

SUPERIOR SUSTAINABLE PROTEIN FROM WOOD

AQUACULTURE NUTRITION
INNOVATION



GLOBAL AQUACULTURE INNOVATION AWARD



**CROWDED
HOTTER
HUNGRIER**

An aerial photograph of a vast agricultural field, likely a vineyard, with rows of green crops stretching towards the horizon. A tractor is visible in the distance, working the field. The sky is clear and blue.

**LESS THAN 10% OF LAND ON
EARTH CAN PRODUCE FOOD...**

**AND AGRICULTURE ALREADY
USES OVER 70%**



**LIMITED RESOURCES ARE
PUSHED TO EDGE OF CAPACITY**



**30% OF WILD FISH STOCKS ARE
HARVESTED AT BIOLOGICALLY
UNSUSTAINABLE LEVELS...**

90% ARE FULLY EXPLOITED



**OCEAN ECOSYSTEMS
ARE DECLINING FASTER
THAN EVER BEFORE**



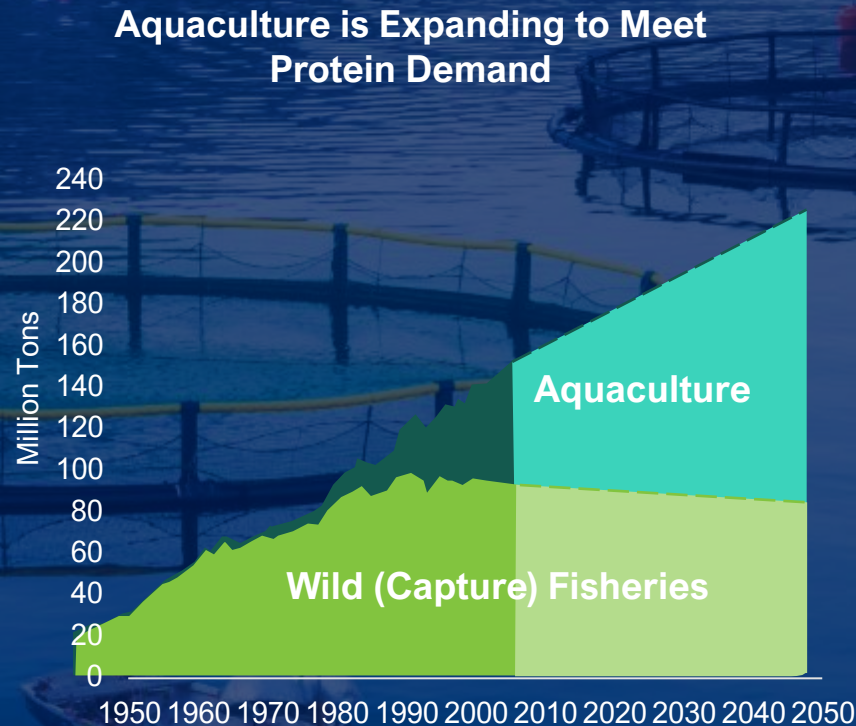
How can we produce
more **NUTRITIONAL**,
ACCESSIBLE food to
SAFELY and
SUSTAINABLY feed
the future?



SUSTAINABLE, SAFE, ETHICAL GROWTH OF AQUACULTURE IS SOLUTION TO FEED THE FUTURE



**Aquaculture is 50-100x
less harmful to
environment than land-
animal production**



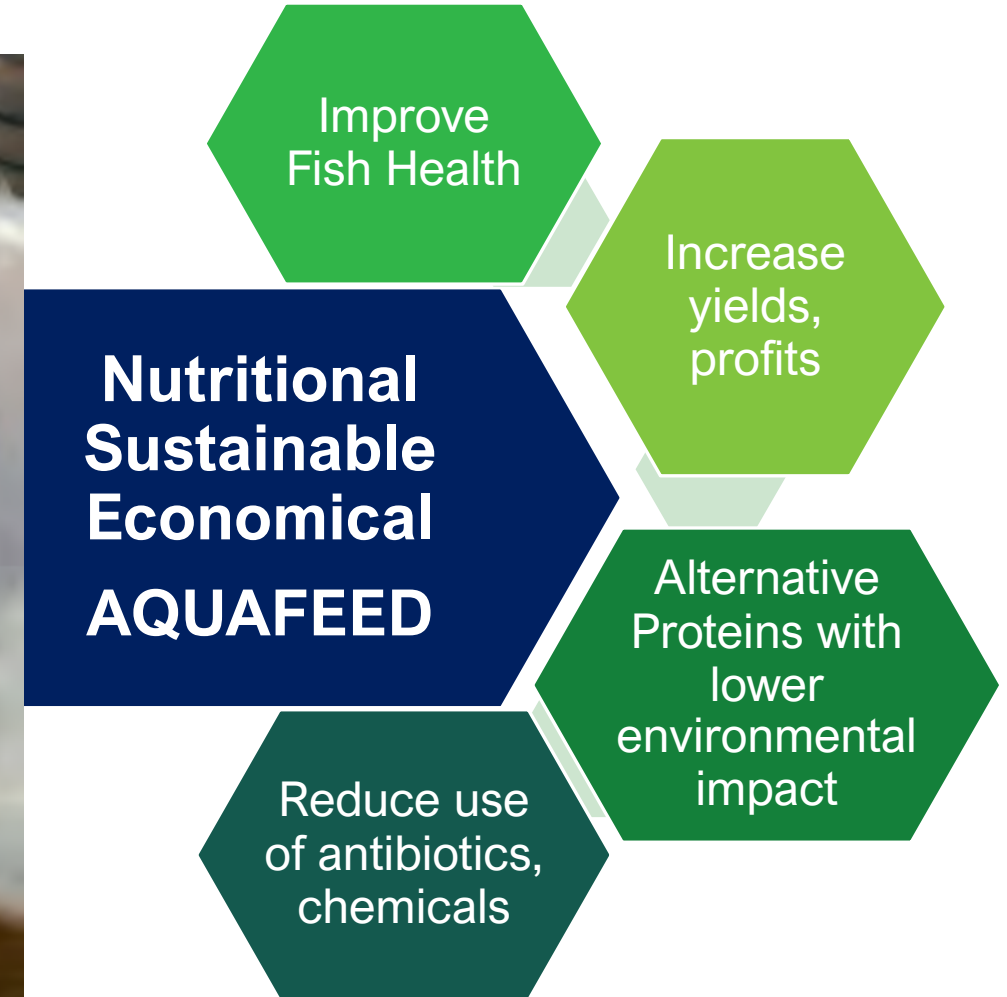
**Aquaculture projected to supply
over 65% of global seafood
consumed by 2030, 8% CAGR**

Sources: World Resources Institute, 2010.
FAO, 2016.



**Seafood produced
sustainably is healthy
and appealing to
consumers**

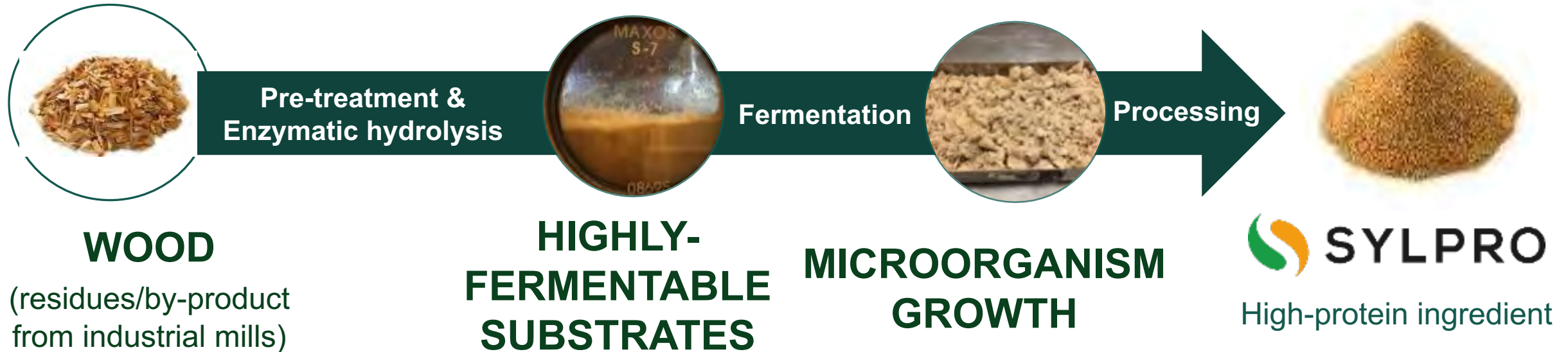
FEED INNOVATION: SUSTAINABLE, NUTRITIONAL PROTEIN IS CRITICAL AQUACULTURE GROWTH



Sources: GAA BAP, 2019.
UN FAO, 2016

ARBIOM WOOD TO FOOD TECHNOLOGY PLATFORM

Arbiom is leading **Feed Innovation** with technology that converts
Wood to Protein



WOOD OFFERS UNIQUE BENEFITS AS FEEDSTOCK THAT EXPANDS NEW PROTEIN PRODUCTION



**Renewable,
Non-Food Crop**



**Existing supply
chains of forest
products industries**



**Global forest land
is increasing**



**Sustainable forest
management
practices**

SYLPRO® OFFERS COMPELLING BENEFITS AS PROTEIN SOURCE FOR AQUAFEED



Nutritional



Economical



Traceable



Sustainable



- ✓ High-quality protein-rich ingredient
- ✓ Superior animal performance and gut health
 - ✓ Reliable for feed mill operations
- ✓ Robust and flexible production platform

SUCCESSFUL SYLPRO TRIAL RESULTS



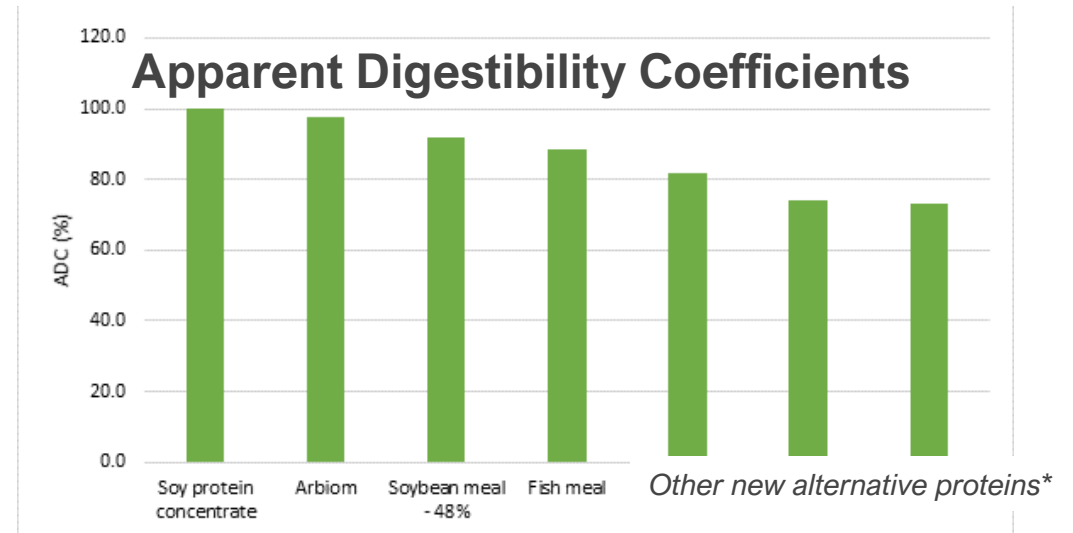
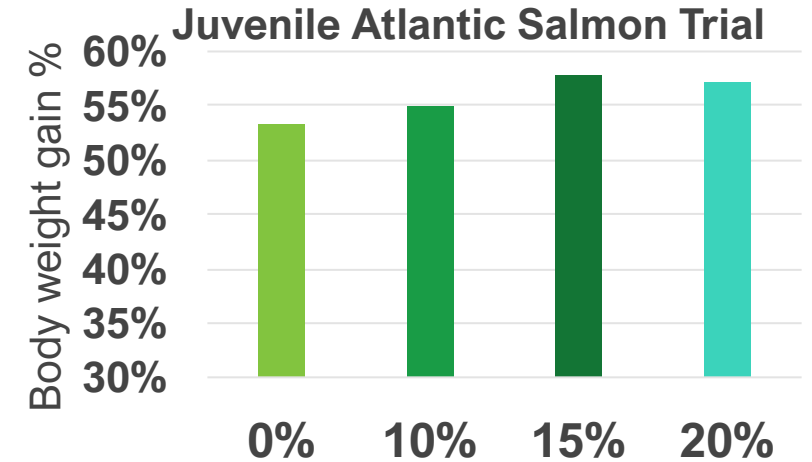
High-Performance in extrusion and material handling studies



SylPro is nutritious, highly-digestible protein based on ADC



Life Cycle Analysis confirms SylPro more sustainable than many plant & animal proteins (e.g. fishmeal, soy)



ADDITIONAL SPECIES FEED TRIALS PLANNED IN 2020

- ✓ Trials will evaluate Nutritional Performance, Digestibility, and Added Value in additional species



RAINBOW TROUT



NILE TILAPIA



**HYBRID STRIPED BASS
SEA BREAM**



RECENT NEWS



Arbiom: Trials support wood to feed protein's candidature as fishmeal substitute

SPECIAL EDITION: AQUA FEED INNOVATION

Arbiom reports success for its alternative protein in salmon trial

Feedstuffs

Efficacy of wood-based protein for aquaculture feed demonstrated

Aquaculture trials test wood-to-food ingredient

Milestone marks step toward commercialization of novel protein ingredient for aquaculture feed; research on livestock applications to be released.

BiofuelsDigest

Making the fish feed we need from the scrap wood we don't: Aquaculture Trials of Arbiom's SylPro show real promise

Salmon trial validates nutritional, sustainable potential of SylPro wood-to-food ingredient

October 11, 2019 | Jim Lane

undercurrentnews
seafood business news from beneath the surface

Wood-to-feed ingredient maker Arbiom sees positive results in fish trials

From what nature does best

To what society needs most...

Join us!



ARBION



Thank you.



ARBION

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