



MECHANISM OF ACTION OF POLYGAIN AQUA

High antioxidant polyphenols detected in Polygain™



CONSERVED CELLULAR PATHWAYS

NRF2 SIRT1 eNOS AMPK

CONSERVED INFLAMMATORY PATHWAYS

COX2 TNF-α NF-κB PLA2 PGE2

BIOLOGICAL EFFECTS

- Reduction of oxidative stress
- Improved immune function
- Balanced and healthy microbiome, free of costly antibiotics
- Improved amino acid availability and protein synthesis

PRODUCTION OUTCOMES

- ✓Increased growth rate
- ✓Improved feed conversion ratio
- ✓ Improved shelf life and fish meat quality
- ✓ Increased stability due to the anti-oxidants incorporated into the feed









P@LYGAIN AQUACULTURE

POLYGAIN™

Polygain™ is a safe natural feed material sourced from Australian grown sugarcane (*Saccharum officinarum*). Produced via a patented process, that concentrates powerful antioxidant polyphenols into a highly palatable material.

Many countries are legislating to remove antibiotics and hormones from aquafeeds. Natural bioactive materials from plants such as Polygain™ with anti-inflammatory and anti-bacterial properties have the potential to replace some of the functions of these materials in the aquaculture industry.

Polygain[™] delivers beneficial results to the intensive farming of a wide range of aquatic species.

BENEFITS

- ✓ Improves overall growth performance
- ✓ Improves resistance in fish against disease
- ✓ Contains anti-inflammatory and anti-bacterial properties
- ✓ Attracts fish to the feed
- ✓ Protects against diseases in shrimp such as EHP, Vibrio and WSSV
- ✓ Improves feed conversion ratio
- ✓ Anti-oxidant effect improves fish meat odour and texture
- ✓ Up-regulates gut microbiome (balance of healthy gut bacteria)
- ✓ Reduces chronic inflammation
- ✓ Low dietary inclusion % (0.2-0.6% w/w)



