

Biogrow Technologies Limited Introduce

fertilpot

100% organic, biodegradable cultivation pots

Description



FERTILPOTS are 100% biodegradable organic cultivation pots composed of 80% long wood fibres and 20% peat moss, and are manufactured without the use of glues or binders. They offer high mechanical strength and superior horticultural properties. Because water, air, and roots will penetrate the walls of the FERTILPOT so easily, there is no need for drainage holes. The natural root structure that develops helps to ensure a successful transplant. No other container, biodegradable or plastic, allows more natural development of the plant's root structure.

FERTILPOT is excellent for native material that can often be sensitive to transplant, since the plant is never removed from the FERTILPOT. FERTILPOT has been proven very successful in the production of flowers, vegetables, grafted vines, forestry stock, as well as a range of annual and perennial ornamentals and crops.

FERTILPOTS are available in a wide range of individual sizes, plus configurations including strips and trays. The seedling and the complete FERTILPOT are planted, so there's no plastic waste to litter or damage the environment.

- ◀ Forestry nursery stock
- ▼ Vine propagation



How the Fertilpot works

AERIAL ROOT PRUNNING

Containers impermeable to roots hair cause deformation to the roots. The most common problem is coiling of roots, but this is not the only one (roots gathering in corners, roots growing upwards, crushed roots, etc.).

When plants are grown in a FERTILPOT, the roots quickly penetrate the pot walls. Contact with the air stops the roots from elongating, root buds start to appear and secondary roots start to develop throughout the pot. This phenomenon is known as "aerial root pruning".

The advantages of this are two fold; one of interest to the user of the FERTILPOT (1) and the other to the user of the plant grown in the FERTILPOT (2).

1 – The volume of the pot is used 100% by a dense network of root hairs. In containers with impermeable walls, a few very long roots use all the area around the pot. This difference in quality of the root system is the main explanation for the marked difference in development between two identical plants grown in a FERTILPOT and a plastic pot, using the same pot size.

2 – When a plant grown in a FERTILPOT is planted or repotted (without removing the pot), the dormant root buds set during aerial containment are immediately activated. There is no shock from transplanting. This difference is particularly marked when ground conditions are difficult (cold, drought, adverse season, etc.). Finally, as there is no deformation in the root system, the plant establishes easily and settles into the soil quickly.

The FERTILPOT is easily biodegradable and transforms into organic matter.

The speed at which it degrades depends on different parameters, primarily linked with the intensity of microbial activity. With spring planting in a temperate climate, only a few fragments of the wall will still be visible after a few months.

Comparison
root development



Automatic destacking
with FERTILPOT



▲ Gladiolus



▲ Pelargonium



▲ Dahlia



▲ Parsley



▲ Rose

Manufacturing process

COMPOSITION

The FERTILPOT is made up of four fifths wood fibre and one fifth light peat. Apart from a very small percentage of crushed limestone, there are no other added ingredients, either as raw materials or during manufacture.

The FERTILPOT does not contain any technological additives, chemical product residues or printing inks, this is a 100% organic product.

The wood is obtained strictly from thinning out, and has very specific characteristics. Additionally, the peat is not obtained from ecologically sensitive areas.

PROCESS

The wood is heat treated to destroy any phytotoxic compounds. Then a pulp is obtained through a mechanical process, which is conveyed to the moulding machine to form pots. To obtain sterile pots, they go through a dryer. The entire process is very environmentally friendly.

QUALITY CHECKS

A large number of checks are carried out from receipt of the raw materials throughout the manufacturing process of the FERTILPOT. All measurements taken are logged in a database, and can then be retrieved from the manufacturing code printed on the packaging on the finished product.

For the user, the most important characteristics are its permeability to water and its mechanical strength. This is very much reflected in the plant growth qualities of the FERTILPOT.

Two simple tests can be carried out to see just how much better the FERTILPOT performs:

For the first test, fill the pot with water and measure the time it takes to seep through the pot walls. The pot empties quickly. This is the reason why the FERTILPOT does not require drainage holes on its sides.

For the second test, crush the pot by hand – it should spring back into shape and remain intact. This suppleness prevents any breakage when the plant is repotted, and is a gauge of the pot strength while the plant is growing.

Advantages of Fertilpot

HORTICULTURAL ADVANTAGES

- No root deformation (coiling, knotting, folding, girdling, spiraling)
- Very dense and active root hair development
- Ability to transplant without waiting for roots to fully develop
- Improved plant establishment speed and quality
- High strike rate with little loss of seedlings
- Extended planting season
- No transplant shock
- More "even" batches

ECONOMIC ADVANTAGES

- Accelerated plant growth
- Smaller pot size required – less potting mix
- Less space required for cultivation
- Faster repotting and/or planting (no need to remove pot/bag)

- Compatible with automated systems
- Extended planting season
- No time wasted collecting plastic pots/bags
- No cost of recycling

ECOLOGICAL ADVANTAGES

- 100% biodegradable, organic product
- Transformation into humus which improves soil fertility
- Manufactured from renewable raw materials
- No plastic waste to litter / collect / dispose of

100% ORGANIC & BIODEGRADABLE
Permitted for use within organic farming systems

Tomato ▶



◀ Escallonia

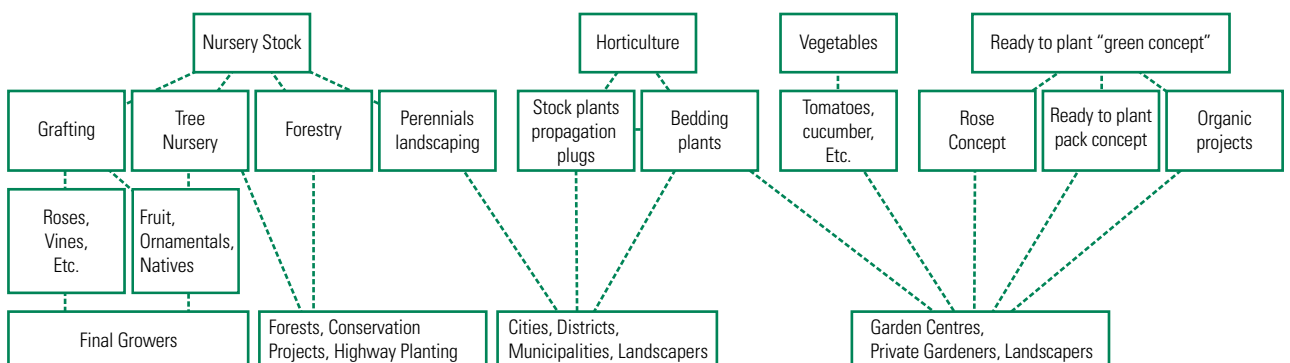
The root system,
2 months after planting out ▼



No pile of plastic waste like this ▼



Several practical applications of Fertilpot



No plastic waste to dispose of, or used pots to clean

Examples of productions in Fertipot

FERTIPOT FOR THE VINEYARD

The FERTIPOT is used for 10% of the benchgrafted planting in France, and is also widely used in other quality wine producing countries (Germany, Spain, Italy, U.S. etc.).



With this technique, a plant can be raised in 2 to 3 months against 15 by the conventional method:

- a 100% rate of take;
- a better establishment = higher longevity of the vine plant;
- possibility of spacing the timing of planting

Companion Product

FERTISS ready-to-use propagation plugs

FERTISS are ready-to-use plugs for the propagation of young plants raised from cuttings, seed or for weaning micro-propagated material.

FERTISS is a clean, natural compost product made of fine sphagnum peat, Perlite and Vermiculite, wrapped in a non-woven mesh that is quickly and easily penetrated by roots.

Because of its excellent rooting speed and close to 100% strike rate, **FERTISS** is the number one choice of growers in many countries, from individual growers to large specialist propagators rooting millions of plugs each season.



FERTISS is used for many diverse crops including tender perennials, hardy nursery stock, herbaceous perennials, and is well suited to weaning micro-propagated plants, hops, pharmaceutical crops and many more.

The shape and consistent texture of FERTISS plugs speeds sowing and helps make potting easy. As soon as the roots appear plants can be easily handled, graded and potted. The speed of rooting allows more batches to be propagated in the same area reducing unit costs considerably, making optimum use of heated beds, skilled staff and water.

FERTISS has earned its reputation as a top quality product. See further reasons why and size options on our web site: www.biogrow.co.nz

FERTISS propagation plugs are available in an unrivalled range of plug sizes and tray configurations. The trays and plugs are designed to complement each other, with excellent air circulation in the trays.

FERTIPOT IN THE ROSE-GARDEN

The use of FERTIPOT for growing roses is an innovative technique that is finding favour both in Germany, Holland, France, Kenya, Egypt and USA...

- Pots for the propagation of grafted roses for cut flower production = less handling, no transplant shock, earlier production;
- Ideal for growing rose bushes for sales in garden centers;
- Rose bushes in their FERTIPOT are planted into the garden without taking them out of the FERTIPOT.



A range to suit all needs

FERTIL cultivation pots are available in a wide range of individual sizes (round and square), as well as in multiple configurations including strips, and trays.



The full ranges are detailed in our product specification sheet, which is also available on our web site: www.biogrow.co.nz

Discuss your needs with us. We will be happy to work out the ideal solution for your requirements, supply trial products for you to test and offer further technical advice and assistance to help make FERTILPOTS and FERTISS Plugs work for you.

You may order products by contacting our sales office, or by registering to become an on-line customer.

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