

Today, foliar feeding is a well-established tool to complete and enrich plant nutrition due to scientific research conducted in the 50's which validated the theory that foliar nutrients can be absorbed through the stomata of the leaf and in some instances through the cuticles.

Foliar feeding can provide the nutrients needed for normal development of crops in cases where absorption of nutrients from the soil is unavailable due to plant stress or in adverse soil conditions when unavailable to the plants roots.

As uptake of nutrients through the stomata of the leaf is considerably faster than through roots, it is the method of choice when prompt correction of nutrient deficiencies is required.

Foliar sprays are much more than a cure to poor growth conditions; they can also provide valuable extra nutrients the plant needs to maintain a healthy immune system to shield itself from the attack of pests and harmful bacteria.

It is well known that specific plant development stages are of higher importance in determining final yields and the foliar application of nutrients during these critical stages, will dramatically increase yields and improve yield quality.

In certain growth conditions, foliar feeding, with its high efficiency, can replace soil application of fertilizers, for many short-season crops.

One of most significant benefits of using a foliar fertilizer is that it can be more cost effective when compared to many other means of boosting plant growth. While the number of nutrients absorbed though the leaf is small, its efficiency rate is higher than if applied directly to the soil.

Many can be tank-mixed with a number of crop protection products, reducing application costs and number of passes through the crop.

### Fertigation

Fertigation compared to traditional surface irrigation systems targets 20-30% of the total volume of soil by applying fertilizers, soil amendments, or other water-soluble products through an irrigation system. It can be adapted to all types of crops but is most common in high value horticultural and fruit crops.

With the water and nutrients applied to the wetted bulb area, feeder root development is also concentrated in this zone. This improves the uptake efficiency of water and nutrients. In trees, rooting depth is greater in the wetted area with roots outside that zone serving as anchorage for the crop.

