

NEW ON THE MARKET

Organic metal amino acid complex to optimize trace mineral nutrition

Zinpro Corporation has launched ProPath®, its most versatile Performance Minerals® innovation for the U.S. and Mexico to optimize trace mineral nutrition for multiple species.

The ProPath family of products delivers benefits to animals and customers that include a highly concentrated mineral formulation, exceptional uptake and absorption, biological efficacy, diet flexibility and consistency, product stability, solubility and sustainability.

ProPath is classified as a metal amino acid complex. It stands alone as the only organic performance trace mineral product that combines two specific amino acids, each bound (or complexed) to a mineral, such as zinc, copper, iron or manganese, in a

stable, 1:1 ratio. ProPath's unique molecular structure results in a more sustainable choice to improve animal wellness and performance.

"Our ProPath product line relies on two synergistic, amino-acid absorption pathways (cationic and anionic) to elevate trace mineral nutrition accessibility in the animal," said Bill Scrimgeour, CEO, Zinpro Corporation.

"By optimizing these pathways, our ProPath innovation advances the science of animal nutrition, allowing minerals to be more effectively absorbed and metabolically available in the animal's organs, tissues and enzyme systems. With greater mineral optimization, ProPath provides multiple benefits – for the animal, the producer and the environment."



ProPath is flexible for use in a wide variety of diets, including conventional or specialty, like non-GMO), wet or dry.

<https://www.zinpro.com>

A bioactive feed supplement from sugarcane

The threat of antimicrobial resistance in aquaculture is an ongoing challenge to the industry and general public health around the world. It has been estimated that more than 90% of bacteria originating in seawater are resistant to one or more commercial antibiotics. The greater concern is that of the 51 commonly used antibiotics in agriculture and aquaculture, 39 are also extremely important to human medicine. If resistance to

these antibiotics continues to increase in aquaculture, there will be devastating flow on effects to disease rates and production outcomes. For this reason organizations such as the World Health Organisation (WHO) are promoting the "One Health" approach. This recognizes that to address health in an industry like aquaculture, the implications to human health and the environment must be addressed at the same time. This has

lead to the rise in popularity of phyto-genic feed additives as an alternative to antibiotics.

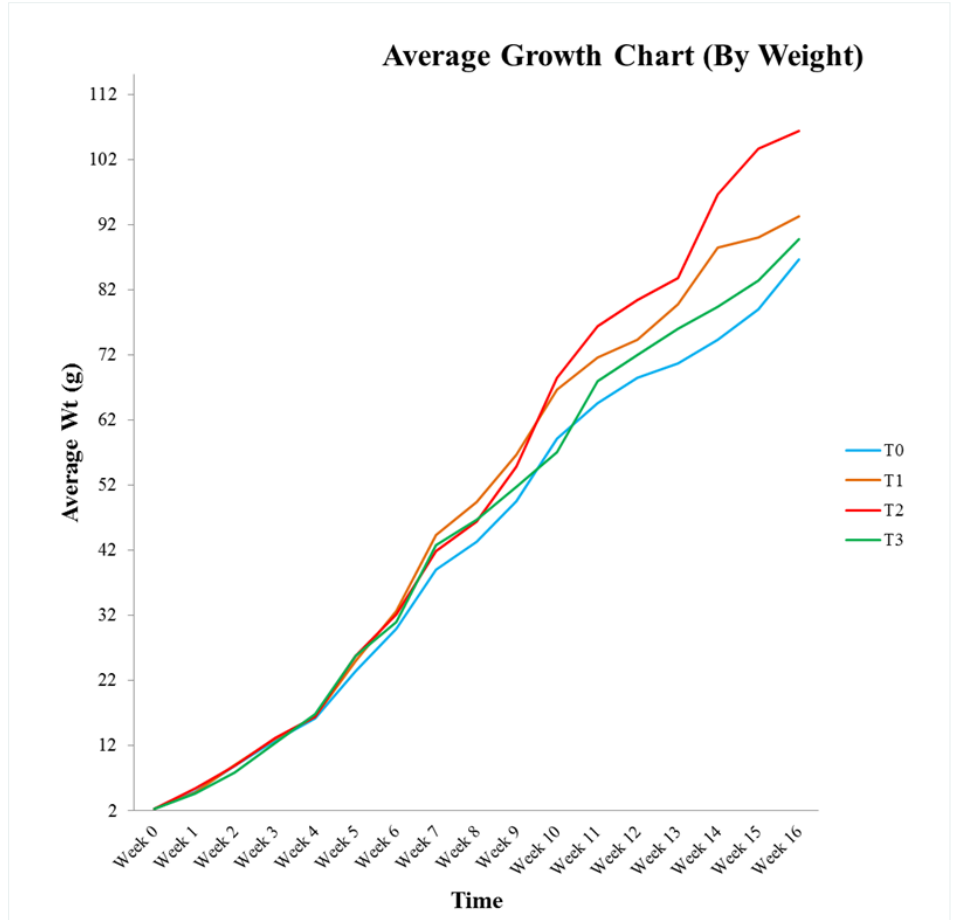
Phytogenic feed additives are plant based feed additives that are designed to give a functional benefit to aquaculture species. They are often from underutilized agricultural streams and therefore, are a useful option in increasing the sustainability of the industry. Sugarcane

(*Saccharum officinarum*) is a source of these phytogetic feed additives and is well known to have antimicrobial properties, whilst also having some of the growth promoting effects of antibiotics in production animal systems. Extracts from sugarcane are a natural phytogetic feed ingredient not used in human medicine as an antibiotic, are an ideal candidate to replace antibiotic feeding in aquaculture. For this reason some commercially viable sugarcane extracts are now available on the market.

Polygain™ is a natural plant extract from *Saccharum officinarum*; it is polyphenol rich, high in antioxidants, rich in minerals, nutrients and essential amino acids. Polygain™ also has anti-inflammatory and antibacterial properties. Polygain™ is a registered trademark of The Product Makers (TPM) which holds numerous global patents on the production and properties of Polygain™.

Aquaculture trials in Bangladesh (Chittagong Veterinary and Animal Sciences University, Department of Fisheries Resource Management) and in Australia (James Cook University Centre for Sustainable Tropical Fisheries and Aquaculture) using Polygain™ as a feed supplement in doses from 0.2% to 0.6% (w/w) delivers beneficial results to the intensive farming of a wide range of aquatic species.

These studies cover Tilapia (*Oreochromis niloticus*), Pangus (*Pangasius hypophthalmus*), River Prawns (*Macrobrachium rosenbergii*), and Black Tiger prawns (*Penaeus monodon*).



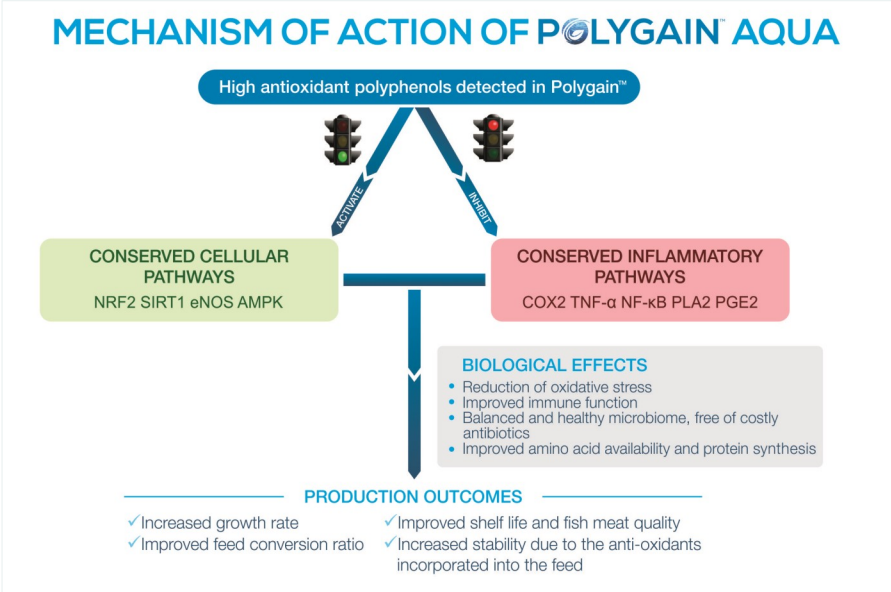
Polygain™ tilapia growth trial

Overall, feeds containing Polygain™ as a supplement has been found to deliver the following benefits in a dose dependent manner:

- Improves overall growth performance
- Attracts fish to the feed
- Maintains water quality & environment
- Improves feed conversion ratio
- Antioxidant effect improves fish meat odor and texture
- Up-regulates gut microbiome (balance of healthy gut bacteria)

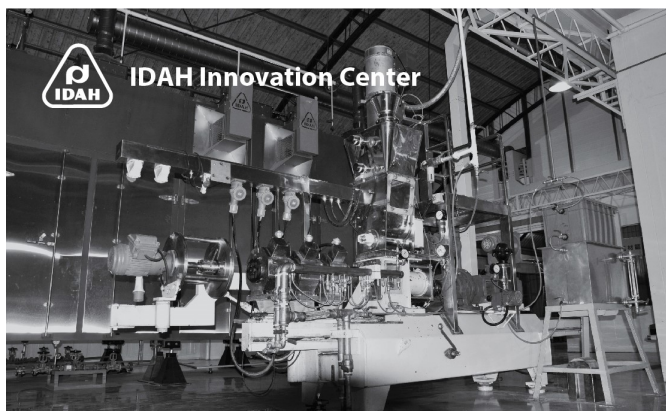
active compounds of polyphenols and flavonoids from Polygain™ has resulted in the following postulated mechanism of action.

Shane Mitchell, CEO
 The Product Makers Australia
 Bioactive Division
 E: SMitchell@tpm.com.au



Mechanism of Action

Extensive pre-clinical trials on the bio-



EXPERIMENT NOW, DECIDE LATER.



* ContraTwin Screw Extruder, Vertical Cross-Counterflow Rotary Dryer

IDAH's Innovation Center, an extrusion research lab, fosters an environment of innovation through open experiment: providing direct hands-on access to industry and machinery.

Our products and services:
R&D Sampling, Education, Turnkey Solution, Single Machine & Spare Parts.

The product sampling, include:
Aqua feed, Pet Food, Animal Feed, Textured Vegetable Protein & Snack.

@idahcompany
 @idahcompany
 @idahcompany
 @IDAH Co. Ltd.

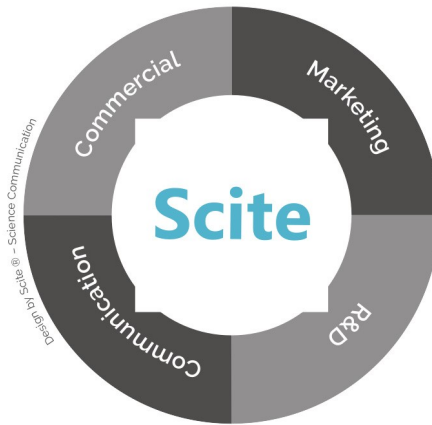
IDAH Co., LTD. / www.idah.com / No. 6 Long-hsiang 1st Rd., Su-ao Township, Yilan County 270 Taiwan
 Tel: +886-3-990-2701 / Fax: +886-3-990-1101 / email: idah@idah.com

Crunching scientific data for marketing and communication

Research-based companies are generating data at an unprecedented rate. This has been particularly observed in the feed sector, where suppliers are developing technologies that improve culture conditions and productivity to maximize return on investment, and are creating innovative formulations and additives that address the challenges producers are facing. Common examples include research efforts to find alternative protein sources, feed additives to replace antibiotics, ingredients that contribute to decreasing the fishmeal level in aquafeeds, and natural additives that enhance feed intake, digestibility and growth performance. Overall, a multitude of alternative ingredients and additives are continuously entering the market. However, these products commonly require scientific evidence before being readily accepted by the market.

Too much data, too little time

R&D departments are often focused on generating scientific data and writing reports, whereas Marketing and Commercial departments have the challenge of communicating scientific information to clients. Yet, communicating scientific data efficiently is time-consuming, and time is increasingly valuable and limited. The focus of scientists is to generate data that support innovations and product applications, while marketing and com-



mmercial managers are focused on developing and applying tools to meet sales goals. As a consequence, communication materials are often outsourced to marketing agencies, a practice that often creates communication problems due to the lack of specialized scientific knowledge. Additionally, scientists and communication designers speak different technical languages that are often difficult to combine. Ultimately, this results in multiple back and forth interactions between marketeers, designers and scientists that are argely inefficient and time consuming.

Changing the game

A new alternative to traditional marketing agencies is now available. Scite is a new service provider that crunches scientific data and breaks down complex concepts and results into simple and easy-to-use contents that can be rapidly assimilated. Ultimately,

the goal is to facilitate the communication between R&D, Commercial, and Marketing & Communication departments of research-based companies and catalyze the process of communicating scientific data to any audience.

Scite has a multi-disciplinary team of scientists, communication designers, and illustrators, who get the science right and have the skills to transmit a technically accurate message in simple terms. The starting point for each assignment can be a scientific report, a dataset, or even an idea. The final output is a tailor-made content in the format that best suits the clients' needs, such as infographics, marketing materials, technical and scientific articles, among others.

Scite's goal is to fill the gap between the generation of scientific data and the delivery of communication outputs, thereby reducing the time companies need to crunch science into marketing contents. Ultimately, Scite safeguards that the capital-intensive generation of scientific data is fully exploited by its clients in the form of high impact outputs.

Miguel Costa Leal, Ph.D.
General Manager
Scite—Science Communication Lda
E: miguel.leal@scite.pt
www.scite.pt