



# Organic Fertiliser versus Chemical

The major difference between organic and chemical fertilizer is the solubility of the nutrients.

Chemical fertilizers are predominantly soluble and immediately available to the plant. There is however, the real risk that these soluble nutrients will be lost via leaching, particularly in sandy soils, into groundwater, rivers and lakes.

Organic fertilizers on the other hand contain nutrients that are less soluble and are released to the plant as they need them by the soil microbial life; we adjust the amount released by stimulating (or not) soil microbial activity.

High soluble salts can be detrimental to plant growth by reducing germination, burning-off sensitive primary roots, causing slower growth and wilting in the middle of the day. Synthetic fertilizers, particularly nitrogenous fertilizers have relatively high salt indexes and individual usage need to be small. Repeated applications of chemical fertilisers will also progressively reduce soil function.

Many of our soil naturally has poor levels of phosphorus, however with years of super-phosphate application soils have large reserves of phosphorus, most of which is locked up chemically.

In a typical organic soil, much of the available nitrogen and phosphorus is contained in the soil organic matter or natural minerals, which are broken down and released by microbial action. Mineralised nutrients are then taken up by the plant as it becomes available.

Soil life and nutrient balance determines the amount of available nutrients in an organic soil. So feed the soil first, then the plant. Build a humus rich soil teaming with biological life.

To improve your soil and uptake of nutrients by your crop, we suggest soil and tissue testing. Our tests provide you with organic and integrated recommendations so you can be confident you will be enhancing your soil with what it needs to feed your crop. You can also send us your results and we will provide organic or integrated recommendations.

**Email us for further information - [admin@organicfarming.com.au](mailto:admin@organicfarming.com.au)**

This information is of a general nature - seek specific advice for your situation.



**Consider OFS New Era High N**  
**A high quality, high analysis pelletised fertiliser providing a**  
**microbe friendly source of nitrogen (8%), phosphorus (1%) and**  
**potassium (1%).**

Nitrogen is a major constituent of several of the most important substances which occur in plants. It is of special importance that nitrogen compounds comprise 40-50% of the dry matter in protoplasm (the living substance in cells). So as a result and to sustain all growth processes, plants require relatively large amounts of nitrogen.

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