

PIGMENTECH

AQU028

*A natural enhancer for the shrimp coloration
and a good source of proteins*



PROPERTIES

- PIGMENTECH is a concentrated plant extract which provides a very **stable source** of easily assimilated pigments for shrimps and fishes.
- PIGMENTECH is a well **balanced source** of proteins and essential PUFAs (ω_3 ω_6), 100% natural, GMO free.
- PIGMENTECH promotes growth, FCR and enhances the health status of shrimp and fish.
- PIGMENTECH has similar effects as **spirulina sp** but at a lower cost.

XANTHOPHYLLS
β-CAROTENE

- Pigment coloration, xanthophylls and carotenoids that fish and shrimp metabolize to make their own natural coloration.

Vitamin E, Choline
 ω_3 and ω_6

- Improves growth performances and health status in both fish and shrimp.
- Hepatoprotection.

COMPOSITION (per kg of product)

Crude Protein: 52-55 %	Xanthophylls :	1250 mg	Vitamin A :	800 000 UI
Lipids: 10.4 %	Lutein and Zeaxanthin :	850 mg	Vitamin E :	500 000 UI
PUFAS: 5.5 %	β Carotene:	500 mg	Choline :	1100 mg

USE AND PRESENTATION

- PIGMENTECH is presented as meal form (500-1000 μ m) which must be grind .
- Recommended incorporation rate in aquaculture diets: **4% to 8%**. to feed the shrimps at least during 4 weeks prior to harvest.
- Store in a cool dry place .

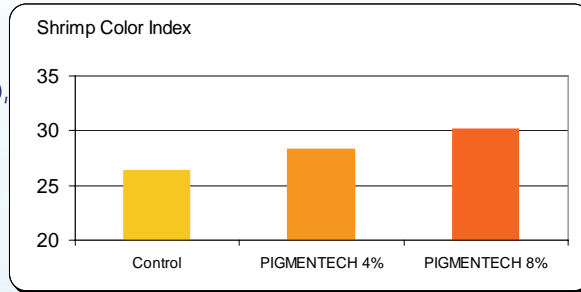
PIGMENTECH: Benefits for shrimp and fish

Results obtained with *Penaeus stylirostris* fed with PIGMENTECH diets :

- PIGMENTECH improved shell coloration of cooked shrimp, after 3 weeks of continuous feeding
- Growth rates significantly increased when PIGMENTECH was included in shrimp feed diet

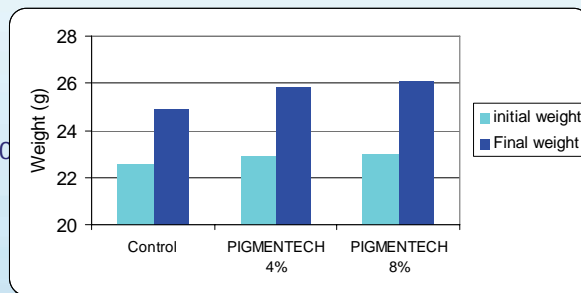
Shrimp shell pigmentation

(Tested by Ifremer, Aquacop, Tahity)



Shrimp weight gain

(Tested by Ifremer, Aquacop, Tahity)

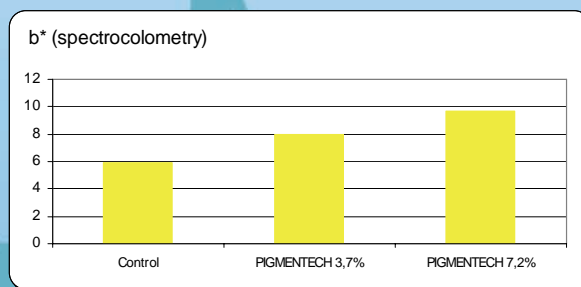


Results obtained with *Sparus aurata* fed with PIGMENTECH diet:

- PIGMENTECH brings up Gold-orange coloration of seabream operculum and skin.
- PIGMENTECH significantly decreased (-8%) seabream liver in volume indicating a better fish health status

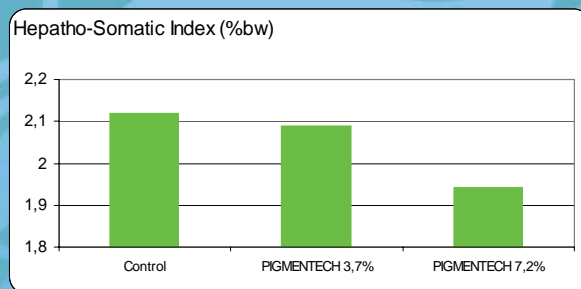
Seabream operculum coloration

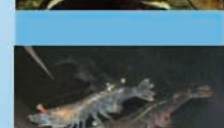
(Tested at the Institute of Marine Biology, Crete)



Seabream liver size

Tested at the Institute of Marine Biology, Crete)





Physical properties

composition	plant extract	Minerals	14%
color	dark green	Crude Fiber	2.7%
Crude Protein	52-55%	Carbohydrate (by difference)	8-12%
Lipids	10.4%-11%	Moisture	9%

Protein

Amino acids	52%protein basis
Cysteine	0.47%
Hystidine	1.25%
Leucine	4.58%
Phenylalanine	2.11%
Threonine	2.55%
Valine	2.96%
Arginine	3.12%
Glutamic acid	5.46%
Proline	2.34%
Methionine	1.14%
Isoleucine	2.55%
Lysine	3.38%
Tyrosine	2.34%
Tryptophan	1.04%
Alanine	3.02%
Aspartic acid	5.04%
Glycine	2.65%
Serine	2.34%
Loss in Hydrolysis	2.86%

Vitamins

As Vitamin A	800,000 IU/kg
Beta Carotene	500 ppm
Vitamin K	100 ppm
Riboflavin (B2)	5 ppm
Choline (B4)	1,100 ppm
Vitamin E	500 ppm
Thiamin (B1)	3 ppm
Pyrodoxyne (B6)	90 ppm
Biotin (B8)	0.2 ppm

Fatty acids

palmitic acid	1.6%
Linoleic acid (w6)	1.6%
Linolenic acid (w3)	4%
Other	3.2%

Coloration pigments

Chlorophyll (green)	35,000 ppm
Carotenes	525 ppm
Beta carotenes	500 ppm
Other carotenes	25 ppm
Xanthophylls (yellow)	1,250 ppm
Lutein	800 ppm
Volaxanthin	60 ppm
Zeaxanthin	50 ppm
Neoxanthin	250 ppm
Other Xanthophylls	90 ppm

Minerals

Calcium	4.1%
Potassium	0.9%
Sodium	0.03%
Cobalt	1 ppm
Iodine	0.3 ppm
Manganese	75 ppm
Zinc	18 ppm
Phosphorus	0.9%
Magnesium	0.17%
Chlorine	0.2%
Copper	11 ppm
Iron	1,100 ppm
Selenium	0.1 ppm

