FERTILISERS

BEGINNERS GUIDE TO GARDENING

WHAT ARE FERTILISERS?

Concentrated chemical or organic sources of plant nutrients can be found in fertilisers. The majority contain major plant nutrients, which plants require in significant quantities. Additionally, some contain trace elements, which plants only require in small quantities. Three major nutrients make up most fertilisers, these are:

Nitrogen (N): Which promoted green leafy growth
Phosphorus (P): To create healthy roots and shoot growth
Potassium (K): Used for flowering, fruiting and general hardiness

WHY ARE FERTILISERS IMPORTANT?

Plant growth can be boosted with fertilisers. The application of fertiliser will be more beneficial to the plant the faster it grows. Using fertilisers may result in a better display of blooms and a greater yield of edible crops, but this is only true if your soil is healthy.

Additionally, fertilisers can be utilised in locations where plants exhibit symptoms of nutrient deficiency, typically as yellowing or discoloration of the leaves.

Keep in mind that applying fertiliser is just as important as maintaining a healthy soil structure and pH for preventing plant nutrient deficiencies.

TYPES OF FERTILISERS

Organic

Organic fertilisers are produced from plant or animal materials and contain organic plant nutrients. Organic products tend t be slower acting, as large organic molecules have been broken down by soil organisms before the nutrients within them are released for plant use.

Examples of organic fertilisers include seaweed, fish blood & bone, and bone meal. Another organic fertiliser product includes Miracle-Gro Performance Organics All Purpose Concentrated Liquid Plant Food.

Inorganic

Inorganic fertilisers are synthetic artificial forms of plant nutrients or naturally occurring mined materials. Inorganic fertilisers are usually more concentrated and faster-acting than organic fertilisers.

Examples of inorganic fertilisers include Growmore, Miracle-Gro All Purpose Soluble Plant Food, and Phostrogen All Purpose Plant Food.

Controlled release

Controlled-release fertilisers are almost always granules of inorganic fertilisers coated with a porous material such as sulphur or synthetic resin. Water enters the granule and the composts filter out into the encompassing soil. The rate of leaching increases with soil temperature; this is in line with the fact that plants grow more quickly in warm weather.

Slow release

Slow-release fertilisers degrade slowly, usually under the influence of soil micro-organisms to release their nutrients and again are dependent on soil temperature. Hoof & horn and bone meal are two examples of these, which are typically organic.

UNDERSTANDING FERTILISER LABELS

The items in fertilisers, as depicted on the lable can appear to be very overwhelming. But the product's composition and nutrient content are explained on the label, which can help you figure out what to buy and how to use it best. All fertiliser bottles need to show similar fundamental data. This makes it possible to compare two different packages of garden fertiliser and make it clear what is being purchased.

Components, for example, nitrogen, phosphorus and potassium are the most helpful piece of fertiliser, as opposed to mixtures like phosphorus pentoxide and potassium oxide. As a result, a label typically contains two ratings: one for the element's actual rating in brackets and another for the compound's (oxygen) rating.

Application Guidelines: Garden fertiliser manufacturers typically include extensive information to assist gardeners in getting the most out of their products. Generic fertilisers like superphosphate and Growmore have recommendations based on experience as well as field trials, whereas major manufacturers will conduct tests and trials. Gardeners may need to use "trial and error," ideally in conjunction with occasional soil analysis, to achieve the best results because guidelines cannot cover all possibilities.

Products Without Labels: Products that aren't covered by fertiliser regulations may be sold as plant foods without stating how many nutrients they contain. Use of fertilisers that do not state their nutrient content should be avoided by gardeners because they may contain very few plant nutrients.

How to make your own fertiliser...

If used in large quantities, comfrey, nettles, and liquid from wormeries are all effective liquid fertilisers. They are less effective than chemical fertilisers, but they are also safer and better for the environment.

Put about 1 kilogram of nettles in 10 liters of water, let it sit for about two weeks, and then use it at a dilution rate of 10: 1.

Put 1 kilogram of comfrey leaves in 15 liters of water, seal the container, and let it sit for six weeks before using it undiluted.

Wormery liquid should be diluted with water until it resembles weak tea, typically at a ratio of 10:1.

FERTILISER APPLICATION

There are numerous ways of applying manures, and the technique you pick will mostly rely upon the item you are using.

Top dressing: In order to encourage growth, quick-acting fertilisers are typically applied to the soil surface around plants in the spring, at the beginning of the growing season. Avoid leaf contact, which can cause burning, and avoid applying too much, which could damage the roots and pollute the groundwater.

Base dressing: This is when fertiliser or potting compost is added to the soil prior to sowing or planting.

Watering on: During the growing season, soluble powders and granules or liquid fertilisers can be dissolved or diluted and sprayed onto plant roots with water to give them an immediate boost. They are mostly used for feeding plants in pots, bedding, and greenhouses. Liquid fertilisers make the nutrients available immediately. Leaf contact can cause scorching, so caution must be taken.

Foliar feeding: This is the application of a diluted fertiliser solution to the leaves of plants. It can be used as an emergency treatment to fix nutrient deficiencies or to give plants quick extra food. The undersides of leaves and young leaves that are just starting to grow absorb liquid fertiliser more readily than other areas of the leaf. Applying fertilisers to the foliage in direct sunlight could cause it to burn.