

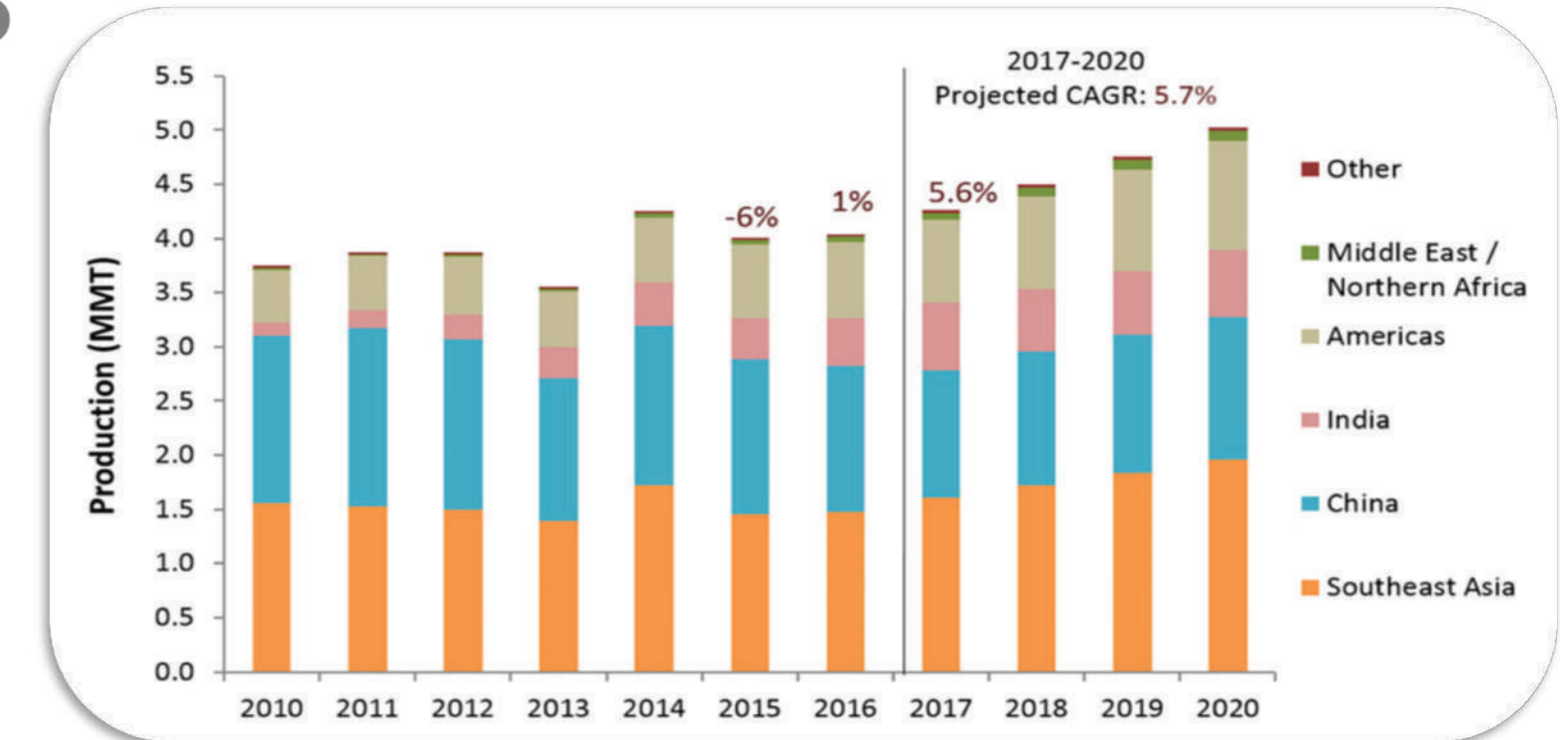
SARGASYNBIOTIC FEED ENHANCER FOR SHRIMP AQUACULTURE

PATENT NO. PI 2013702168



The non-therapeutic use of antibiotics has featured among the list of contributors that help propagate multidrug resistant strains of bacteria

ISSUES

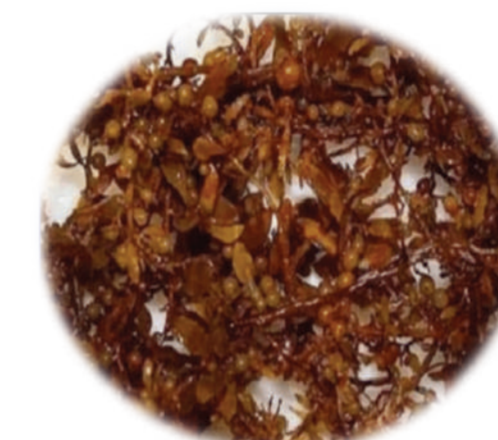


High Demand of Penaeid shrimp for citizen in Malaysia and foreign countries, especially China and American

SOLUTION



Probiotic, *Lactobacillus plantarum*, idyL20



Prebiotic, *SargaPrebio*

Synbiotic



◆ Improved survivability and good growth
◆ Improved immune response

TECHNOLOGY

The Synbiotic Shrimp feed consists of Prebiotic, *Sargassum polycystum* powder (SargaPrebio[®]) and Probiotic, *Lactobacillus plantarum* idyL20 have potential to prevent AHPND outbreak of penaeid shrimp. Since the two main supplements, *Sargassum polycystum* powder (sargaPrebio[®]) and Probiotic, *Lactobacillus plantarum*, idyL20, are natural, these supplements did not harm human health or the environment, fulfilling the requirements of food safety and biosecurity.

CURRENT ISSUES

- Outbreak of Penaeid shrimp disease in local farms included Acute hepatopancreatic necrosis disease (AHPND) and Vibriosis which causing high mortality that affect Malaysia economy directly.
- High Demand of Penaeid shrimp for citizen in Malaysia and foreign countries, especially China and American.
- Vaccination doesn't effective for penaeid shrimp to against infectious disease. And also, antibiotic not allowed for penaeid due to Malaysia's health law.
- High cost of feed and immunostimulant products for local shrimp farmer in Malaysia.

INVENTIVENESS & NOVELTY

- Promotes the production of antibiotics residue-free aquaculture products
- Initiates the pathway for stimulating and strengthening of the immune system in farmed aquatic species, thus reducing the need for antibiotics in aquaculture
- Potential for conversion of a menacing, invasive seaweed into a wealth-creating, organic immune stimulant for farming aquatic species

USEFULNESS & APPLICATION

- Applicable to farmed aquatic species in fresh water and Marine resources, including finfish, shellfish and crustaceans that are commercially farmed with artificial pellets and extruded feeds
- Applicable to sports fish, ornamental species and domesticated monogastric terrestrial species e.g rabbits and chicken
- Guaranteed availability at more competitive prices compared to already available oligosaccharides and polysaccharides in the market such as FOS, GOS, Inulin.
- Sustainability of production with consistency of quality

IMPACT OF THE PRODUCT

- Promotes reduction of drugs and chemical residue in farmed aquatic species
- Improved survivability, feed efficiency and growth performance during farming of aquatic species e.g fish and shrimps
- Improves carcass content of quality protein, iron and other trace minerals
- Potentially improves immune response potentials of fed animals leading to healthy products

MARKET POTENTIAL

- Farmers and entrepreneurs in the aquaculture sector
- Pharmaceutical industry

TRL : 5 – Validation in real environment



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