DEPARTMENT OF ANIMAL NUTRITION FEEDING OF POULTRY CONVENTIONAL AND UNCONVENTIONAL FEED INGREDIENTS



UNCONVENTIONAL FEEDING

- It refers to all those feeds that have not been traditionally used for animal feeding either by farmers and by feeding manufacturers in commercial feeds.
- These includes the industrial and agricultural by products used in animal feeds at certain percentages depending on their palatability, nutritional value and toxic factors/anti –nutritional factors.
- Feed constitutes 60-70% of total cost of production.
- Poultry being the mono-gastric animal lack the fibre degrading enzyme.

CHEMICAL COMPOSITION :

- Dried grain
- Cashew apple waste
- Cow pea leaves
- Palm oil
- Sunflower oil cake
- Unconventional cereals
- Broken rice

BREWER'S DRIED GRAINS:

- It is a valuable by products of brewery which has a potential to be used as supplementary feed.
- They have been used in both ruminants monogastric animals.
- Materials used in beer making process contains 75% moisture.
- High level of BDG reduces performance of poultry birds.
- Enzyme is added to improve performance of birds.



CASHEW APPLE WASTE:

- Used in layer chick ration.
- It replace 10% of commercial layer diet.
- CAW can also be incorporated in the diet of Japanese quail chicks.

RICE KANI/ BROKEN RICE:

- It's chemical composition varies from where it collected, processed and stored.
- Rice kani is comparable to maize in cp and energy contents.
- Apparent metabolizable energy is compared to that of maize.



COWPEA LEAVES :

- It is important legume grain and fodder.
- It has significant impact in reduction of egg production.

SUNFLOWER OIL CAKE:

- It is concentrated feed rich in proteins and fats.
- They contain-lysin, methionine, tryptophan.
- They are poor in carotene





UNCONVENTIONAL CEREALS :

- Unconventional cereals like bajra and ragi available in most parts of india
- Millets grossly resemble maize.



CONVENTIONAL FEED :

• These are essentially composed of complex carbohydrates which are extremely tough to be digested by poultry due to lack of specific enzymes in their systems.

CONVENTIONAL FEED INGREDIENTS:

- Maize
- Barley
- Oats
- Wheat
- Wheat bran
- Pearl millet
- Rice
- Rice polish

- Deoiled rice polish
- Sorghum
- Ground nut
 - cake
- Fish meal
- Oyster shell

I.Maize:- It us highly digestible and contains very little fibre. It is used as a source of energy and is low in protein, especially lysine & sulphur containing aminoacids.

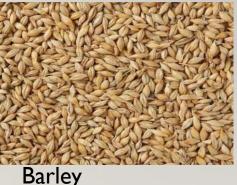
2.Barley:- It is not very palatable because of its high fibre content & should not constitute more than 15% of the ration.

3.Oat:- It contains manganese, which may help in preventing hook disorders, feather cannibalism pulling & cannibalism.



Maize





Rice : Broken grains of rice can be used for replacing maize.

Limestone : limestone is a source of calcium. It should not contain mare than 5% magnesium.

Oyster-shell: Oyster-shell contains more than 38% calcium, and is a good substitute for limestone. It is quit palatable.

Limestone











Ref:

Swain, B. K., Naik, P. K. & Singh, N. P. (2014). Unconventional Feed Resources. ICAR- Research Complex For Goa.

