NEW STRATEGIES
BIO-FUNCTION

Improving Animal Health Globally

Key information

Directions for Use
150g of pure Biopower per metric ton of feed.

Stability and Storage
Stable for 2 years when stored in a cool, dry place away from sunlight and below 25 °C.

Packaging
10 kg bag

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Agrovet Animal Health (Austria)

3A BIOPOWER

A Growth Booster for Broilers

Agrovet Animal Health (Austria)

3A BioPower

3A BioPower is a unique combination of herbal extracts, enzymes and toxin binders formulated for better performance, enhanced digestion and reduced mortality in all Avian species.

Reduction in overall feed costs due to improved feed efficiency and performance boosting effect

- A MIXTURE OF HERBAL EXTRACTS
- BETA-MANNANASE ENZYME
- PHYTASE ENZYME
- TOXIN BINDERS

A MIXTURE OF HERBAL EXTRACTS

A carefully chosen mix of herbal essential oils increases performance by way of positively altering the intestinal microbiota, increasing enzymes secretion, strengthening the immune response, improving the morpho-histological maintenance of the gastrointestinal tract and increasing the antioxidant activity in broiler chickens.

Research has demonstrated that the use of herbs and their essential oil in the diet of broilers can achieve comparable (or better) performance than the inclusion of antibiotics in the diet, whilst having the added benefit of increasing the health of the intestinal mucosa and strengthening overall immunity.

The unique herbal blend found in **3A BioPower** has additional properties that are also beneficial:

- Fungistatic properties that inhibits the growth of fungi and aflatoxin production
- Antiparasitic properties
- Potent antimircrobial properties
- Contains herbs that are toxic to the poultry red mite
- Helps in the prevention and treatment of Salmonella
- Natural growth promoter in broiler chickens

BETA-MANNANASE ENZYME

Beta-mannanase is part of the hemicellulose fraction of the plant cell walls. Beta-mannan content is present in most feed ingredients and varies in its content. Its effects include decreasing the intestinal absorption of glucose and carbohydrate synthesis by interfering with insulin secretion and IGF formation. It results in a reduction in the absorption of nitrogen, fat, amino acids and other nutrients in broiler chickens.

The mechanism of beta-mannanase is to degrade beta-mannan into mannan oligosaccharides (MOS). This can help to reduce harmful bacteria in the intestinal tract, promote the growth of bifidus and lactobacillus strains and promote overall improvement in the intestinal microbial environment.

PHYTASE ENZYME

The phytase enzyme catalyses the hydrolysis of phytic acid, an indigestible, organic form of phosphorus found in grains and oily seeds, to a useable form of inorganic phosphorus. Because poultry lack the phytase enzyme, it is an important dietary addition. Including phytase in the diets of poultry result in an enhancement of the nutritive value of plant material by the liberation of inorganic phosphate from phytic acid.

It is well established that supplementing the feed of poultry with phytase increase the availability of phytase-bund nutrients like calcium, phosphorus and other minerals, as well as carbohydrates and proteins.

TOXIN BINDERS

Mycotoxins are toxic compounds produced by different species of fungi in certain environmental conditions. Blends of various raw materials in compound feed increase the risk of feed contamination with several differing mycotoxins.

The presence of mycotoxins in feed have a wide range of adverse effects on poultry including loss of nutritive value from feed, poor FCR, decreased palatability of feed, immune-suppresion, stunted growth, poor hatchability and fertility and a reduction in overall health and performance. Toxin binders minimize the negative effects of mycotoxins in broiler chickens by absorbing or inactivating the toxins.

Experimental trial

Objective: Effects of diet supplementation with **3A BioPower** on broilers´ performance.

A scientifically proven performance enhancer and growth promoter in broiler chickens

ANIMALS:

Two hundred and eighty day-old male broiler chicks.

MATERIAL & METHODS:

The birds fed with diets based on corn-soybean meal as mash during 1-14 (Starter), 15-28 (Grower) and 29-35 (Finisher) days of age. Dietary treatments were as follow:

1) Control diet (based on corn-soybean meal)
2) Basal diet + 300gr/MT BioPower™

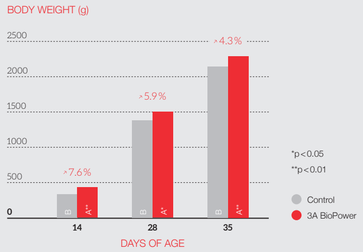
MEASURED PARAMETERS:

Body weight gain (BWG) and feed intake (FI) measured during 1-14, 15-28, 29-35, 1-28 and 1-435 days of age. Feed conversion ratio (FCR) was calculated by dividing feed intake to body weight gain. Productivity efficiency index (PEI) also was calculated at the end of experimental period.

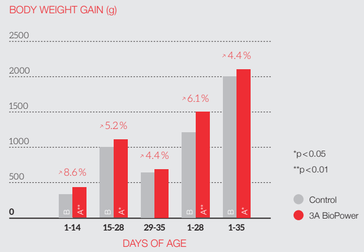
STATISTICAL ANALYSIS:

Analysis of data was carried out using Independent-samples T Test. All statements of significance were based on a probability of $P < 0.05$.

INGREDIENTS (%)	STARTER (1-14 DAYS)	GROWER 15-28 DAYS	FINISHER 29-35 DAYS
Corn	53.72	57.21	64.00
Soybean Meal	39.30	36.00	29.00
Vegetable Oil	2.50	2.80	3.04
Dicalcium Phosphate	1.90	1.65	1.55
Clacium Carbonate	1.25	1.10	1.15
Salt	0.39	0.39	0.37
DL-Methionine	0.24	0.19	0.20
Lysine HCl	0.20	0.16	0.19
Vit. + Min. Premix	0.50	0.50	0.50
CALCULATED CHEMICAL COMPOSITION			
Metabolisable Energy (Kcal/Kg)	2905	2970	3065
Crude Protein (%)	21.90	20.70	18.2
Total Arginine (%)	1.502	1.418	1.230
Total Lysine (%)	1.335	1.225	1.075
Total Methionine (%)	0.586	0.524	0.503
Total Methionine + Cystine (%)	0.925	0.848	0.787
Total Threonine (%)	0.885	0.843	0.790
Calcium (%)	1.03	0.91	0.89
Avaiable Phosphorus (%)	0.50	0.45	0.42
Sodium (%)	0.17	0.17	0.16



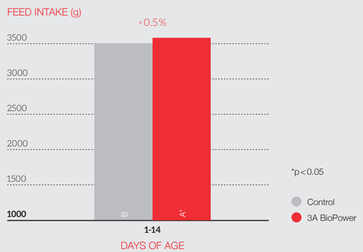
PICTURE 1
EFFECT OF DIET SUPPLEMENTATION WITH 3A BIOPOWER ON BODY WEIGHT OF BROILER CHICKS.



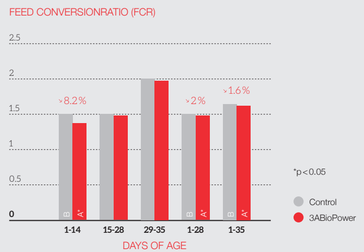
PICTURE 2
EFFECT OF DIET SUPPLEMENTATION WITH 3A BIOPOWER ON BODY WEIGHT GAIN OF BROILER CHICKS.

An analysis of the experimental data generated in this investigation clearly point to the positive effect of 3A BioPower on body weight and body weight gain of broiler chicks (Picture 1 and 2).

The body weight and body weight gain was increased more than 5.5% in the broilers fed 3A BioPower diets.



PICTURE 3
EFFECT OF DIET SUPPLEMENTATION WITH 3A BIOPOWER ON FEED INTAKE OF BROILER CHICKS.



PICTURE 4
EFFECT OF DIET SUPPLEMENTATION WITH 3A BIOPOWER ON FCR OF BROILER CHICKS.

Feeding 3A BioPower to broiler chickens resulted in increase (0,5%) in feed intake at the starter phase (Picture 3).

Feeding 3A BioPower significantly reduced the FCR of broiler chickens (Picture 4).

The reduction was observed at the starter phase (more than 8%) and at the end of 35 days in 3A BioPower treated groups.