

JOHN'S CORNER

ORGANIC FERTILIZERS AND NUTRIENTS 31:

FEATHER MEAL

by John Ferguson

Feather meal as one might guess comes from the poultry industry, primarily chickens and turkeys and occasionally from ducks. Feathers have a lot of keratin in them which is a natural fiber resistant to decomposition. They are naturally very high in nitrogen (N) and one of the richest nitrogen sources found in nature. The nutritional content of the meal varies between 10-1-0 to 13-0-0 (N-P-K) depending on what else is included such as heads, feet, skin, etc.

To produce feather meal the feathers are cooked, a process called rendering. This is generally done under high pressure and heat that sterilizes the feathers and hydrolyzes the complex proteins. They are then dried and ground into a powder. Depending on the final usage from animal feeds to organic fertilizers they may be sold as a meal, granules or pellets.

Feather meal is a natural slow release organic fertilizer. It must be worked into the soil for best results and often takes up to a week before the microbes start slowly releasing the nitrogen. Over the first three months around 75% of the nitrogen will be released and the final 25% over the next few months. The majority of nitrogen in feather meal is not water soluble hence it does not leach and pollute our waterways as artificial fertilizers do. As a result almost all the nitrogen is used by the plant or stored in the soil till needed.

Usage varies based on need but 12 pounds per 1,000 square feet or 1/3 cup per nitrogen loving plant is typical.



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SUMMARY:

Feather meal is another tool in a gardeners arsenal of nutrient sources. Best usage is when a soil test shows only nitrogen is required to balance the soil fertility. Other uses is a nitrogen source for plants that have a above average nitrogen requirement such as corn.

PROS:

- excellent source of slow release nitrogen
- often used as an ingredient in organic fertilizers
- renewable resource
- many brands available
- moderate cost
- slow release nitrogen source for a compost pile
- does not pollute

CONS:

- nitrogen slowly available
- does not contain other nutrients
- may be dusty
- limited availability in some areas
- may attract animals.