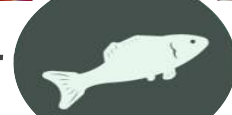
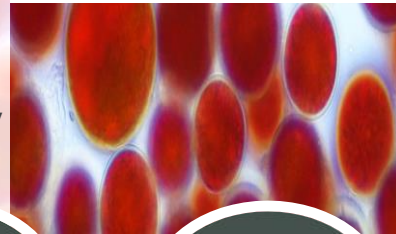


# Red Oil

## Haematococcus

**Superior antioxidants** for Health and Colours.

A natural astaxanthin in oil is much better absorbed by animal intestine tract.



### Microemulsion

**Red Oil** was prepared as an **astaxanthin microemulsion** which is better dispread, fast driven to target organ absorption and digestibility



### BROODSTOCK & LARVAL STAGE

- Reproductive performance
- Hatching and offspring survival rate
- Reduce larval deformity
- Effectively developmental of larval stage
- More carotenoid deposited in yolk
- Enhance immunity

Mix Red Oil with Slice squid at 20 CC / 1 kg squid

Mix Red Oil with diet at 20-30 CC for topcoat 1 kg feed

### ORNAMENTAL ANIMAL

- Brightening & Shining skin
- Value added to the animal

Mix Red Oil 20 – 30 CC/ 1 kg feed



Main ingredient	Haematococcus pulvalis and Marine oil	
Composition	Fat	70 – 80 %
	Astaxanthin	0.42 %
	Other Carotenoids	0.07 %
	Lutein, Canthaxanthin, Zeaxanthin, Beta Carotene	

**NET CONTENT 1 LITER**



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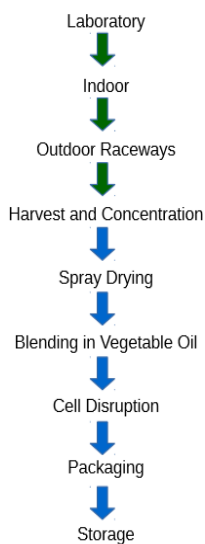
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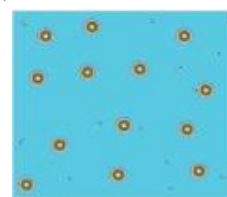
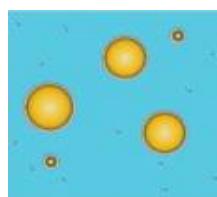
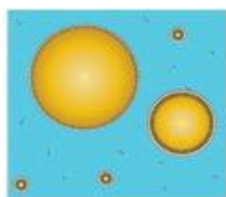
# Process

Haematococcus Culture

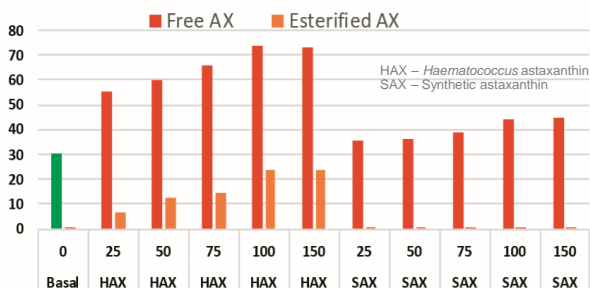
Red Meal Oil Production



# Particle size



Status	Emulsion	Nanoemulsion	Microemulsion
Appearance	Turbid	Clear	Clear
Particle size	0.1 – 100 µm	50 – 1000 nm	10 – 100 nm
Viscosity	High	low	low
Stability	Unstable	Unstable	Stable and long shelf life



(Ju et al. 2011).

Free and esterified astaxanthin (AX) deposition in vanamei shrimp after feeding 8 weeks



## For shrimp broodstock

1. Sliced squid with appropriate size
2. Dry the squid under sunshade place
3. Mix with Red oil 20 CC / 1 kg squid
4. Mix with Veta-Vit..... 3 g
5. Mix with Marine max..... 3 g
6. Mix with DHA Omega-gold..... 3 g
7. Dry the squid in the refrigerator for red oil and mixer absorption in squid flesh



## For animal feed

1. Mix Red oil 20 CC with artificial feed 1 kg
2. Mix with Veta-Vit..... 3 g
3. Mix with Marine max..... 3 g
4. Mix with DHA Omega-gold..... 3 g



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