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Tailoring your feeds

Assessing the effect of microdiets and feeding levels on Atlantic halibut post-larvae feed intake and growth performance

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INTRODUCTION

Atlantic halibut is a key fish species for aquaculture diversification due to high market value and excellent consumer acceptance. Main bottlenecks at hatcheries relate to heavy reliance on live feeds and difficulty in introducing inert diets, which can delay weaning and compromise growth.

Weaning stage in Atlantic halibut can be improved by:

- Optimizing feeding regimes
- Developing customized microdiets with:
  - *increased attractiveness*
  - *suitable nutritional profile*
  - *adapted physical properties*

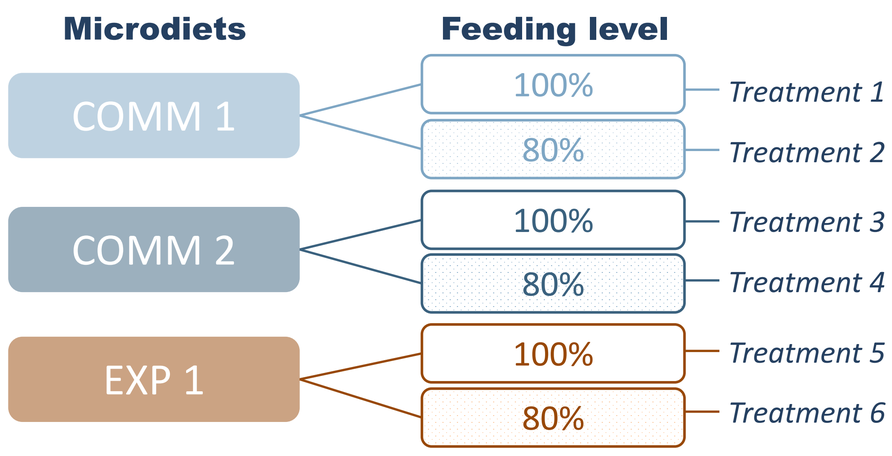
This study aimed at assessing the effect of three microdiets fed at two feeding levels on Atlantic halibut post-larvae growth performance and feed conversion.

CONCLUSION

- Results from the present trial show that it is possible to **achieve improved FCR** at an early development stage **through customized nutrition**, and that increased feeding levels may not necessarily bring extra growth in halibut post-larvae.

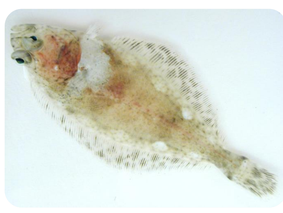
MATERIALS AND METHODS

- 6 treatments: 2 commercial & 1 experimental microdiets, fed at 2 feeding levels (100 and 80%)



Atlantic halibut post-larvae were sampled at:

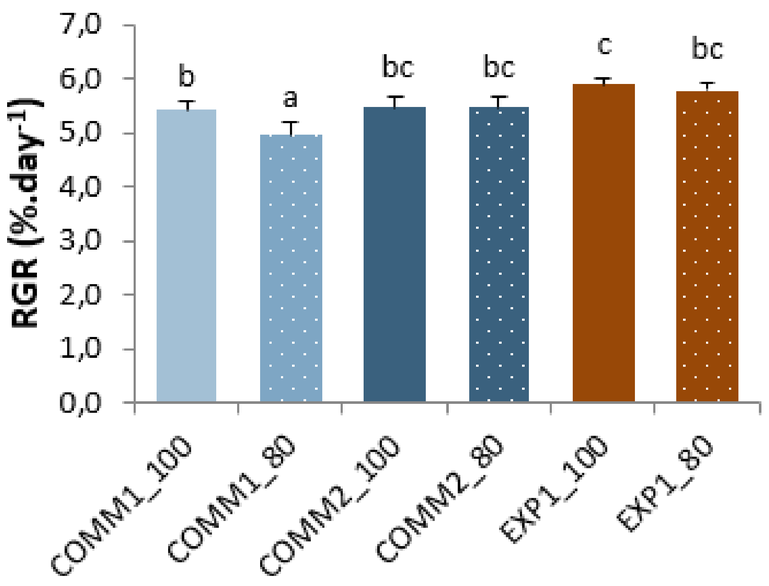
- 107 dph
- 148 dph



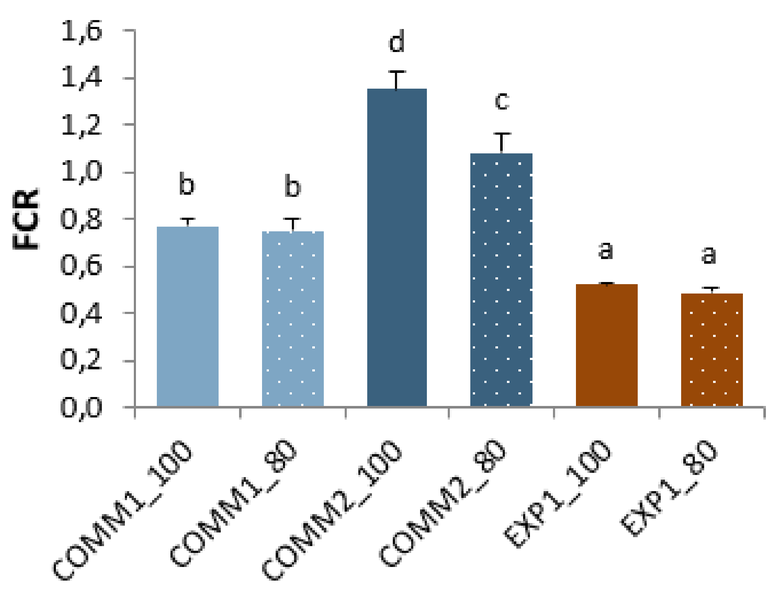
Main analyses comprised Wet Weight (WW), Total Length (TL), Relative Growth Rate (RGR), FCR and Survival.

RESULTS

Growth



Feed Conversion



Both COMM 2 and EXP1 groups tended to have higher growth, irrespective the feeding level.

EXP1 group had the lowest Feed Conversion Ratio ($P<0.05$), both at 100% and 80% feeding level.

EXP1 group also tended to have higher final body weight than fish fed either COMM1 or COMM2.

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