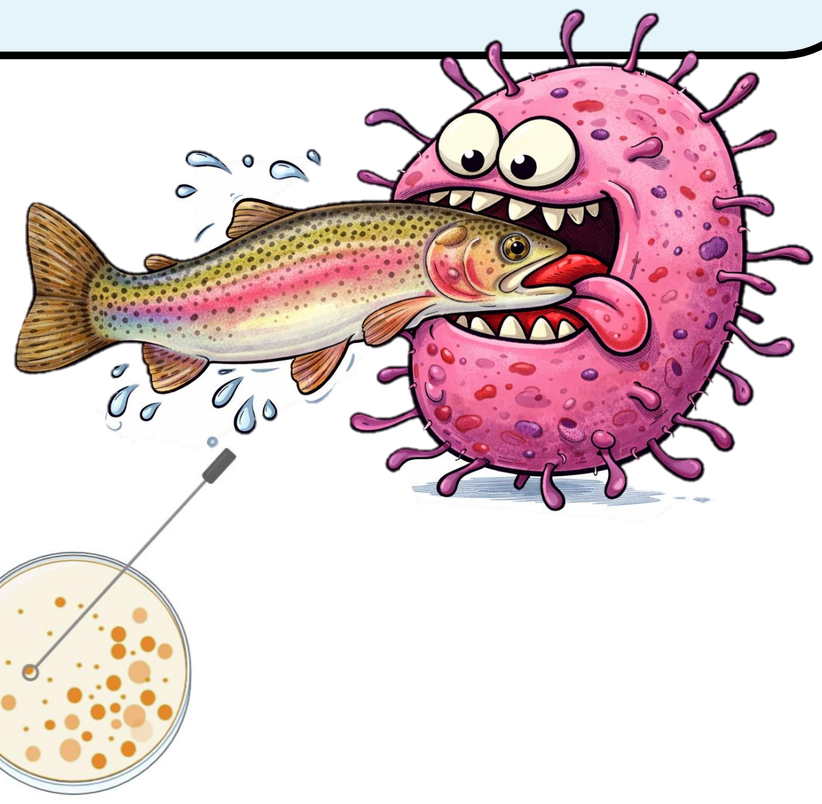
Background

- Emerging bacterial disease caused by different *Lactococcus* species
- Affects both marine and freshwater farmed fish
- Increasing economic and animal health impact
- Study integrates three complementary investigations on distribution, diversity, and pathogenicity



Study 1

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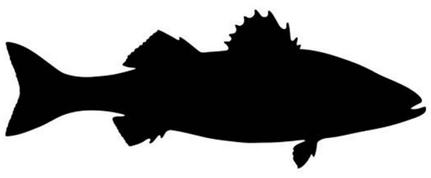
https://doi.org/10.1111/jfd.70048



European Seabass – *Lactococcus petauri*

Dicentrarchus labrax (Linnaeus, 1758)

- Present in Italian marine aquaculture since at least 2012
- Broad antimicrobial resistance detected
- Importance of re-evaluating archived isolates

Study 2

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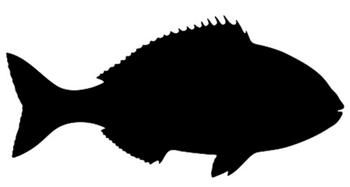
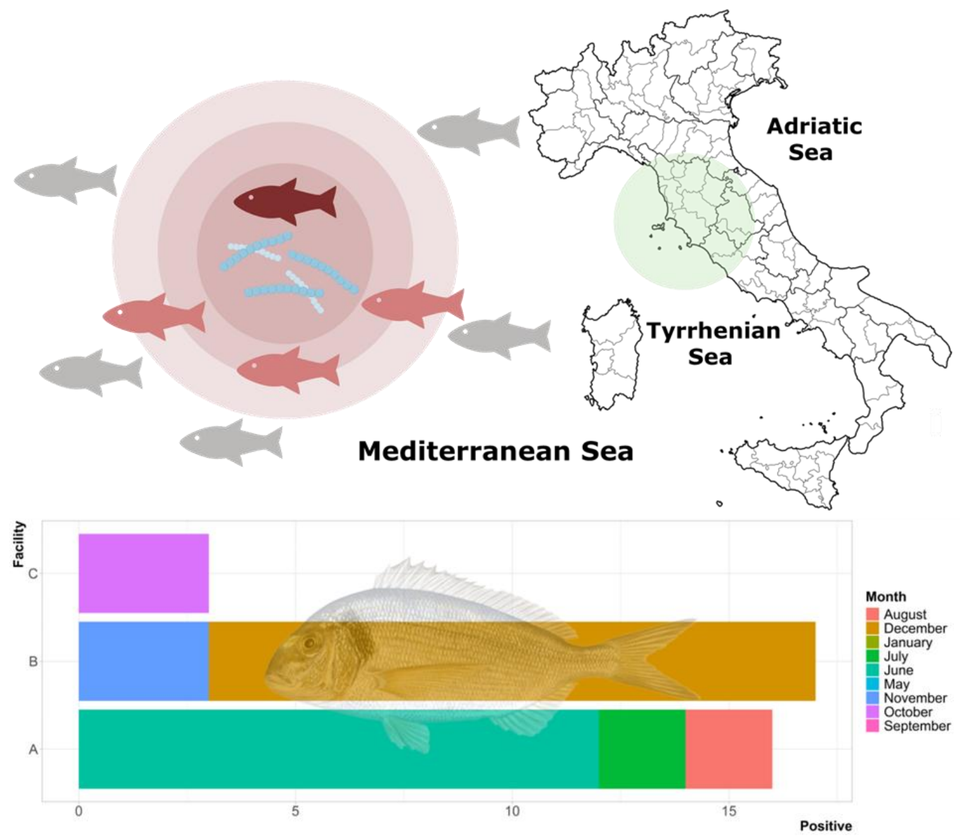


Gilthead Seabream – *Lactococcus garvieae*

Sparus aurata (Linnaeus, 1758)

- First outbreak recorded in Italy (2024)
- Mortality observed in three farms
- Associated with summer temperatures >18 °C



Study 3

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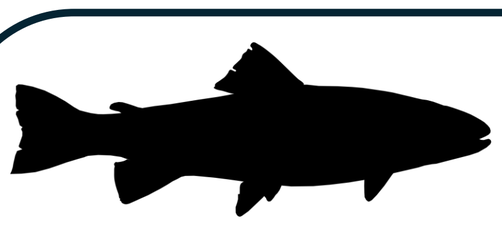
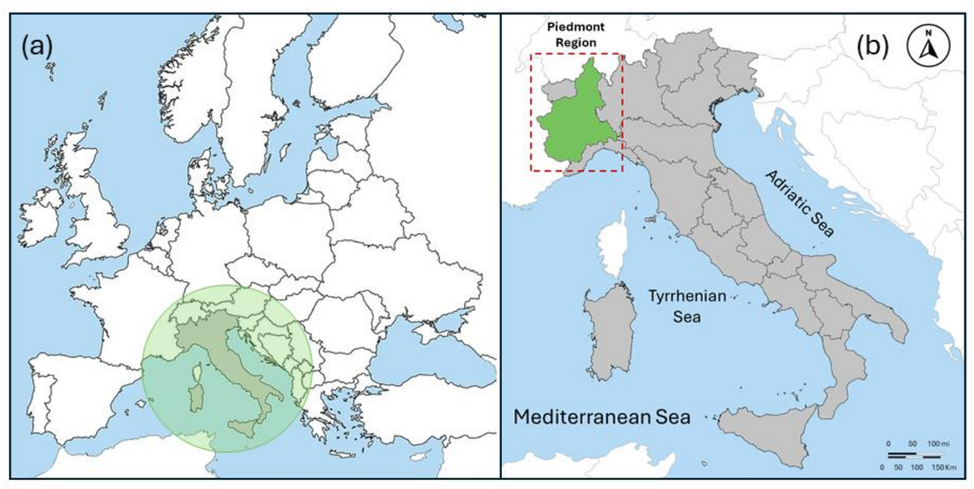


Rainbow Trout – *Lactococcus formosensis*

Oncorhynchus mykiss (Walbaum, 1792)

- First detection in European aquaculture
- No clinical signs or mortality observed
- Strain susceptible to common antibiotics
- Surveillance needed to assess pathogenic role



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