

Growers Mash with Cockroach Meal

Ingredients	Growers Mash 1%	Growers Mash 2%
Whole maize	59	59
Wheat bran	17	17
Soya bean meal	18	18
Cockroach meal	1.5	2
Fishmeal	2.5	2.5
Dcp	0.3	0.3
Limestone	1.3	1.3
Iodized salt	0.2	0.2
Premix	0.2	0.2
MycobinDer	0.1	0.1



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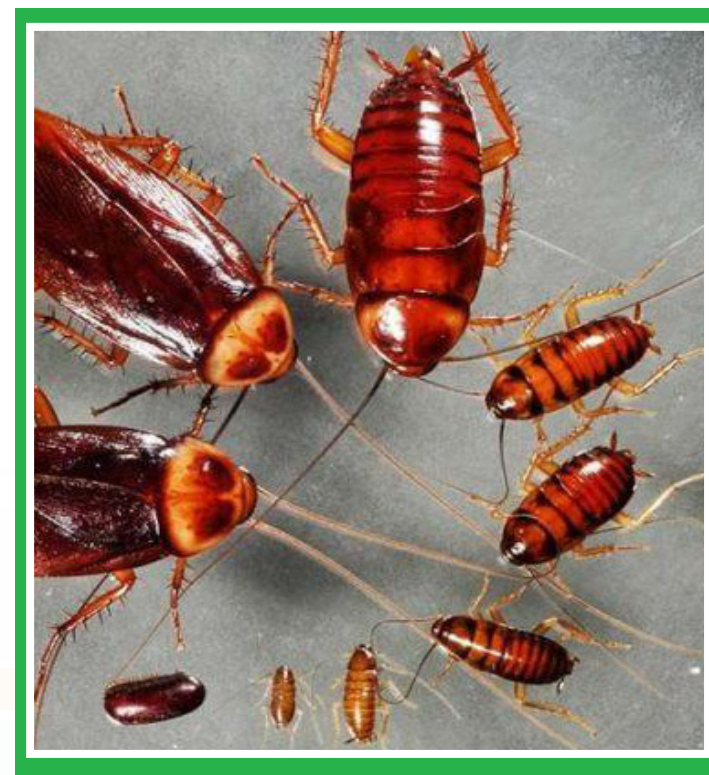
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Cockroach Meal as an Alternative Feed for Indigenous Chicken



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Introduction

Cockroach meal is a product obtained from processed cockroaches of any species. It is a nutritious option with a crude protein content of 56-58% and a fat content of 7-15%, making it an alternative source of high-quality protein for chicken feeding. Large-scale cultivation of cockroaches, followed by drying and crushing, allows for the production of cockroach meal to replace 50% of fishmeal in grower diets. With a 2% inclusion in the chicken feed ratio, birds exhibit an increased survival rate of 95% and similar growth performance as those fed on fish meal. Suitable cockroach species include the German cockroach and American cockroach.



German cockroach



American cockroach



Cockroach meal

Why use Cockroach meal as chicken feed?

Reasons for using cockroach meal as chicken feed include:
Cockroach species are prolific and readily available. They can be efficiently multiplied in a fabricated container, utilizing substrates such as kitchen waste, cereal crops, and agro-industrial wastes, which are easily accessible.

Unlike fishmeal, cockroach meal faces no competition from humans, as people do not consume cockroaches.

Feeding chickens with cockroaches is less complicated, as birds naturally consume cockroaches while foraging in free-range systems.

Cockroach meal easily integrates with other ingredients and can replace up to 50% of fishmeal in compounded growers' mash.

The metabolizable energy in cockroach meal is high (3639-3964 Kcal/Kg), primarily due to its elevated proportions of carbohydrates and fat content.

Establishing cockroach rearing facilities requires minimal initial capital, making it an easily adoptable practice for smallholder farmers.

Nutritional value of Cockroach Meal (CM)

Energy (Kcal/kg)	3639-3964	Moisture (%)	9-10	Protein (%)	56-58	Carbohydrates (%)	7-16	Crude fibre (%)	5-6	Ash (%)	3-4	Fats (%)	7-15	Lysine	2.81	Methionine	0.65
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How to Feed

Cockroaches can be fed to chickens in the following ways:

- Collect/harvest and feed raw cockroaches to chickens as a protein supplement.
- Collect, dry, grind, and mix with other chicken ingredients to form compounded feed like growers' mash.

Sources of Cockroaches

- On-farm production.
- Wild harvesting.

