

II taller internacional INLARVI enero 2017

Feeding strategies in Chilean croaker larviculture

Ana Farías, Iker Uriarte, Jorge Hernández

Coloquio Internacional “Brechas de Investigación en larvicultura de peces”

Sede Puerto Montt
Instituto de
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Integrated Programme to the development sustainable of the cultivation of *Cilus gilberti*

Programme INNOVA CORFO 09-PDAC 6912 directed and coordinated by FCh, M.Sc. Marcela Ureta

Subprogrammes of Research and Development

Subprogramme for nutrition (UACH)

Subprogramme for Genetics (UCN)

Subprogramme for environmental
impact (UCN)

Subprogramme for health (ADL
Diagnostic)

Subprogramme for production of juveniles in
hatchery (FCh)

Subprogramme for pre-ongrowing and
ongrowing in tanks (UNAP)

Subprogramme for ongrowing in floating
cage rafts (CORDUNAP)

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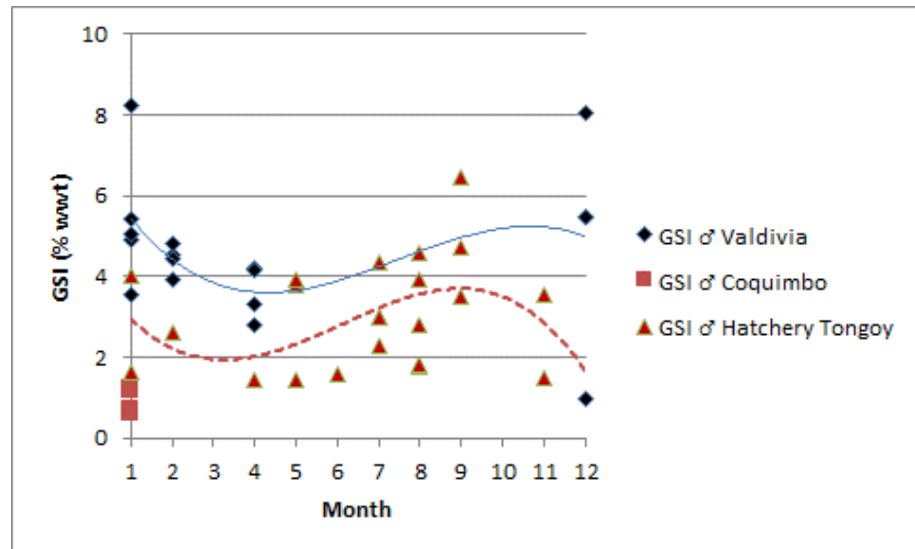
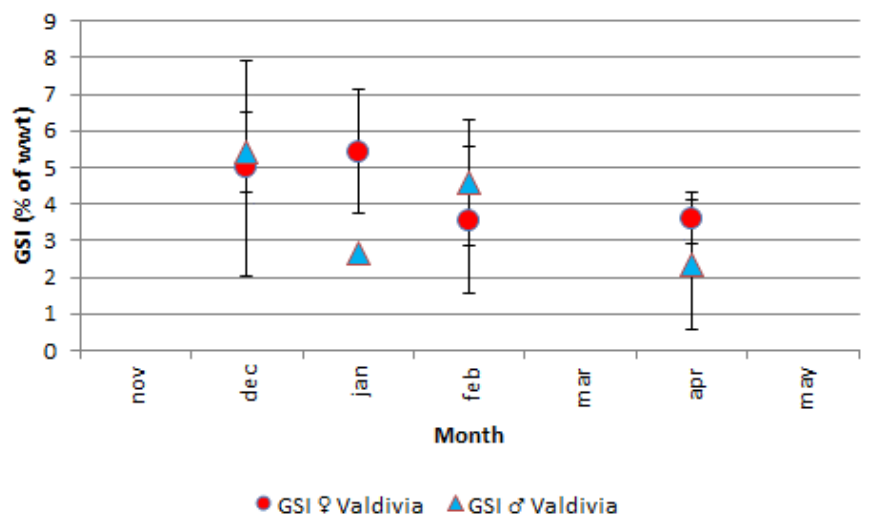


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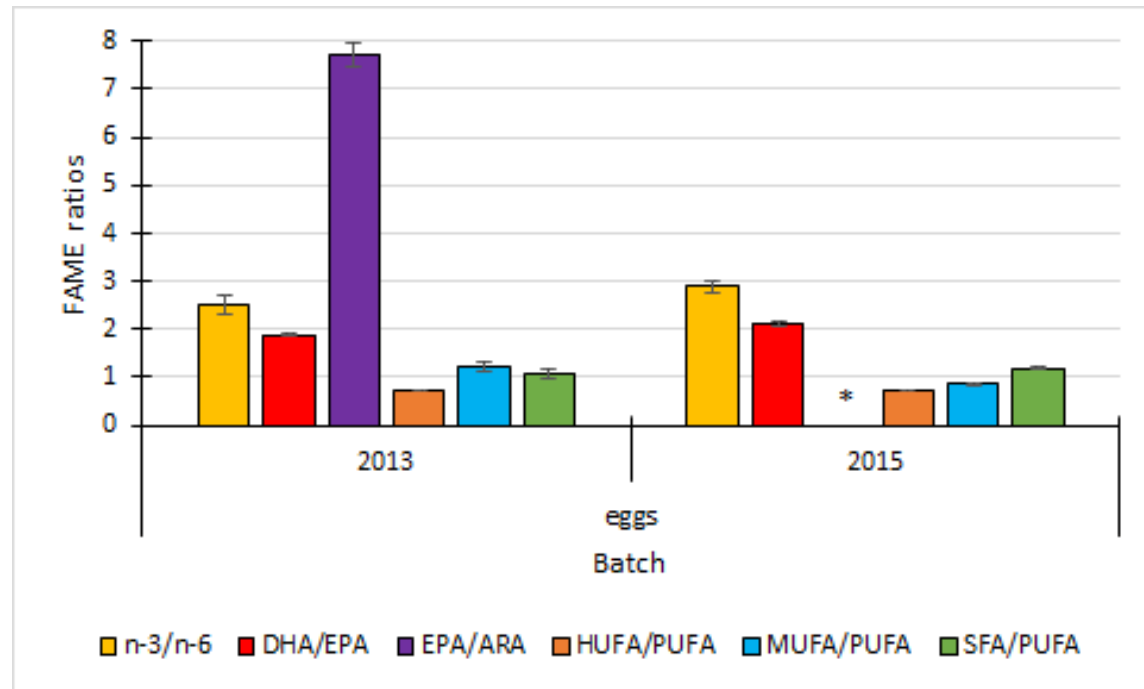


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Ova quality after reproductive conditioning

Broodstock conditioning, larval rearing and juvenile production are made in Hatchery Tongoy by Fundación Chile (FCh).

Proximal analyses, Fatty Acid Methyl Esters and Aminoacid purification and identification are made in Hatchery Marine Invertebrates Puerto Montt by Universidad Austral de Chile (UACH)



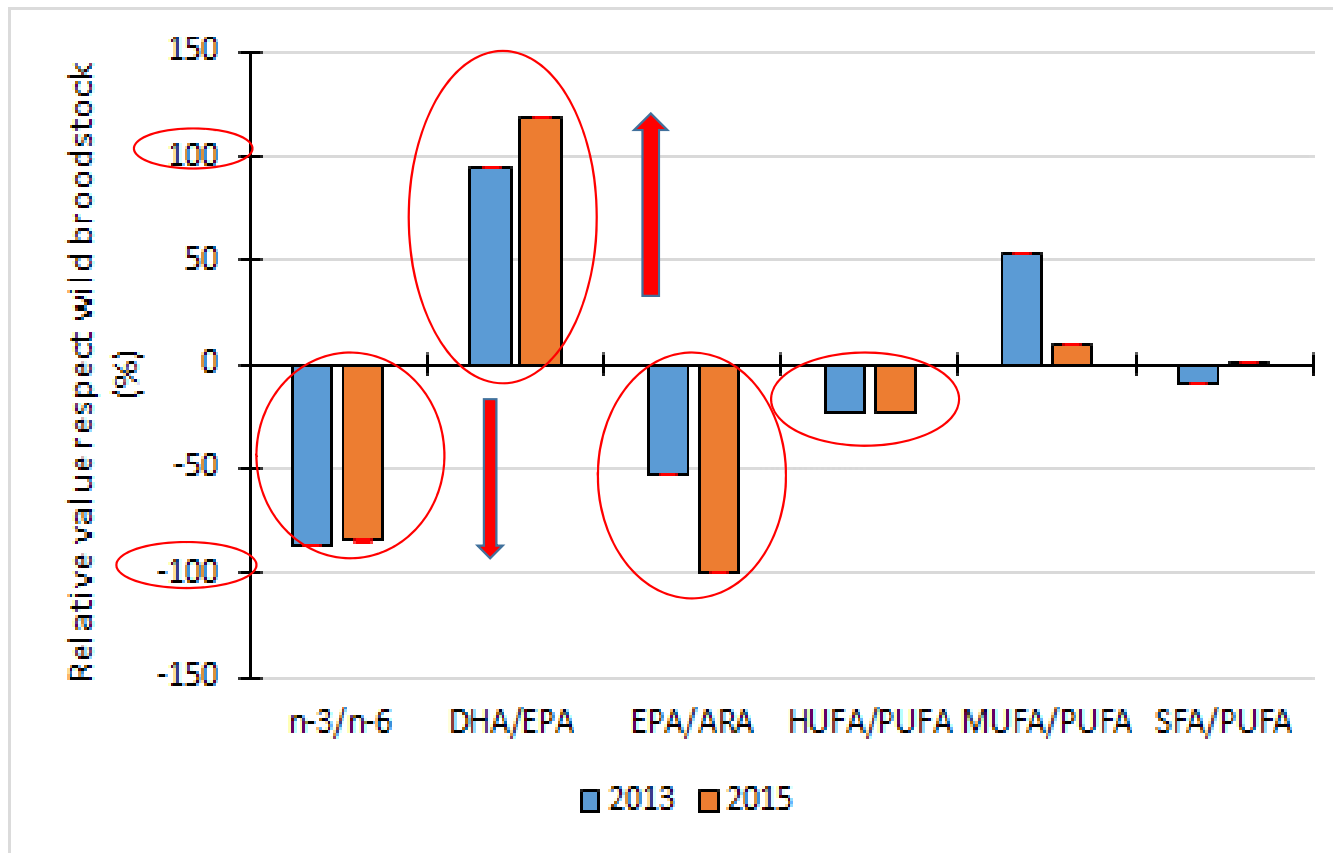
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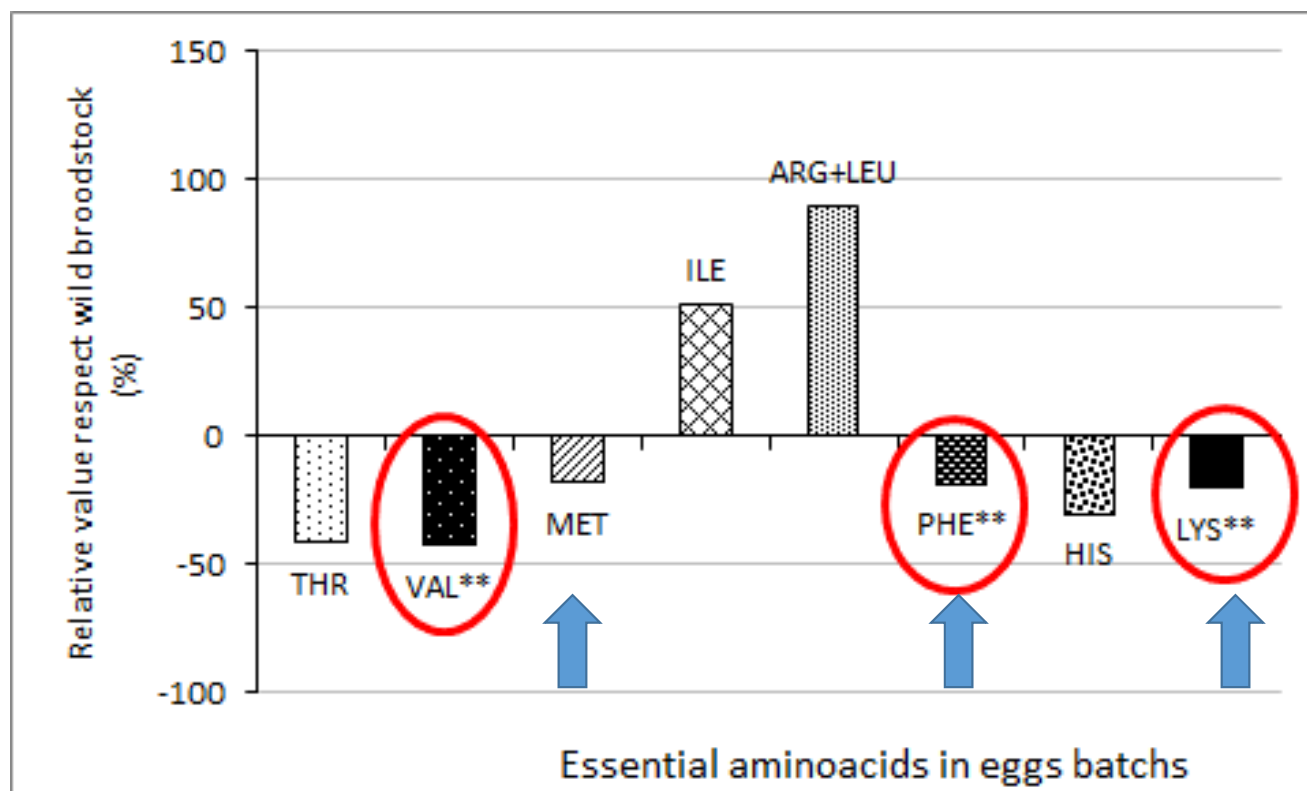
Differences between hatchery eggs and wild ova could be explained by the broodstock diet during reproductive conditioning. Or not.

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preserved during prolonged fasting

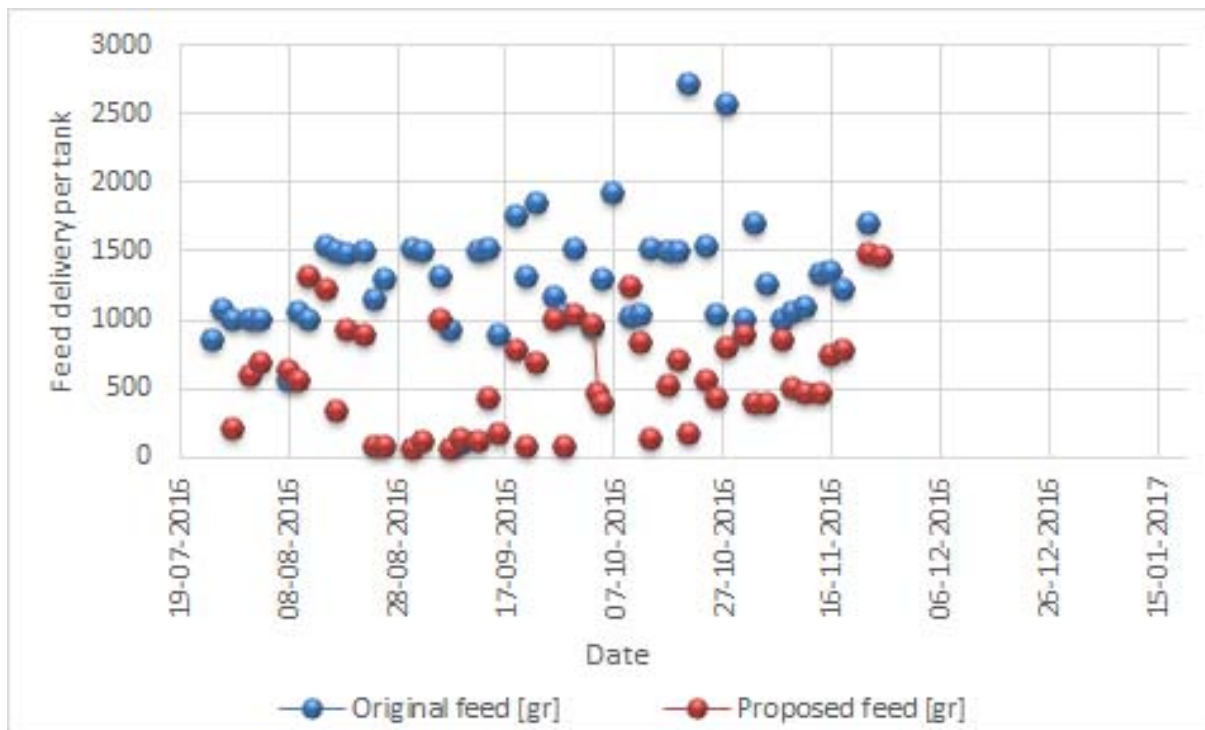
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2 tanks with 45 fish of 5kg each, 2 diets, non replicate tanks

What we do?

A change in the formulation of broodstock diet for:

- Improved aminoacid composition
- Improved fatty acid composition
- Improved P/E ratio
- Maintenance of mixture with fresh attractants

What we will measure?

- GSI
- Biochemical analyses
- Fecundity

What we will expect?

- Best quality of the eggs
- Maintenance of fecundity
- Improvement of GSI

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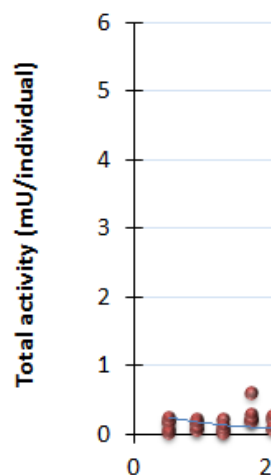
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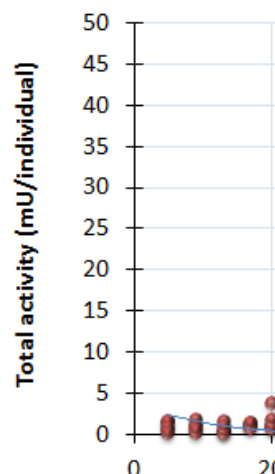


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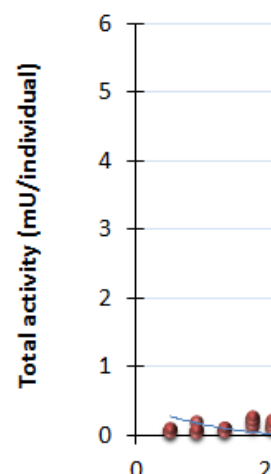
Acid proteases



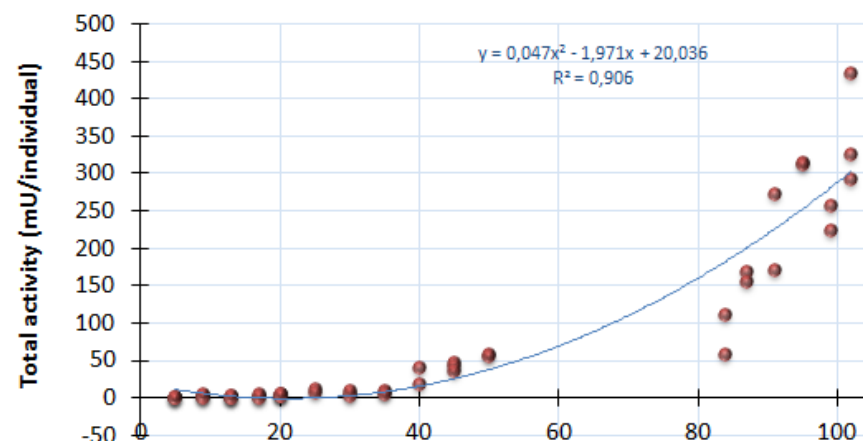
Trypsin



Chymotrypsin



Leu-aminopeptidase



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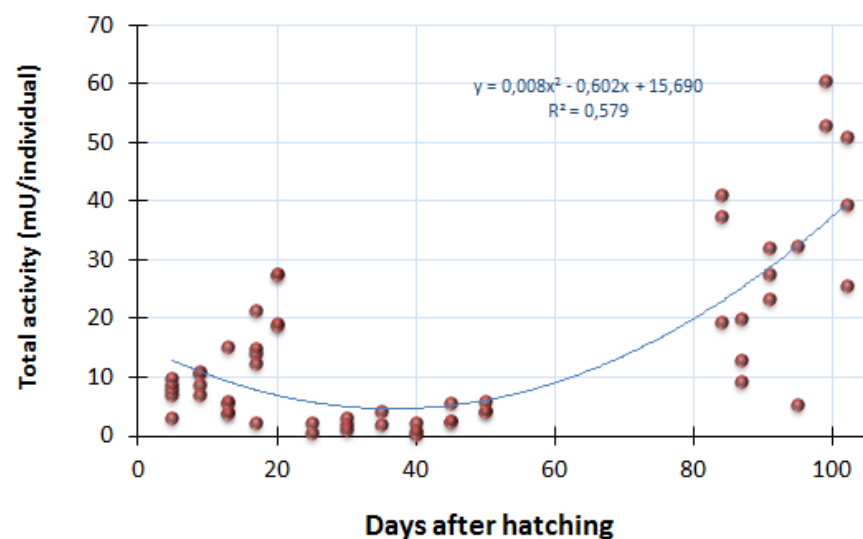
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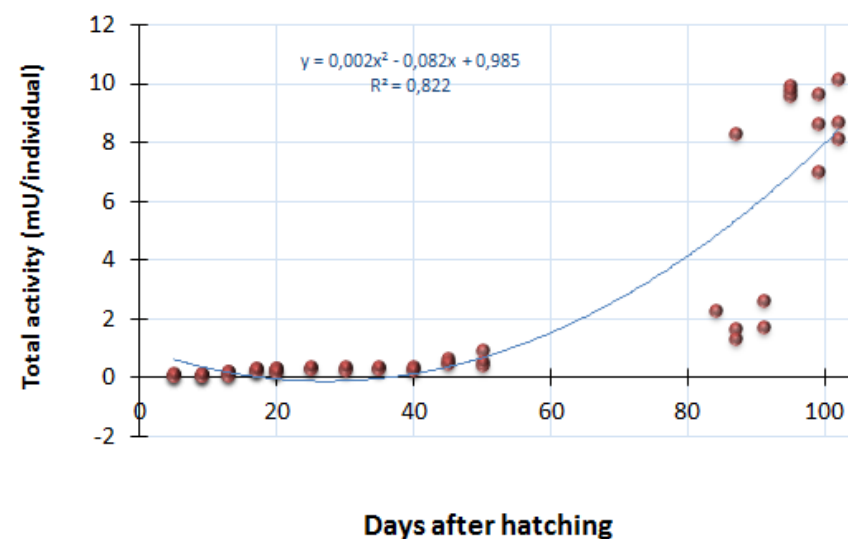


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Amylase



Lipase



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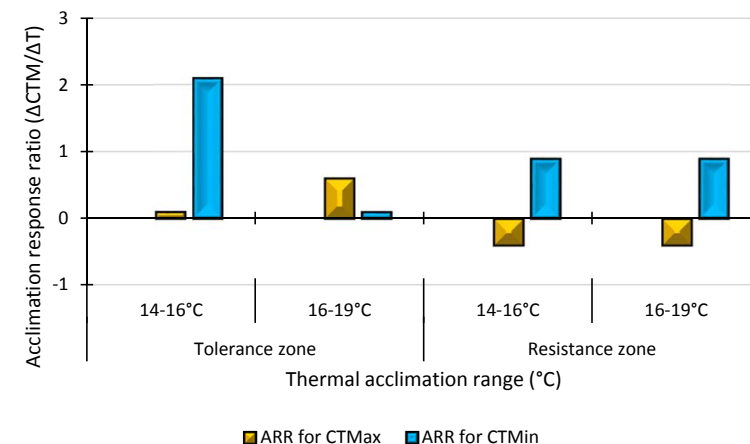
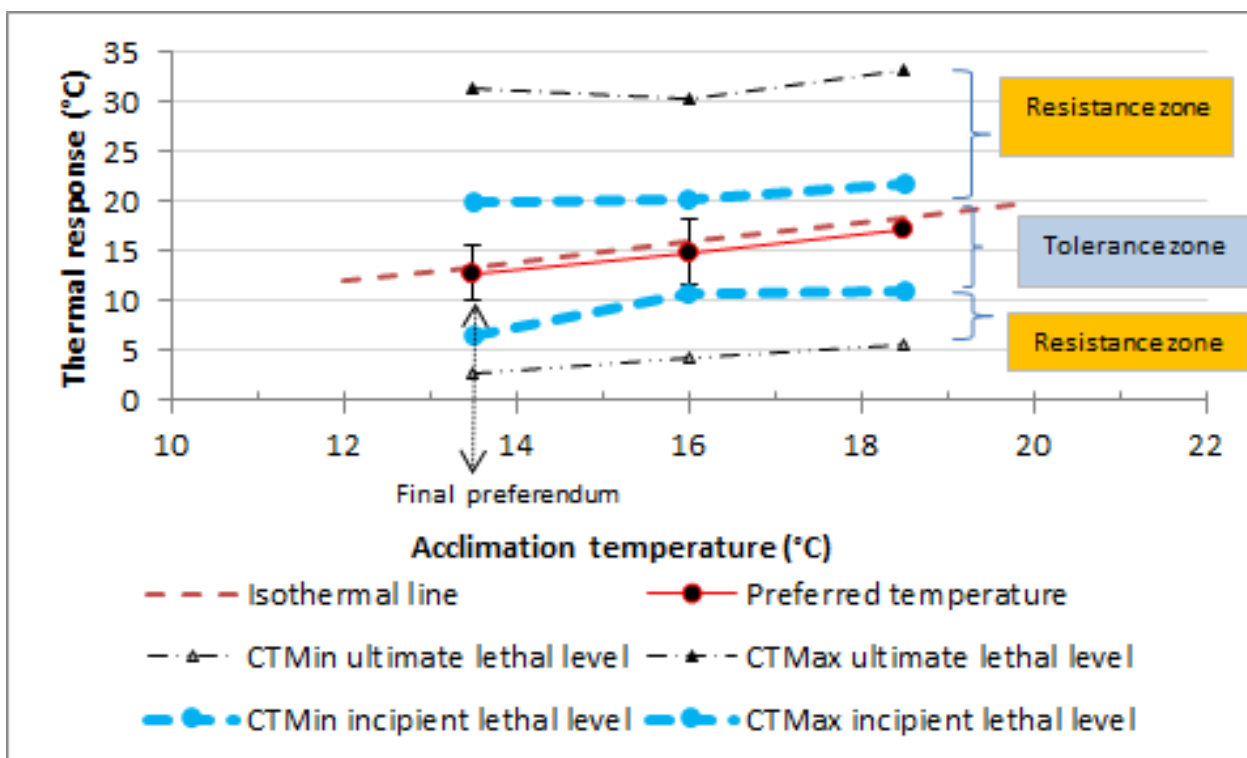


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Larvae are more sensitive at warm waters than cold waters

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Strategy consist of:

- Reduce the dependence of live prey throughout the larval-postlarval period
- Improve broodstock diets
- Include the regime of temperature
- Evaluate if a diet *ad hoc* for juvenile corvina effectively improve productivity
- Evaluate applying the basal index
- Formulate applying the know-how obtained from natural population

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