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TITLE: WHAT IS 10-10-10?

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What does 10-10-10 mean in layman's terms? Fertilizer labels contain three numbers that correspond to the percentage of nitrogen (N), phosphorus (P₂O₅) and potassium (K₂O) in the bag. The nutrients will always be listed in this order and in a ratio. A 10-10-10 fertilizer means it has equal amounts of Nitrogen, Phosphorus and Potassium.

A 5-10-15 means there is twice as much phosphorus as nitrogen and three times as much potassium as nitrogen. Why should you buy fertilizer with lesser amounts of nutrients? Why not just buy the highest analysis possible?

Vegetables are classified into three categories as to their nutrient requirements:

- Heavy: cabbage, Irish potatoes, lettuce, onions, sweet potatoes, and tomatoes.
- Medium: herbs, okra, beans, pepper, pumpkins, carrots and squash.
- Light: Southern peas.

The even analysis (8-8-8 / 10-10-10) is used mostly for non-flowering or leaf plants such as lettuce and the greens family. With these, you want to produce a lot of edible foliage.

The other analysis (5-10-15 / 4-8-12) is used to grow fruiting plants such as tomatoes and peppers. The first number is N, which produces vegetative growth. Vegetative growth is needed for leaves to produce chlorophyll for the plants. However, too much N, especially at the wrong time, can cause the fruit on tomatoes and peppers to fall off.

The tomato plant has no intent on producing a big, juicy fruit for you. It is just trying to produce seed for its regeneration. Putting out a high nitrogen fertilizer signals the fruiting plant to use this extra nitrogen to grow vegetatively. They will slough off their fruit and start growing larger leaves at the expense of the fruiting.

Timing the addition of N as a side dressing is critical, too. The plant needs fertility for growth, so put the fertilizer out at planting. But, do not add anymore until after the plant flowers, and the fruit grows to the size of a dime. Then, side dress with extra nitrogen for the next fruit set.

In short, customize the fertilizer for the plant. The plant will appreciate it. Good luck and good gardening!