

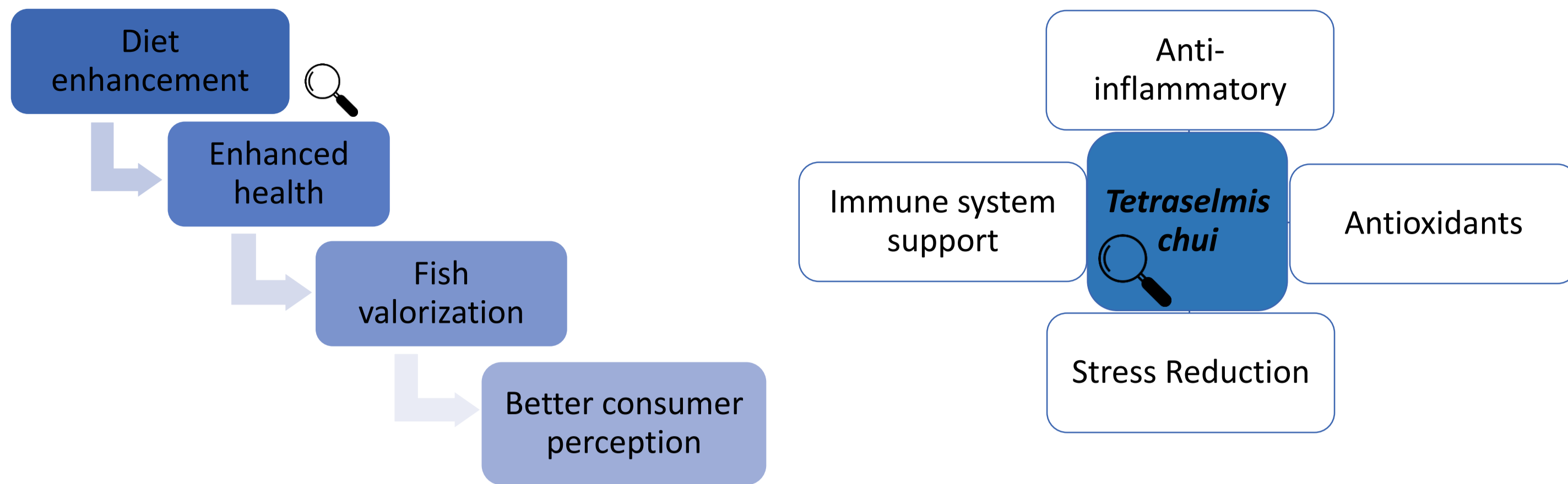
EVALUATING THE IMPACT OF DIETARY *Tetraselmis chui* EXTRACTS ON IMMUNITY AND DISEASE RESISTANCE IN EUROPEAN SEABASS *Dicentrarchus labrax* JUVENILES

Cunha, A.^{1,2,3*}, Santos, P.^{1,2,3}, Hinzmann, M.¹, Magalhães S.⁴, Aires, T.⁴, Conceição, L.⁵, Machado, M.¹, Vitorino R.³, Gonçalves, A.T.^{3,5}, B. Costas^{1,2}

*acunha@ciimar.up.pt

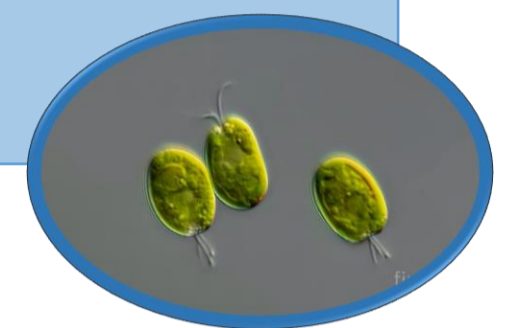


Introduction

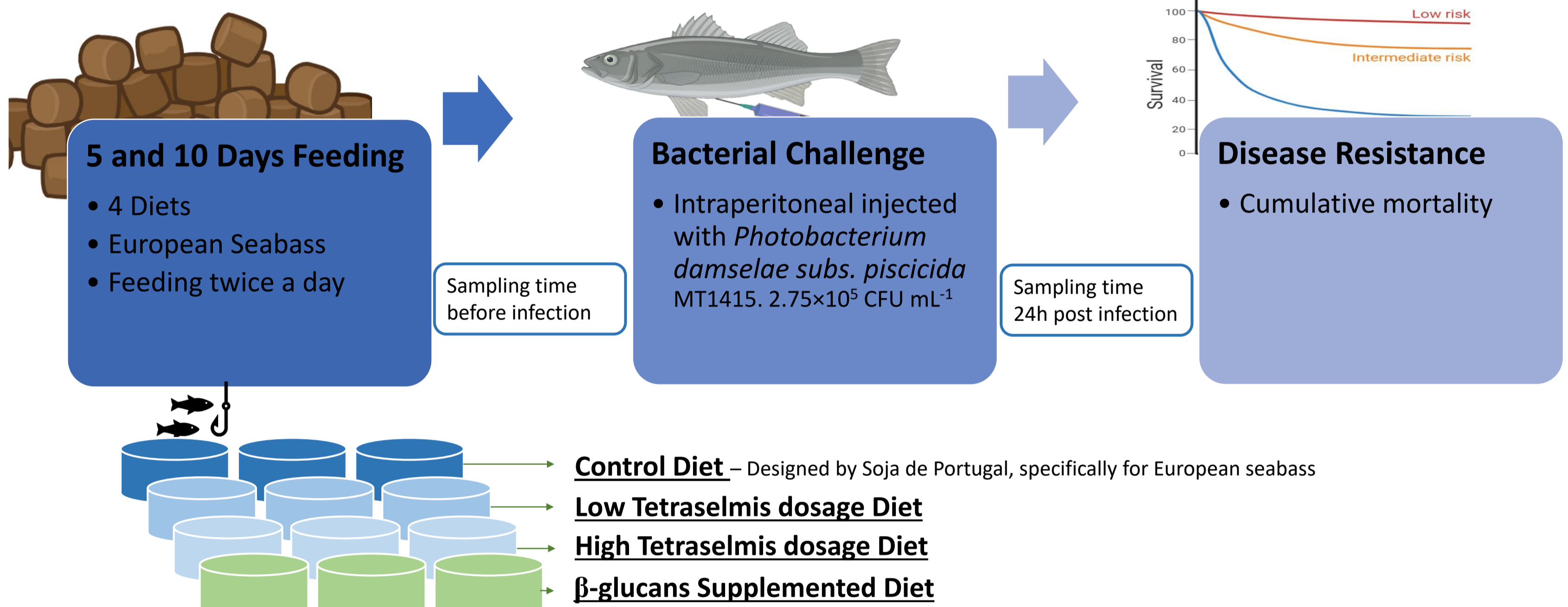


Aim

Evaluation of the capacity of *Tetraselmis chui* extract to modulate the immune response and disease resistance of European seabass



Material and Methods



Blood

- Differential leukocytes counting
- Peritoneal leukocyte evaluation
- Hemoglobin
- MCV, MCH, MCHC and Hematocrit ratio

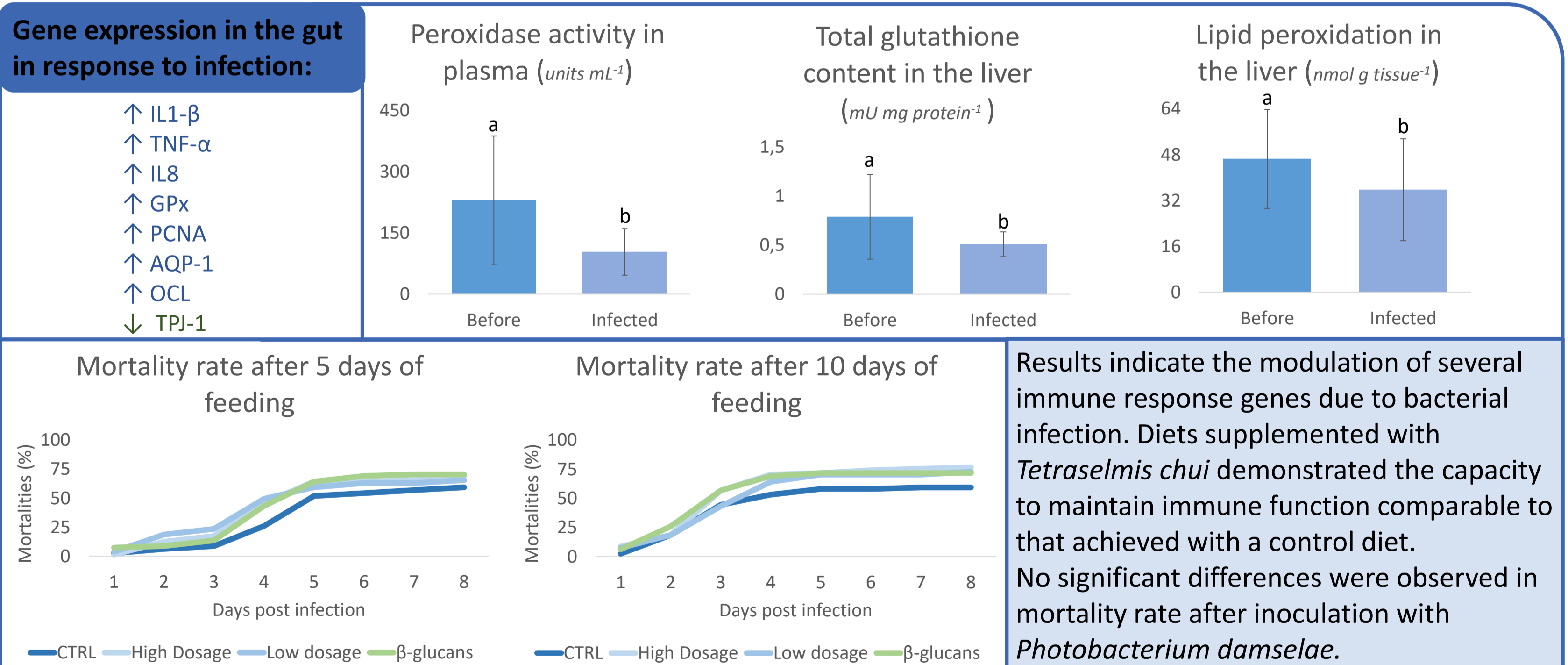
Gut and Liver

- Oxidative stress biomarkers
- Molecular biomarkers
- Stress biomarkers

Plasma

- Humoral parameters

Results



Discussion

Preliminary data suggest that dietary supplementation with *Tetraselmis chui* extract under the current experimental conditions does not seem to modulate the seabass immune status nor survival against *Photobacterium damsela* piscicida.

Future Work

Evaluation of other feeding times and supplementation levels, to further our knowledge. Analysis of immune related molecular parameters in head kidney and liver.

Acknowledgements

This work was financially supported by "Pacto da Bioeconomia azul" (Project No. C644915664-00000026) within the WP5 Algae Vertical, funded by Next Generation EU European Fund and the Portuguese Recovery and Resilience Plan (PRR), under the scope of the incentive line "Agendas for Business Innovation" through the funding scheme C5 - Capitalization and Business Innovation. A.Cunha, was supported by Foundation for Science and Technology within the 2022.12761.BD PhD grant.

