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making you more competitive

Trimin™ ORG Plus

Scientifically balanced blend of organic trace minerals for efficient production

See The Difference

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Poultry diets have to be supplemented with essential trace minerals with the objective of avoiding deficiency diseases and to carry out key functions in relation to many metabolic processes for optimum health, growth and productivity. Trace mineral forms can be organic or inorganic. Studies have shown that poultry birds absorb, digest and use mineral chelates better than inorganic minerals. In other words, they have a greater bioavailability as compared to the inorganic form.

Benefits of Organic Trace Minerals

1. Higher bioavailabilty than inorganic trace minerals.
2. Increased bioavailability has a twofold benefit of reducing feed costs (due to lower inclusion levels and higher bioavailibity) and minimising nutrient build-up in the soil (due to less mineral excretion).
3. Unlike inorganic trace minerals, their organic counterparts do not react among themselves and decrease their availability or use.
4. Organic trace minerals are protected from interactions with antagonists in the digestive system.

The commercially produced organic trace minerals mainly are produced as 'chelates', meaning a protective chemical bond between a mineral and an appropriate organic compound (ligand) is made. There are different types of chelates -

Proteinates are a type of chelates where minerals are chelated with short-chain peptides and amino acids derived from hydrolysed soy proteins. Other producers use amino acids such as Glycinates or Methionates to chelate the minerals

Glycine Chelates

1. Glycine has the lowest molecular weight with a high bonding capacity to the mineral making it superiorly stable.
2. Glycine has a specific site of absorption (active and passive) in the intestine compared to Methionine, Cystine etc. Glycine chelated organic minerals have much greater bioavailability through increased selective transport of peptides at gut level
3. Glycine chelates form a homogenous dispersion in the intestinal gut inducing optimal absorption. Low pH of Glycine chelates, reduces the sensitivity to the acidic conditions of digestive tract and the absorption of mineral is improved.
4. Glycine chelates remain as a chelate until absorbed and does not interact with other gut constituents.
5. Glycine chelates are non Hazardous and environmentally safe products.

Trimin ORG Plus Trial Report On Commercial Broilers

The present trial studied the effect of Trimin ORG Plus (Organic Trace Minerals – Glycine Chelates) against Brand X (Organic Trace minerals – Methionine Chelates) on broiler production performance and mineral excretion levels.

Trial Design

The trial was conducted at a commercial broiler poultry farm - Kumuraihah in Medchal (Telangana). A total of 2,040 Cob500 one-day-old broiler chickens (mean weight 42 g) were used in the feeding trial that lasted until the birds reached 39 d of age. T1 group diet had Trimin ORG Plus while T2

group received Brand X. Inclusion Levels for both brands of organic trace minerals was 500g/tonne of feed.

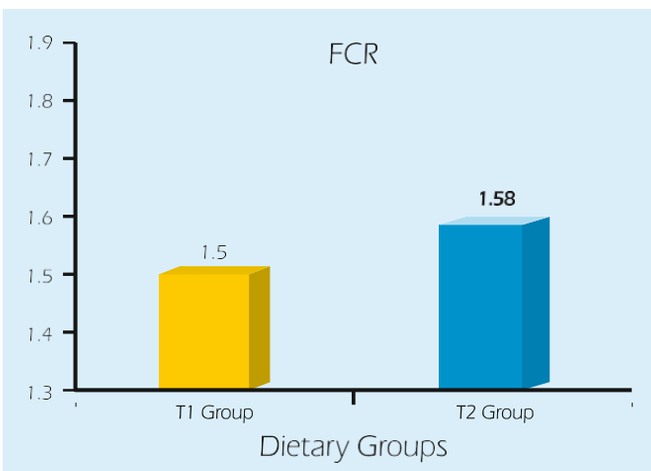
Feed intake and bird weight were determined at 15, 29, and 39 d of age and were used to calculate FCR. On d 26, faecal samples were taken for mineral analysis. Ten birds per pen were randomly selected and placed in cages until sufficient droppings were produced (minimum of 50 g per 10 birds). After faecal collection, birds were returned to their original pen. Faecal samples from each pen were homogenously mixed and analysed for Mn, Zn, Fe, and Cu contents, to determine the level of mineral excretion.

Observations

Production Parameters

Parameters	Dietary Groups	
	T1 group	T2 group
d 1 to 39		
Body Weight (g)	2,243	**2186**
Feed Intake (g)	3386	**3450**
FCR	1.5	**1.58**

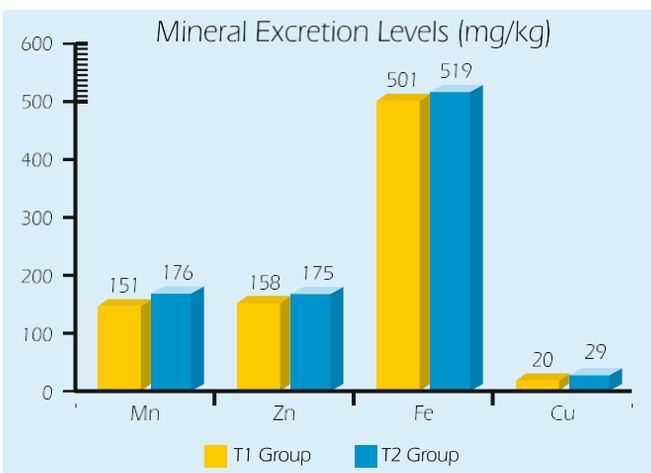
Performance of broiler birds fed different organic trace minerals



Mineral Excretion

	Minerals (mg/kg)			
Groups	Mn	Zn	Fe	Cu
T1	151	158	501	20
T2	176	175	519	29

Mineral levels in the faecal samples taken on day 26



Inference

- A lower FCR in T1 group denotes that glycine chelated trace minerals are more efficient that the methionine chelates used in group T2.
- The significantly lower excretion rates observed in the T1 group is indicative that the chelates used in T1 are better absorbed than the chelates of T2 group.

Conclusion

The above study demonstrates that Glycine chelated trace minerals are better absorbed by the gut and more efficiently utilized by the broiler birds.

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Composition

Nutritional Value Per KG	
Manganese	80g
Zinc	80g
Iron	60g
Copper	10g
Iodine	4g
Selenium	0.6g
Cobalt	1g
Chromium	0.4g
Molybdenum	0.05g
Nutritive Carrier	q.s.

Usage

Broiler/Layer - 500g/tonne of feed

Breeder - 1kg/tonne of feed

Or as recommended by the nutritionist

Key Role of Important Trace Minerals

- Copper - Anti-oxidant, Anti-microbial, Growth Promoter
- Iron - Erythropoiesis
- Manganese - Bone formation, Carbohydrate and Lipid Metabolism
- Zinc - Immunity
- Selenium - Antioxidant
- Chromium - Insulin mediated increase in glucose uptake, counteracts heat stress
- Cobalt - Synthesis of Vitamin B_{12}

Presentation

25 kg Bag

No Side Effects Observed

Store in original packaging at cool and dry place and protect it from direct sunlight
(Shelf life 36 months)

• ROSSARI BIOTECH LIMITED •

(An ISO 9001:2015 & 14001:2015 & GMP Certified Company)
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