CreveTec
First shrimp farm in Belgium

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www.crevetec.be

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Activities CreveTec

- Consulting for aquafeed production and formulation
- Raw material development
- Production of shrimp feeds for European market
- Production of shrimp feed concentrates
- Production of postlarval and nursery feeds
- Consulting for shrimp farming (concept design, feed and water management)
- Contract research

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Shrimp farm

To prove the concept, a demonstration farm was built in Belgium (Ternat, near Brussels)

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Concept

Bioflocs are maintaining the water quality
No water exchange (full recycling of water since 2014)
Fresh shrimp for local market

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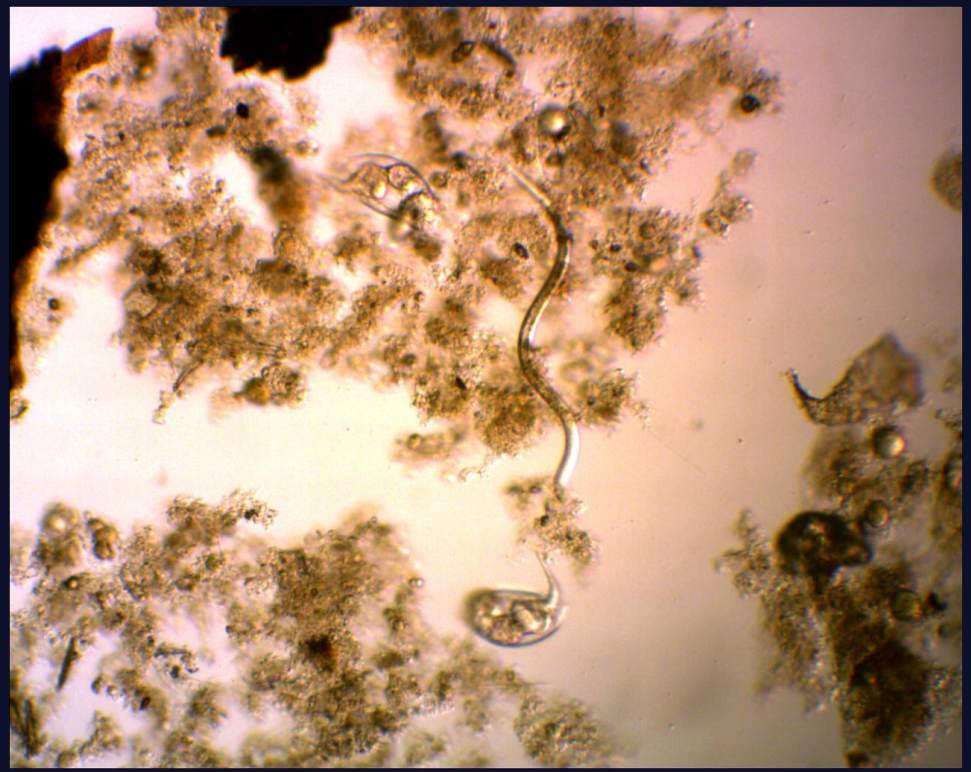
Bioflocs ?

Bioflocs are maintaining the water quality
Assimilation of shrimp faeces produces bacterial biomass and plankton
Nitrifying bacteria convert NH_4 into NO_3



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Bioflocs ?

- Shrimp can live in water with some turbidity and are filter feeders
- Bioflocs and especially the plankton (rotifers, copepods and nematodes) are additional feed for them, make the grow faster with less feeds.

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100 % reuse of water ?

Even though shrimp consume bioflocs, they can not control the growth, so biofloc density increases

NO_3 accumulates

Solution: A biofloc reactor with denitrification

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Growout tanks

There are 2 nurseries , 2 pregrowout and 4 growout tanks

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Problems !

- Low survival of shrimp throughout the production cycle
- This problem seemed to be in all farms in Europe (and US)
- We can only import PI from US (EU regulation)
- We identified the problem to be the small size (and different age) of PL from US
- Small PL (<9 mm, or less than PL11) don’t have gills developped to survive low temperature (low oxygen)
- Long transit time and no feeding causes Vibrio to develop in the gut
- The result is weak PI and weak shrimp

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Solution

Production of Pl in Europe
5 projects for PL production are being installed
CreveTec has nauplii since August
First batches of Pl are ready now, but quantities are still low

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maturation

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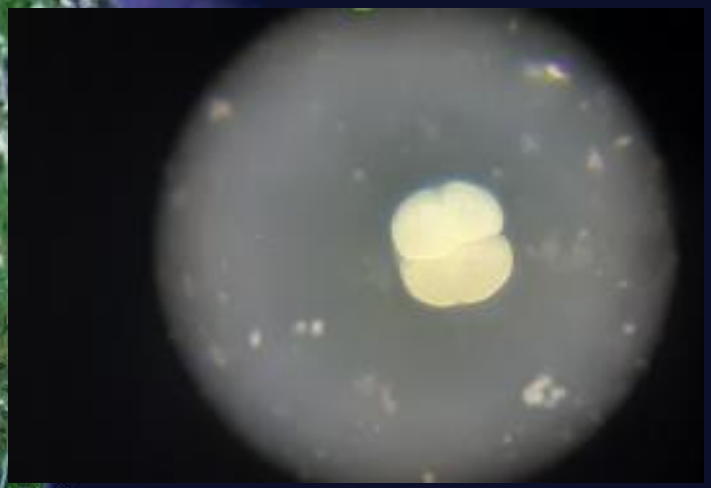
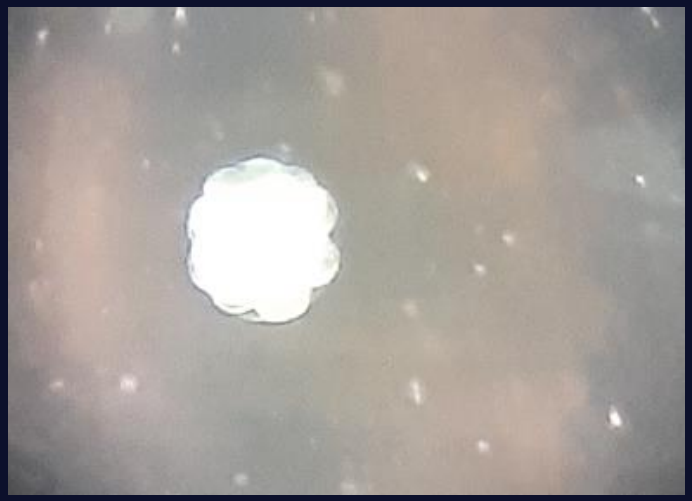
Spawning and hatching





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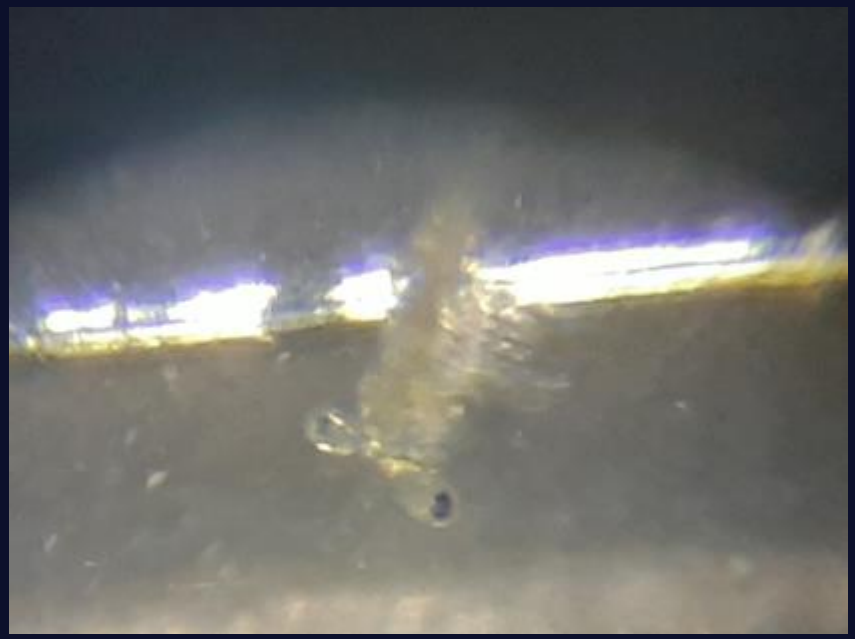
Larval development



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Future

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Conclusion

Shrimp can be farmed anywhere thanks to the possibility to grow them in water with bioflocs
They can efficiently use the bioflocs as feed
Water quality can be maintained
No contact with environment – Sustainable
Fresh shrimp – superior texture and taste

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Thank you

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