

The growth of the plant depends on seasons. Photosynthesis is the process of food preparation in leaves which depends on the intensity of sunlight the plant getting. During the summer season the activity of plant cells is at higher rate. The growth of the plant depends on the rate of cell division. The new shoots, buds, flowers and fruits will appear during this season. During that period of time plant needs lot of nutrients for its proper growth. Then they should be supplied frequently in form like spraying or in tablets. In winter there will be drop in temperatures and the plant will be in dormant stage due the freezing temperatures. The activity of plant will be at stand still at that time, so the supplement of nutrients is not required.

India being a tropical country, we don't have much of differences in temperatures. We have only hot, hotter and hottest. The growth of the plant is a continuous process in tropical region.

When the plants growing in pot they need to be fertilized frequently. We have to provide different supplements to the plants superficially (from outside). These nutrients are of two types.

- 1) Organic fertilizers or natural suppliers
- 2) Inorganic or synthetic or artificial fertilizers

Inorganic fertilizers

The supplement of food is to be done frequently in a regular method.

Plant food contains lot of macronutrients and micronutrients. Both the nutrients are essential to the development of the plant.

The essential macronutrients are the nitrogen, phosphorus and potassium. The main element is the nitrogen which is essential for the plant's vegetative growth, the main leaf production and green colors depends on the intake of nitrogen mineral. Phosphorus helps in flower and fruit production. Potassium is the element which plays a main role in keeping the root system healthy and strong.

The plants also require minor elements which are also called as micro elements such as calcium, sulphur, magnesium, along with trace elements such as zinc, copper, manganese, iron, chlorine etc. This type of artificial inorganic fertilizer is two types. One is water soluble or instant release. And second one is time based or sustained release. The controlled fertilizers are to be supplied once in every 3 to 5 months depending on the weather and watering and the main important one growth rate of the plant. The other instant water soluble fertilizer is to be applied once in every two weeks.

Organic fertilizers

Organic fertilizers are the natural fertilizers and slow release type, because the nutrients they contain dissolve slowly in water, The availability of nutrients to the plant takes place in slow phase, it may take several days or weeks or months. Some of the natural fertilizers are animal manure, worm castings, urine, peat, leaf mould, dried blood, bone meal and seaweed extracts. One of the best organic fertilizers is vermin compost with many nutrients to improve the soil structure. Due to their insolubility in water, these organic fertilizers can be supplied once in 3 to 4 months depending on the growth of the plant.