

1st EuroShrimp Symposium 05. April 2017

Pilot Aemme Shrimp Aquafuture Switzerland GmbH Stacy Ciulik



Aquafuture Switzerland

Biofloc Technology

Pilot Aemme Shrimp



Aquafuture Switzerland

Biofloc Technology

Pilot Aemme Shrimp



Aquafuture Switzerland LLC.



Irene Kunz Fritz Kunz Matthias Kunz Stacy Ciulik



1998 – Investment in freshwater shrimp farm in California

2012 – Shrimp farming market research

2013 – Attendance at WAS Aquaculture

2014 – Founded Aquafuture Switzerland LLC

2015 – Started Pilot Aemme Shrimp



Sustainable Production in Switzerland.



Preservation of mangroves

Support environmental balance



Reduction of "by catch" (can include sharks, rays, sea turtles, fish)

Small ecological footprint

Farm to Fork

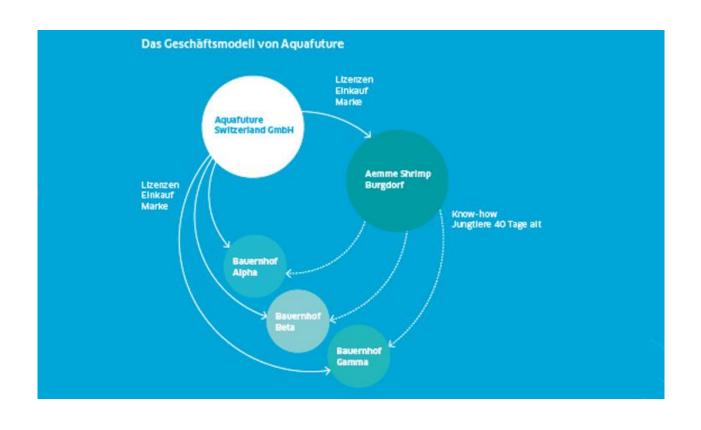


Vision.

To support agricultural family businesses in successfully establishing and maintaining sustainable aquaculture production.



Business Model.





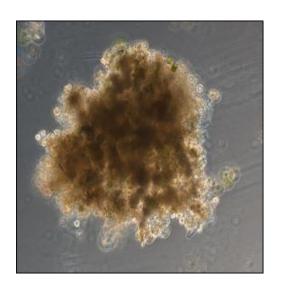
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Biofloc Technology

Pilot Aemme Shrimp



Biofloc Technology. Microorganism.



Biofloc is irregularly-shaped, suspended, microscopic Consists of:

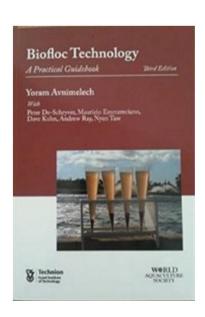
- microbes
- algae
- protists
- zooplankton
- waste
- detritus
- exoskeletons
- uneaten feed

Provides biological filtrations and turns nitrogenous wastes into highprotein feed for the shrimp

Biofloc bacteria outcompete harmful, pathogenic bacteria like *Vibrio spp.* that can cause shrimp and human diseases.



Biofloc Technology. Guidelines.



Biofloc Technology

A Practical Guidebook by Dr. Yoram Avnimelech

Design and Operation of Super-Intensive Biofloc-Dominated
Systems for Indoor Production of the Pacific White
Shrimp, Litopenaeus Vannamei—the Texas A&M Agrilife Research
Experience,

to be released later this year by Dr. Samocha

There are no biofloc techology production blue prints available



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Pilot Aemme Shrimp



Pilot Aemme Shrimp. EyHof - 300-year-old family tradition.



EyHof in Burgdorf, Switzerland ... the gate to Emmental



Irene, Fritz, Christian and Jürg Kunz



Pilot Aemme Shrimp. EyHof – farming today.



Adapting to changing local environment, regulations and trends



- 1 ha intensive orcharding
- 7 ha potatoes
- 3,5 ha sugar beets
- 3,5 ha winter oats
- 3,5 ha corn
- 3,5 ha winter wheat
- 13 ha meadow with fruit trees



Pilot Aemme Shrimp. Shrimp Farming Prerequisites.



Sustainable energy concept

Good water quality

Willingness to work 365 days a year



Existing farm buildings with 175 – 200 m2 for 6 – 8 tanks

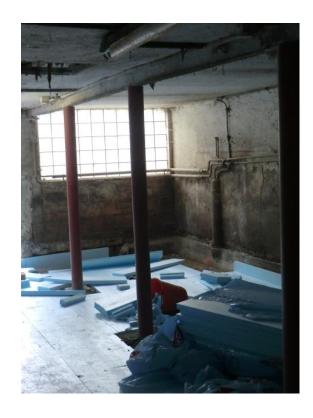
Direct sales from farm

Close proximity to city markets



Pilot Aemme Shrimp. Pig Stall Demolition.







Pilot Aemme Shrimp. Shrimp Production Transformation.







Pilot Aemme Shrimp. Laboratory.



Daily water tests: PH, DO, salinity and temperature



Pilot Aemme Shrimp. Branding.



Farm to Fork
Regional production
Swiss farms with unused stables, barns, etc.



Pilot Aemme Shrimp. Success.







Pilot Aemme Shrimp. Press Conference Prep - 30 Oct 2015.





Pilot Aemme Shrimp. Phase 2.





Pilot Aemme Shrimp. Challenges.

Year-long ripening process of biofloc bacteria in natural spring water

Establishing brand in Premium Market

Short shelf life



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Expectations. 1st Euro Shrimp Symposium.

Status in Europe:

- Fish-free feed
- European hatchery
- Harvesting methods
- Certification
- Organic labeling
- Who is producing where and how



Thank you.

