LIVE NAUPLII PASTE

CLEAN AND PURE

VIBRIO and EHP free

NUTRITIONALLY ENHANCED

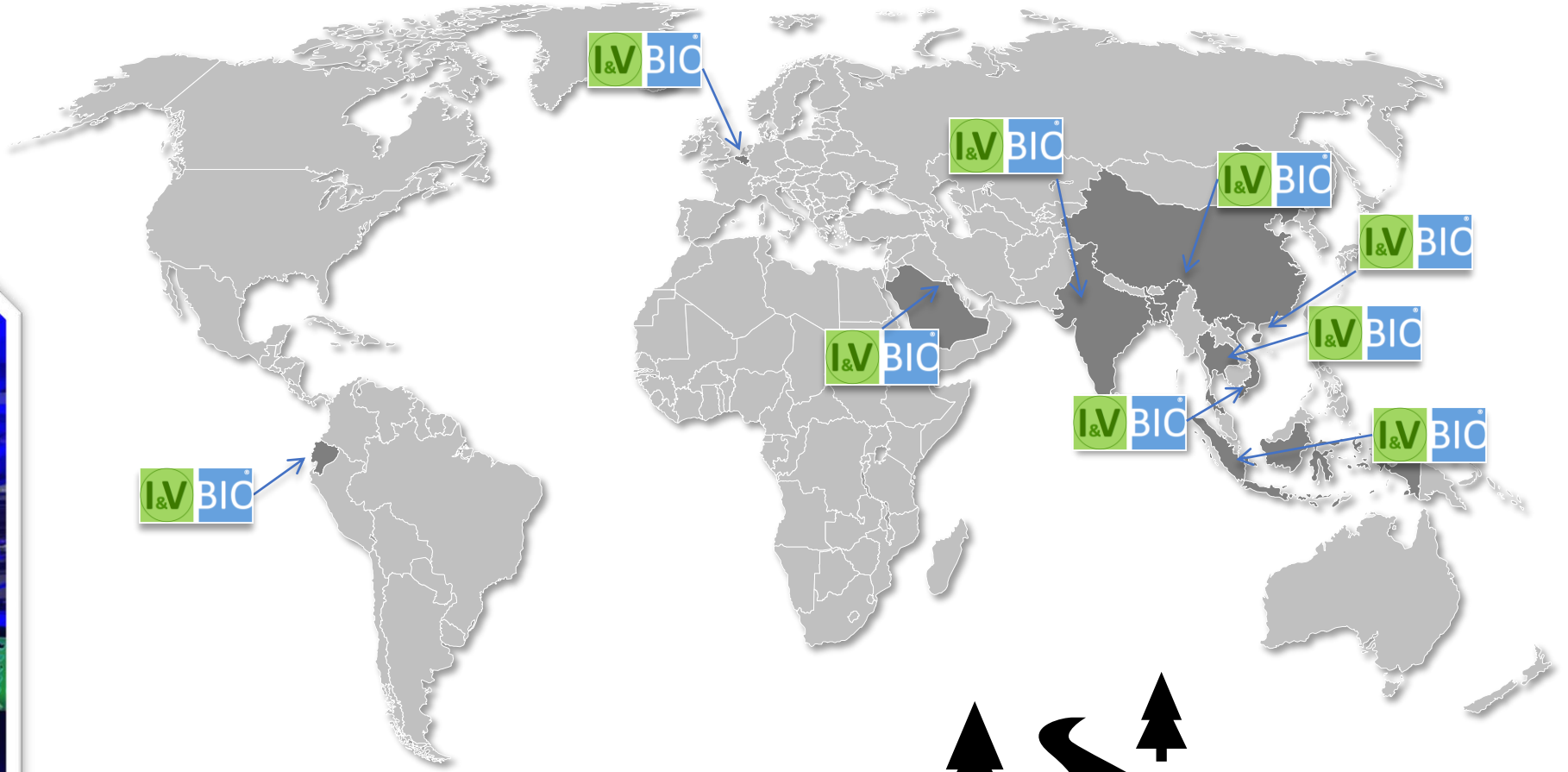
CONSISTENT Quality& Quantity

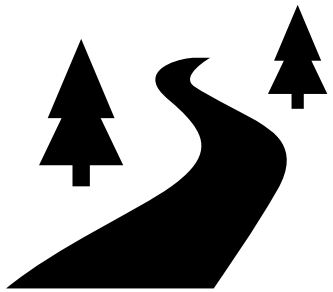

I&V BIO
INSTART
ORI-N3


I&V BIO
INSTART
ORI-N3
Formulated by
Live Artemia paste
VIBRIO free
Specific Pathogen free
Ready to feed
Herb extracts
Innovative algae based DHA enrichment
Maximal uptake
No leaching
To be store at 2°C - Net weight 500 g
Produced and distributed by I&V BIO Co., Ltd.


realme GT 6
2025.01.03 10:58

A Global Presence





2013

Our commitment:

Uninterrupted Supply

Patented Hatching technology

None damaging separation technology

QC monitoring of every batch

Our commitment:

Uninterrupted Supply

Patented Hatching technology

None damaging separation technology

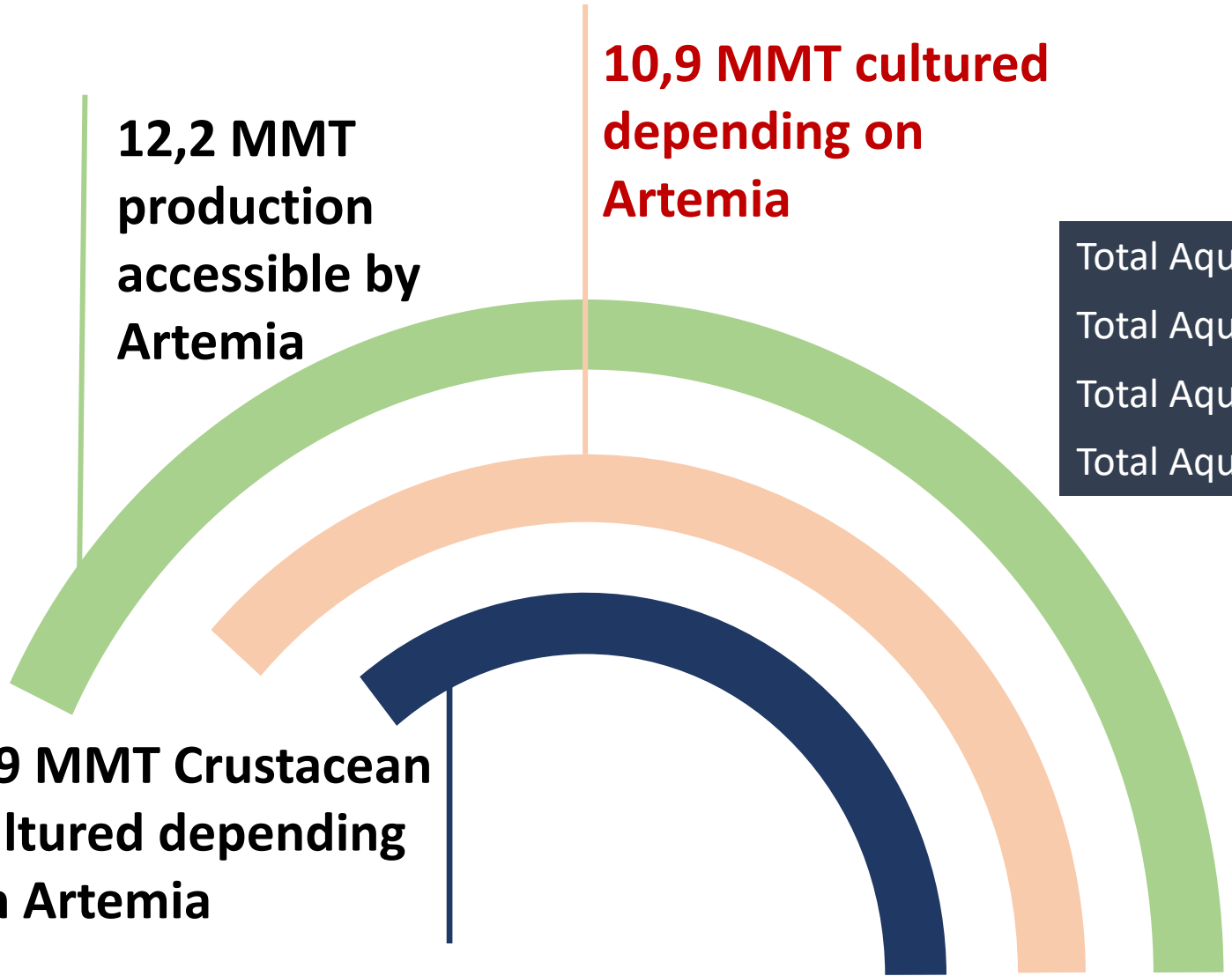
QC monitoring of every batch

Optimal Water management

Software/ automatization

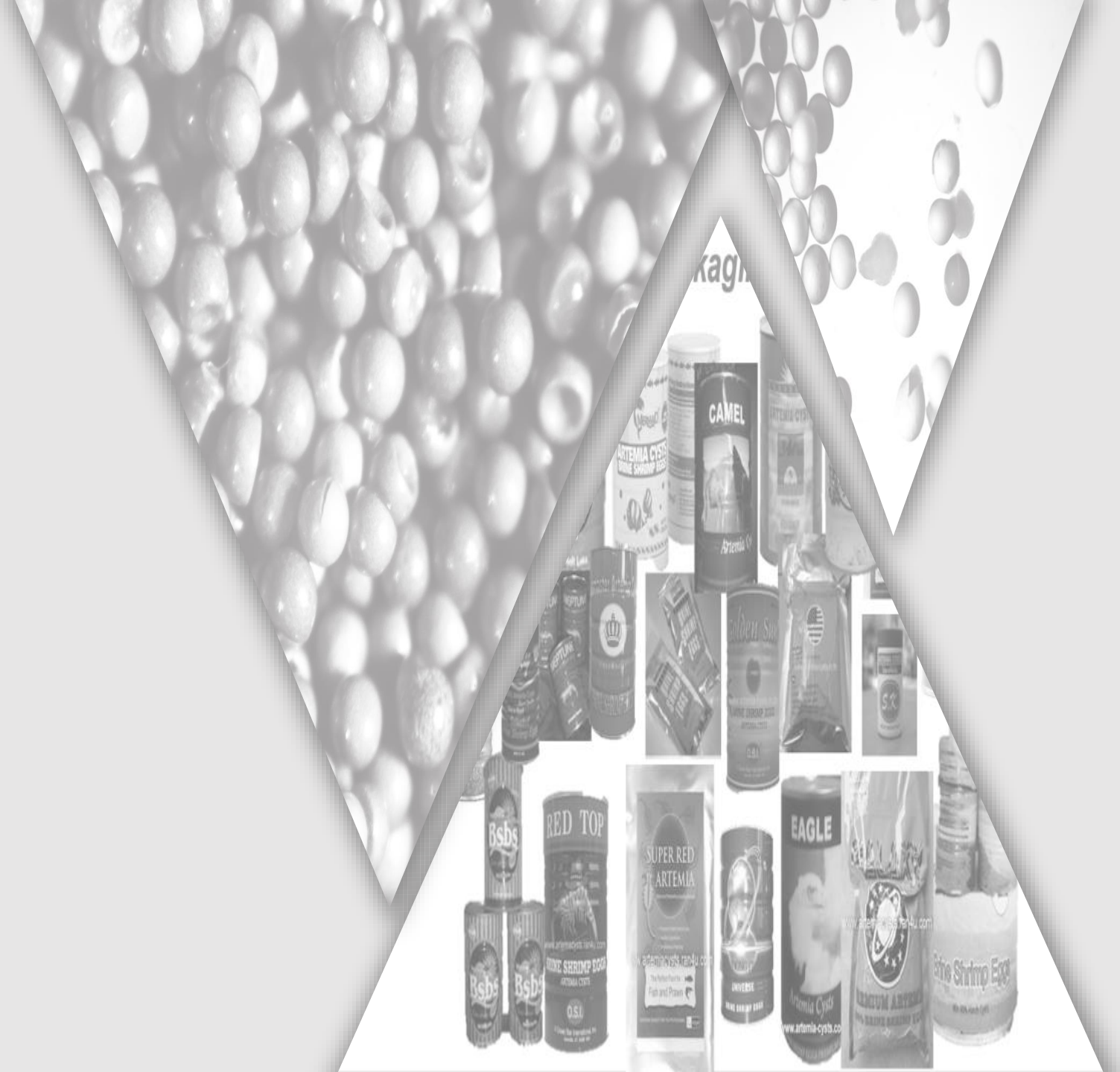
Nauplii conditioning and storage

IMPORTANCE OF ARTEMIA IN AQUACULTURE



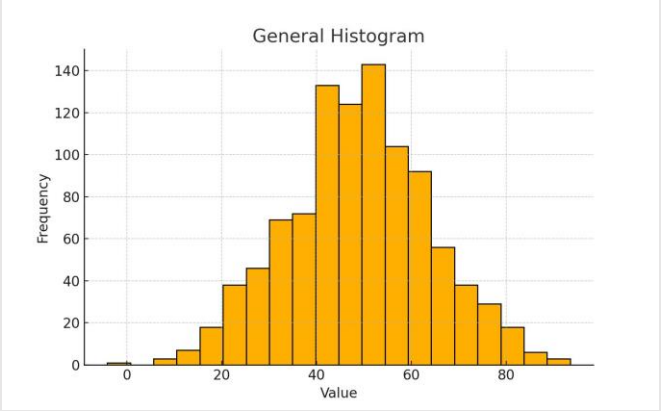
Live food remains a fundamental aspect to ensure **optimal survival** and ensure predictable production of **high-quality** marine fish & crustaceans juveniles

Total Aquaculture Fresh water	48,000,000 MT
Total Aquaculture Diadromous	5,700,000 MT
Total Aquaculture Marine fishes	3,500,000 MT
Total Aquaculture Crustacean spp.	11,200,000 MT



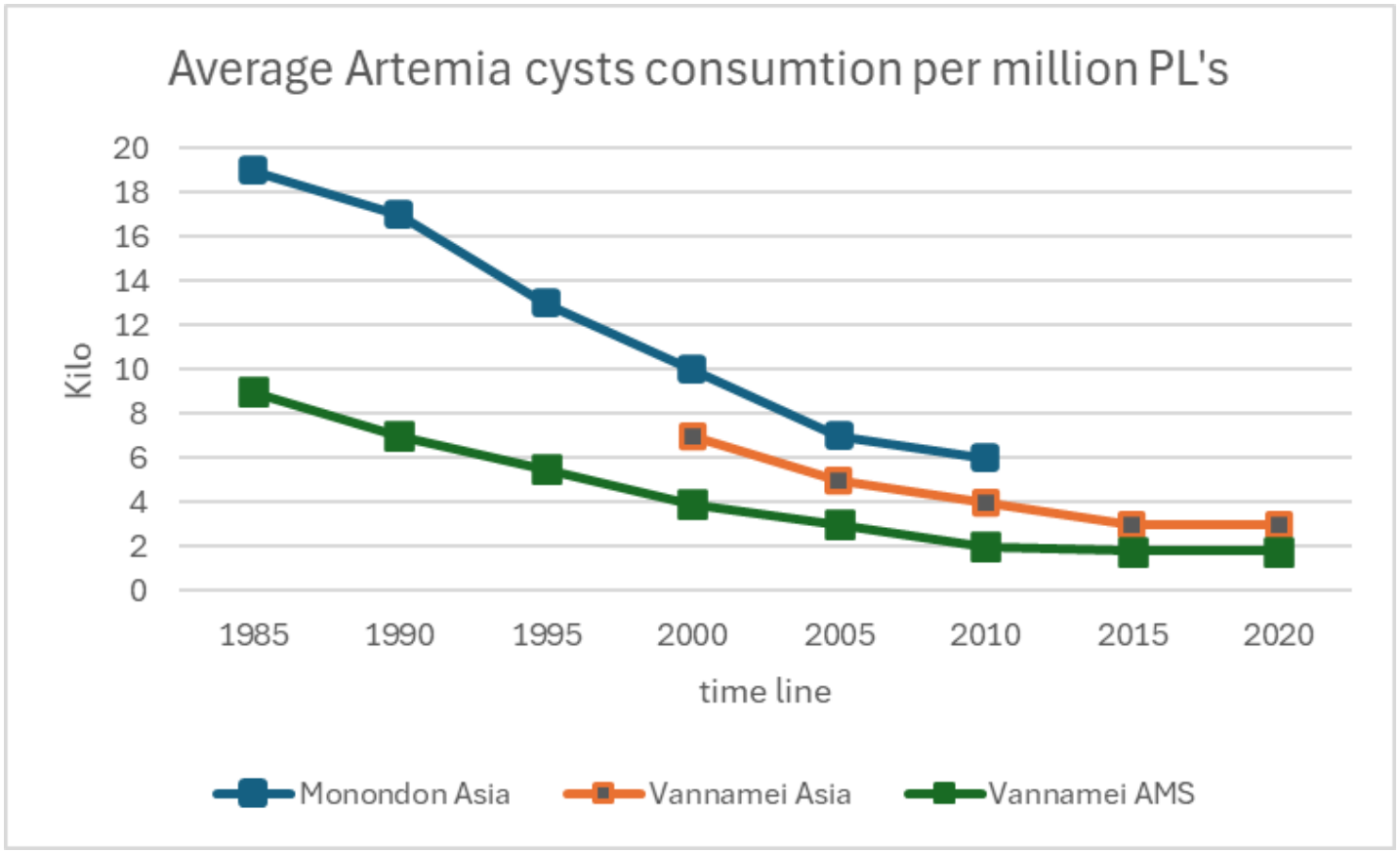
ARTEMIA CYSTS

While hatcheries need live Artemia nauplii they are being supplied with Artemia Cysts. The yields obtained from hatching these cysts are susceptible to **a wide daily variation of yield and quality.** Quality criteria are based on lab results, which are rarely if ever obtained in commercial production facilities



I&V BIO
... a better choice

Fuel for the performers



"Although today's hatcheries rely on high-performance breeder lines, Artemia consumption has declined significantly. Given its limited availability, the logical step forward is to enhance its quality through superior enrichment—maximizing its nutritional impact where quantity falls short."

I&V BIO

... a better choice

INSTANT ARTEMIA

INSTART 1

LIVE INSTANT *ARTEMIA*
Easy and Consistency

INSTART ORI-N3

LIVE INSTANT *ARTEMIA* ENRICHED
with Skretting ©
Ori-N3 algae-based enrichment product

M-Bryo

FRESH DECAPSULATED *ARTEMIA* CYSTS
Intact membrane
No leaching

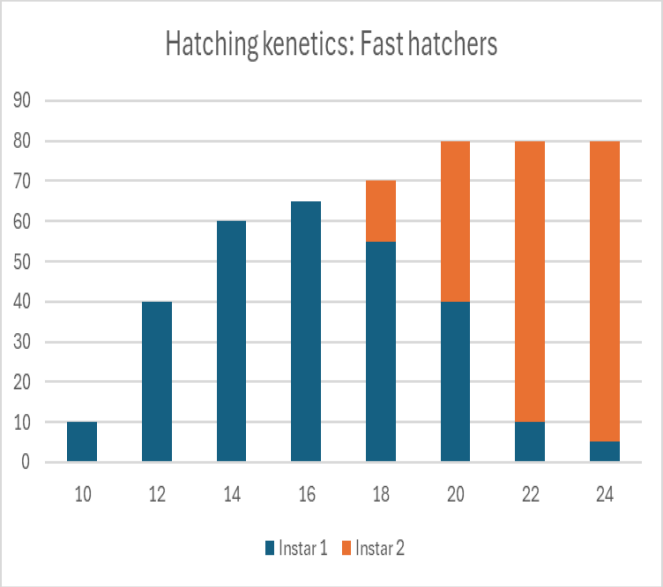
- Ready to feed
- Vibrio, EMS, EHP free
- Daily delivery
- DIV1 free

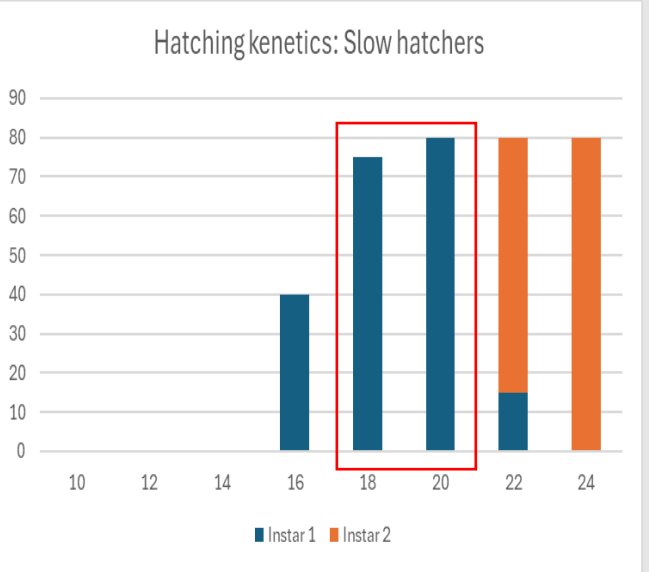
www.iandv-bio.com
e-mail: sales@iandv-bio.com

INSTART 1

Starter live feed

- 100% instant Instar 1 Artemia nauplii.
- Energy **yolk** still present
- High in **EPA**
- Natural presence of **micro elements**.
- Slow moving/ easy prey





One — EPC 23 — EPC 25 — EPC 26

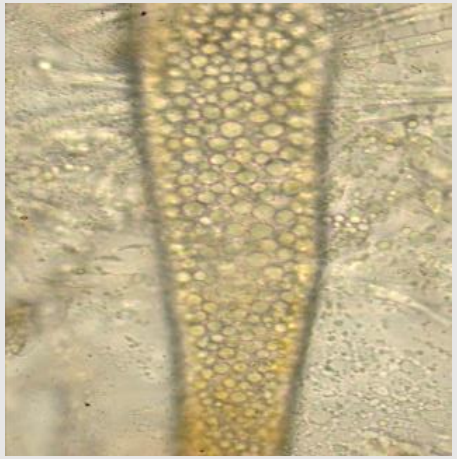
INSTART ENERGY E

SKRETTING
a Nutreco company

Ori-N3 (Enrichment Performance Claim 23)

Nutritional enrichment

- From Bio-encapsulation to **Cellular** encapsulation,
- From starved nauplii to **fed** nauplii,
- From oil-based to **algae-based**,
- Higher dry weights, more **meat** to the bone,
- Highly **digestible**,
- Less water **pollution**,
- Different Artemia sources (GSL-CIS).



Oil based

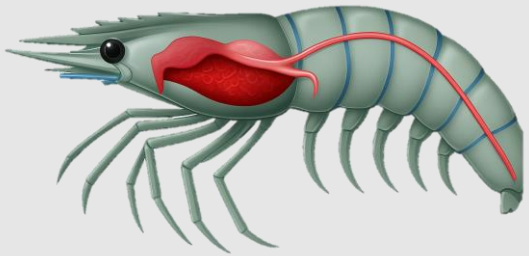
Algae

One — EPC 23 — EPC 25 — EPC 26

INSTART ENERGY E

EPC 25

Probiotic enrichment and gut health improvement



- Inhibition of potential pathogens through **probiotic** activity while acting positively with beneficial bacteria
- Enhanced **gut conditioning** and active repair.
- Stimulation of the **immune system**, hence robustness.
- Active in a wide variety of culture conditions.

One — EPC 23 — EPC 25 — EPC 26

INSTART ENERGY E

EPC 26

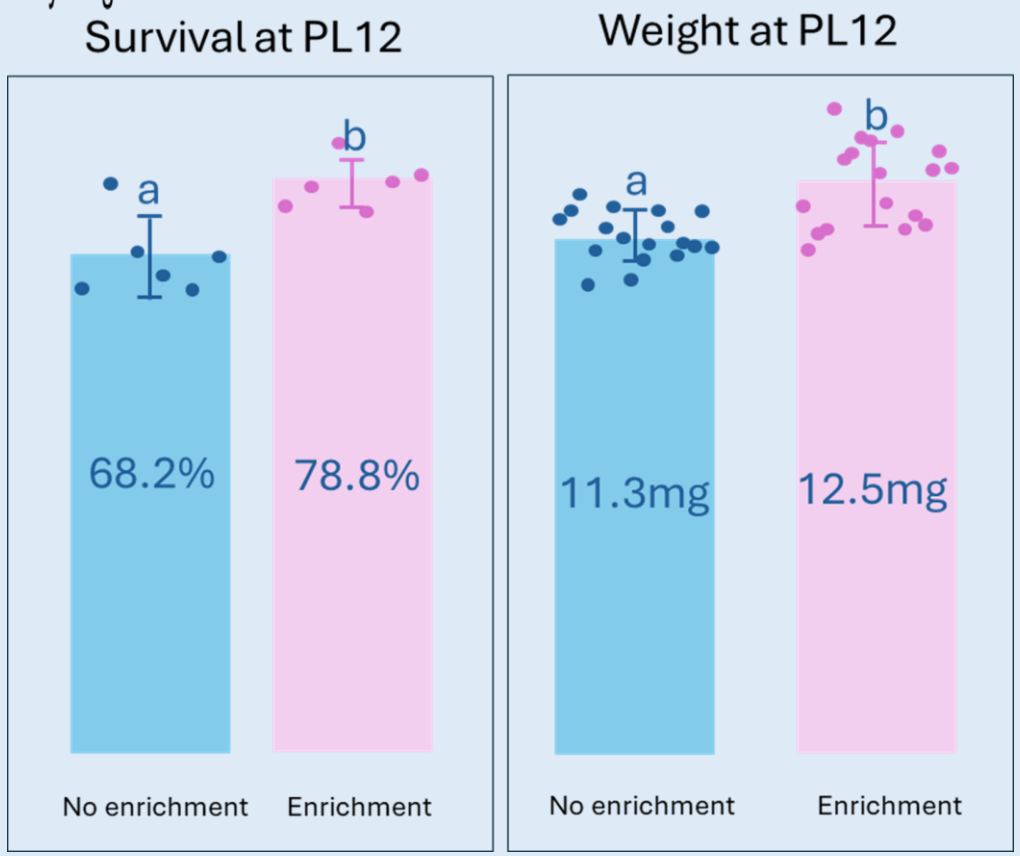
Future enrichment improvements are endless:

- A pipe line of tremendous possibilities.
- Through Internal R&D.
- Open to further technical and commercial strategic partnerships.
  - Further enhancements of Nutritional **cocktails**
  - **High-performance** bacteria strains
  - **Phage** technology
  - (Oral) **Vaccines**

One — EPC 23 — EPC 25 — EPC 26

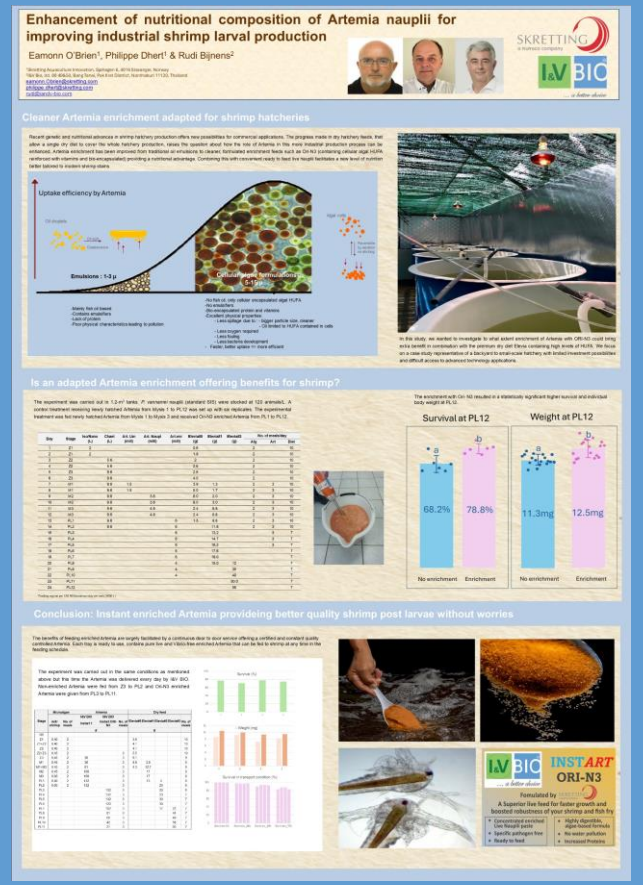
Hatchery Trials EPC 23

The enrichment with Ori- N3 resulted in a statistically significant higher survival and individual body weight at PL12.

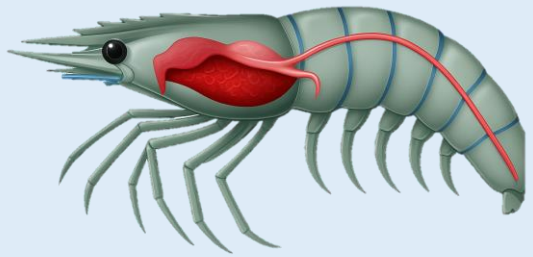


Molecule	Instar 1	Instar 2	Enriched
DHA	ND	ND	189
EPA	76.3	9.2	100.5
Vitamin C	66.98	9.4	117.64

* Mg per 100 gr.



Treatment with probiotic-enriched Artemia from Post larvae 2 onwards.



- ✓ Significant improvement in growth in a few days of application.
- ✓ Improved survival in the salinity stress test
- ✓ Lower Vibrio levels measured.
- ✓ Improved early days performance at grow out stocking.
- ✓ Consistent observation of improved performance (4 runs in time)

5

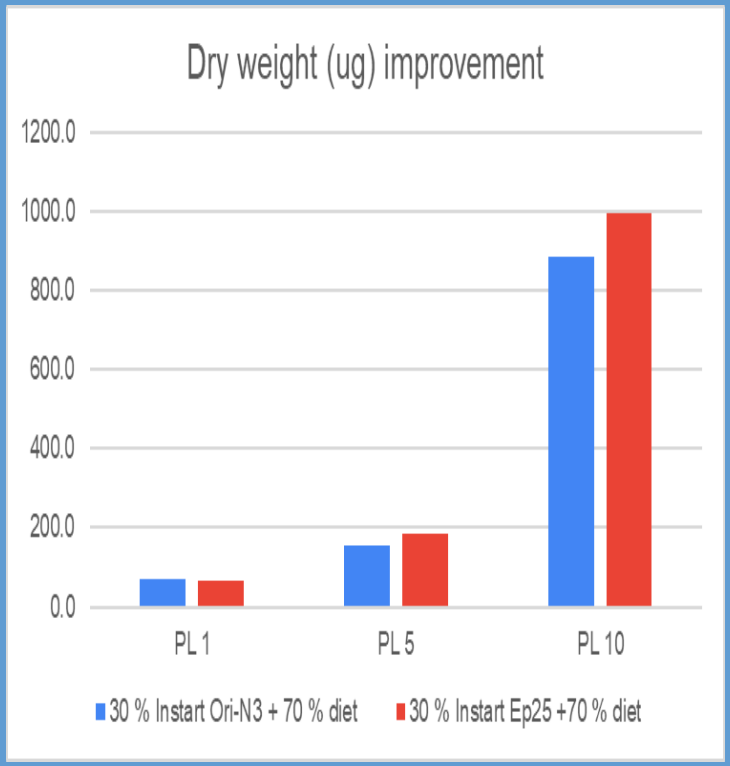
4

3

2

1

Hatchery Trials EPC 25

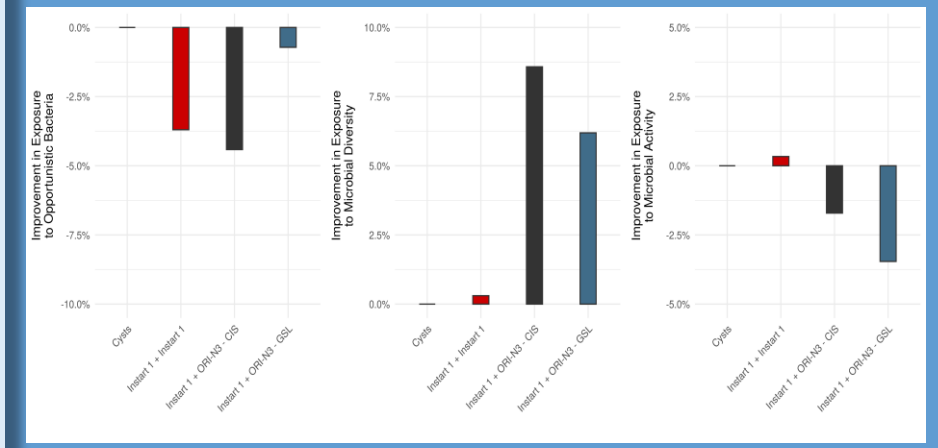


KYTOS

I&V BIO ... a better choice

Hatchery trials: Improved microbiomes observed

The use of enriched Artemia Ori-N3 results in a significant improvement of the microbiome of the shrimp hatchery tanks compared to the use of traditional use of Artemia cysts.



% reduction to opportunistic bact

% increase to micro diversity

% reduction to exposure to active bact.

5

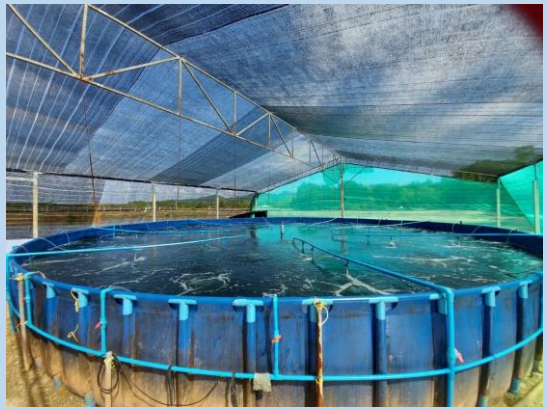
4

3

2

1

Commercial trials during the Nursery and Grow out

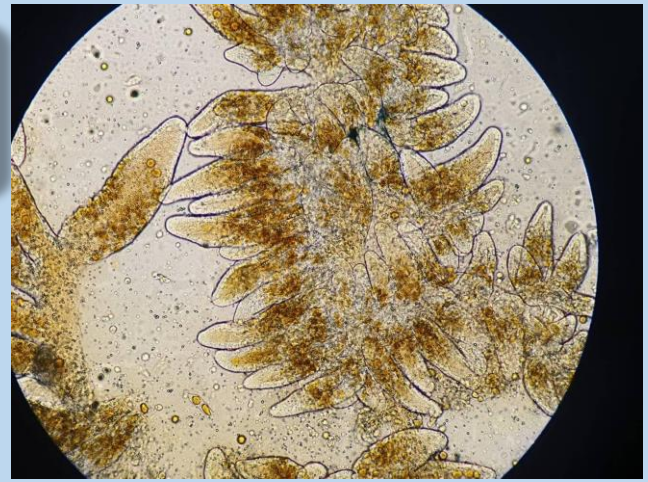


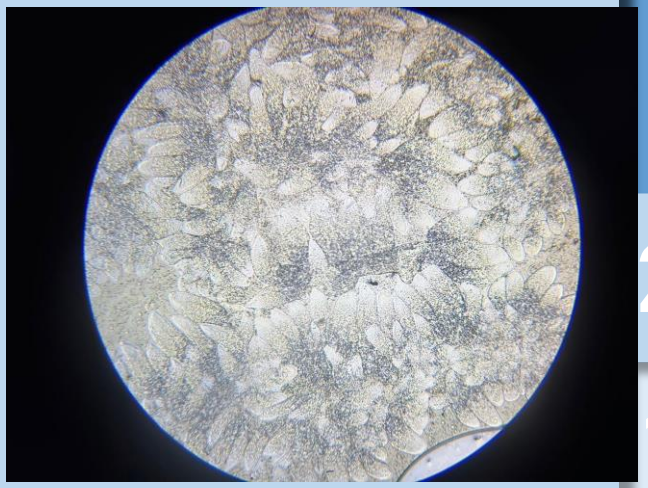
- Recommended use of 14 trays (800 gr) per million PL
- Use for 4 to 7 days (highly variable)

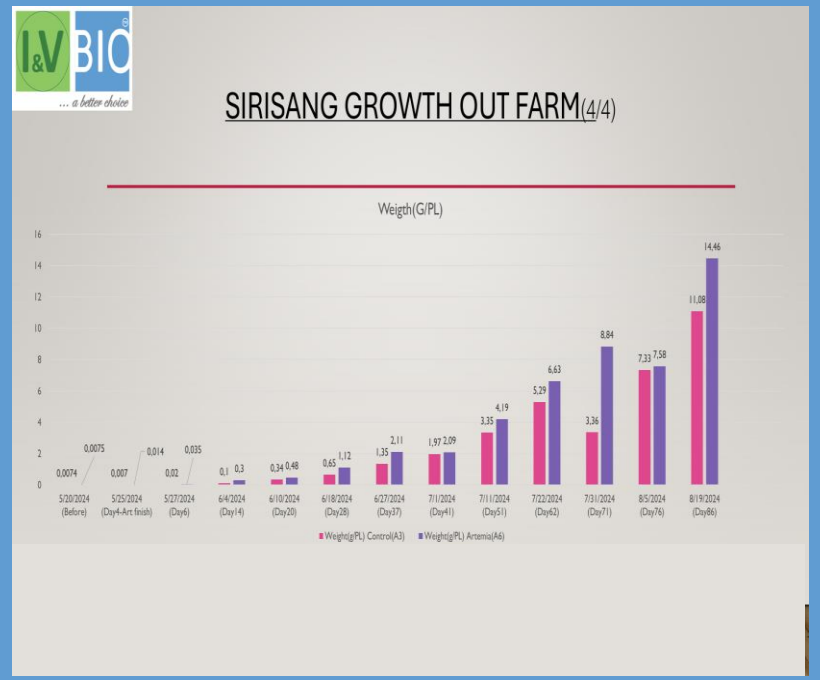
Enriched Artemia use beyond the Hatchery Phase (EPC 23)

Enriched Artemia use beyond the Hatchery Phase (EPC 23)

The use of enriched Artemia for a few days after stocking results in better PL performance







5

4

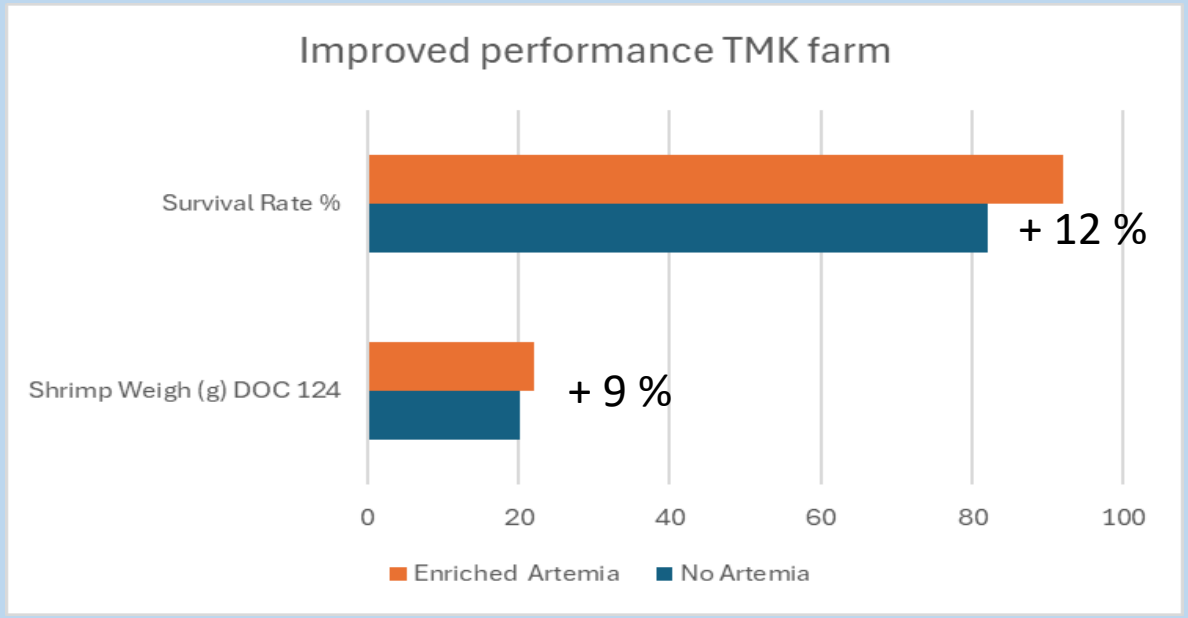
3

2

1

Enriched Artemia use beyond the Hatchery Phase (EPC 23)

The use of enriched Artemia for a few days after stocking results in better PL performance



- DOC 124
- 5 rai pond size
- 216,000 PL per rai
- **27 % increased income from this crop**

5
4
3
2
1

In Conclusion…a better choice

Artemia Cysts use

- A daily effort and **struggle**.
- A **standstill** technology
- **Variable** outputs & yields
- Reduced viable and damaged nauplii
- **Labor**-intensive
- Costly investment and maintenance
- High risk for **contamination**

Direct Artemia Nauplii

- Clean, **bio secure**, and consistent quality product.
- Proper **enrichment** protocols result in significant and improved efficiencies in PL production
- A **cost-efficient** way to improve both larval survival and weight
- Extended use in nursery systems results in **fortified Post Larvae** that cope better during the first weeks of grow out conditions.