

ESSENTIAL PREVENTION & CURE



A functional feed additive based on essential oils that provides wide spectrum disease prevention in fish and shrimp.

Chronic disease and acute outbreaks are major risk for the sustainability and profitability of aquaculture around the globe. Intensive aquaculture increases the prevalence and intensity of bacterial, parasitic and viral agents, as well as its spread in the different aquaculture species and regions. Environmental and consumer friendly preventive strategies are more and more needed to allow and promote aquaculture sustainability. Apex[®]Aqua is a unique synergistic combination of selected and high quality essential oils perfectly fitting health promoting and disease preventive strategies, formulated for preventive and corrective application.

The benefits of Apex[®] Aqua

- ✓ Broad spectrum antibacterial activity
- ✓ Quorum Sensing Inhibition
- ✓ Reduced mortality caused by bacterial infections
- ✓ Reduced impact of chronic infection on productivity
- ✓ Improved gut health
- ✓ Improved performance & productivity





PROBLEM DEFINITION

Sustainable and profitable aquaculture requires adequate measures to control diseases

The profitability of many aquaculture operations is at risk due to the difficulty to control a wide diversity of disease agents. Further intensification of aquaculture with a clear aim to minimize the use of chemicals and medicines increases the need for effective measures to prevent diseases.

	Corrective: ✗ Decreased productivity ✗ Increased costs ✗ Increased disease risk		Preventive: ✓ Increased productivity ✓ Increased profitability ✓ Reduced disease risk
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OUR SOLUTION

Prevention strategies based on natural health-promoting compounds

Apex[®] Aqua, disease prevention and health promoting action

	name	scientific name	properties
	ANISEED	<i>Illicium verum</i>	Flavouring / Digestive enhancer / Promotes lactation / Antifungal / Antimicrobial
	CASSIA	<i>Cinnamomum aromaticum</i>	Flavouring / Antiseptic / Antifungal / Antibacterial (gram negative) / Stimulates pancreatic activity
	GINGER	<i>Zingiber officinale</i>	Flavouring / Appetite stimulant / Reduces stress / Positive effect on gastric activity / Antioxidant / Antimicrobial
	JUNIPER	<i>Juniperus communis</i>	Flavouring / Appetite stimulant / Digestive stimulant / Aids kidney function / Antimicrobial / Antifungal
	THYME	<i>Thymus vulgaris</i>	Flavouring / Antimicrobial / Antifungal / Antiseptic / Reduce stress
	ROSEMARY	<i>Rosemarinus officinalis</i>	Flavouring / Powerful antioxidant / Digestive enhancer / Antimicrobial / Antifungal
	PINE NEEDLE	<i>Pinus sylvestris</i>	Mild antiseptic / Antimicrobial / Digestive enhancer / Antiviral
	GARLIC	<i>Allium sativum</i>	Appetite stimulant / Digestive stimulant / Antiseptic / Antiinflammatory / Antimicrobial / Antiviral

DOSAGE/APPLICATION

- At the feed mill via the mixer (resistant to industrial processing conditions for fish and shrimp pelleted and extruded feed).
- At the farm top-dressed with a suitable binder.

Fish and shrimp feeds:

- Early stages and high level of disease risk 3-5 kg/MT
- Grow-out stages and low-moderate levels of disease risk 1-3 kg/MT
- Corrective application 5-10g/Kg for 5 to 10 days

We welcome you to consult our health experts to design an optimal additive strategy for specific disease challenges in your target species.

AQUACULTURE SPECIALTY PROGRAMS

<p>HEALTH</p>	<p>DIGESTION</p>	<p>PALATABILITY</p>	<p>SPECIALTY NUTRITION</p>	<p>FEED QUALITY</p>	<p>FARM CARE</p>
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