



II. Reading & Comparing Plant Food Labels

Plant foods sold in the United States generally have a label with information on the following: Grade, Net Weight, Guaranteed Analysis, Sources of Nutrients. Each of these components is explained below. When shopping for plant foods, this section is indispensable for making comparisons between seemingly similar products.

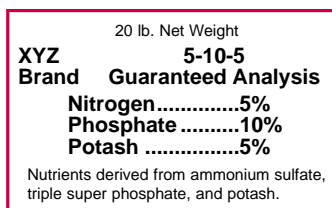


Figure 1

1. The Grade

A shorthand representation of the minimum percentages guaranteed (by weight) for Total Nitrogen, Available Phosphate, and Soluble Potash, with each guarantee separated by a hyphen. In Figure 2, the grade for Plant-tone is 5-3-3, which means that it is guaranteed to contain 5% nitrogen, 3% phosphate, and 3% potash. Therefore, in a 50 lb. bag of Plant-tone, there would be 2.5 lbs. of nitrogen, 1.5 pounds of available phosphate, and 1.5 lbs. of soluble potash.

2. Net Weight

All fertilizers must be sold on the basis of net weight (not volume). When comparing products, it is often better to compare the price per pound rather than total price because the net weights often vary, i.e. 5 lb. bag versus 4 lb. box. You should also take this into consideration when determining the amount of nutrients in a product. (See Figure 3)

3. Guaranteed Analysis

States the minimum percentage by weight of plant nutrients claimed by the seller. If the manufacturer claims a given nutrient, it must be guaranteed in this section.

Plant Food Fundamentals

T I P S H E E T

NET WEIGHT 25 LBS (11.33 kg)	
Plant-tone	
5-3-3	
GUARANTEED ANALYSIS	
Total Nitrogen (N).....	5.0%
0.5% Ammoniacal Nitrogen	
0.5% Other Water Soluble Nitrogen	
4.0% Water Insoluble Nitrogen	
Available Phosphate (P ₂ O ₅).....	3.0%
Soluble Potash (K ₂ O).....	3.0%
Calcium (Ca).....	3.0%
Total Magnesium (Mg).....	0.5%
0.3% Water Soluble Magnesium (Mg)	
Sulfur (S).....	1.0%
1.0% Combined Sulfur (S)	
Boron (B).....	0.02%
Chlorine (Cl).....	0.1%
Cobalt (Co).....	0.0005%
Total Copper (Cu).....	0.05%
Total Iron (Fe).....	1.0%
Total Manganese (Mn).....	0.05%
0.01% Water Soluble Manganese (Mn)	
Molybdenum (Mo).....	0.0005%
Sodium (Na).....	0.1%
Total Zinc (Zn).....	0.05%

Derived from: Dehydrated Manure, Animal Tankage, Crab Meal, Cocoa Meal, Corn Gluten, Bone Meal, Dried Blood, Sunflower Meal, Kelp Meal, Alfalfa Meal, GreenSand, Rock Phosphate, Sulfate of Potash, Sulfate of Potash Magnesia, and Humates.

Plant-tone is a complete plant food. It contains all the essential plant nutrients.

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Figure 2

4. Derivation Statement

The derivation statement lists the sources for the nutrients guaranteed. Look to see how many ingredients are listed. The more ingredients, the more rates of release, the better the feed. Check also to see if there are any slow release ingredients, i.e. natural organic or controlled release ingredients.

Tips for comparing grades:

Bigger doesn't mean better. Some consumers mistakenly believe that bigger numbers in the analysis means better plant food. However, high analysis plant foods are often wasted because the plant cannot utilize all of the nutrients immediately, and what it does not use leaches away from the soil. It is more important to look for slow release ingredients such as natural organic or controlled release that will slowly feed the plant and not leach away.

Take weight into consideration. Some consumers mistakenly believe that bigger analyses always mean more nutrients. However, because an analysis represents the percentage by weight of a given nutrient, it may not always be the case. In Figure 3, Espoma Organic has smaller numbers in its analysis than Brand X, but it actually has more nitrogen, phosphorus and potassium than Brand X.

Figure 3

Brand	Analysis	Weight	Nitrogen	Phosphorus	Potassium
Espoma Organic	18-8-6	25 lbs.	4.5 lbs.	2 lbs.	1.5 lbs.
Brand X	26-3-3	17 lbs.	4.4 lbs.	0.5 lbs.	0.5 lbs.

Comparison tips:

How many nutrients are guaranteed? Look to see how many nutrients out of the 15 that the company guarantees. Although the primary nutrients are needed in the greatest quantity, a shortage of any one nutrient can reduce plant growth to unsatisfactory levels.

Is there any slow release nitrogen? To determine how much of the nitrogen is slow release, add the percentage of "Water Insoluble" Nitrogen to any other "Slowly Available" Nitrogen in the guaranteed analysis. In the Plant-tone label of Figure 1, 4.0% nitrogen (approximately 80% of the nitrogen guaranteed) is slow release. In the XYZ brand label in Figure 2, there is no water insoluble guarantee or any other slow release claim. Therefore, this is a water soluble product that will not last long in the soil.

For more information about our products and services please contact our customer support department at:

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