

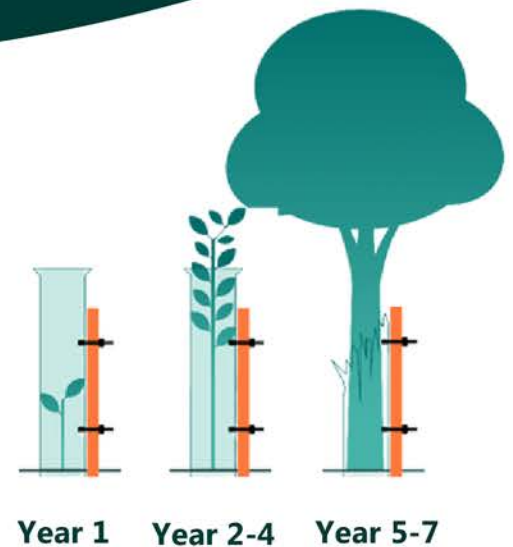
VIGILIS BIO

PLASTIC FREE • SOIL BIODEGRADABLE • HEALTHY TREES

DATA SHEET

- Vigilis Tree Shelters: Manufacturer of plastic free, soil biodegradable tree shelters
- Bio-based materials: Derived from wood, potatoes and corn
- Laboratory tested (conditions mimicking 5 years of weathering)
- Largest UK field-based trials for biodegradable tree shelters
- Performs like a traditional tree shelter, you just don't need to collect it. It will biodegrade in the soil
- No industrial composting required

www.vigilistreesshelters.com



Manufacturer of Plastic Free,
Soil Biodegradable Tree Shelters



To place an order or find out more, please contact: oliver.beech@vigilistreesshelters.com

SPECIFICATION

Materials	Unique blend of bio-based derivatives (potatoes, wood and corn) and a custom biodegradable polymer. The formula has been specially developed by Biome Bioplastics. No microplastics, no toxic residues
Construction	Twin walled tube with a laser line to prevent strangulation and allow the shelter to split as the tree grows
Lifespan	UV stabilised to provide a minimum of 5 years of growing protection and up to 2 years of true biodegradation. Exact timeframe dependant on site conditions
Height	4 sizes as standard (0.6m, 0.75m, 1.2m, 1.5m)
Diameter	76mm - 110mm
Rim	Flared upper rim to minimise bark abrasion
Fastenings	Pre-fitted with releasable cable ties
Colour	Light brown colour to allow sufficient light transmission - a process called photomorphogenesis
Nests	Nests of 5
Biodegradation	No need to break up the tree shelter or bury it in the ground. Designed to 'age' in weather conditions and begin to fragment. Breaks down into flakes which provide a food source for soil microorganisms
After Biodegradation	Organisms feed on the tree shelter flakes and all that remains after this process is Biomass, Water & Minerals

We have designed and manufactured Vigilis-Bio Tree Shelters with one aim in mind: To create plastic-free and soil-biodegradable tree shelters with all the functional benefits of traditional tree shelters.

Vigilis-Bio Tree Shelters are made from a special blend of bio-based derivatives (potatoes, wood and corn) and a custom biodegradable polymer. This plastic-free combination has been chosen to provide the necessary functional performance (minimum of 5 years of tree protection).

Following this, it may take a further 2 years for the shelter to be fully absorbed and incorporated into the natural environment. All that remains after this period is biomass, water and minerals that feed soil bacteria and microbes.



FROM LAB TO FOREST



Vigilis-Bio UK Site Trials

- Over 70 field trials across the UK with 40,000 shelters
- Measurements and observations are taken onsite to monitor the condition of the tree shelter and the health of the tree
- Samples are sent for strength, flexibility, and degradation testing
- Tested at exposed sites with high levels of wind and rain, partially-shaded sites and sites with high browsing pressure
- Vigilis-Bio does not require industrial composting conditions to biodegrade
- A further 35,000 Vigilis-Bio shelters across the USA and Europe
- Vigilis-Bio tree shelters are performing on par with traditional tree shelters
- Third-party Accreditation
- Ecotoxicity test: EN 13432 (2000) - PASSED
- Material under testing for soil biodegradability, ISO 17556
- Data has allowed accredited OWS Letter of Opinion with expectations of a pass



LETTER OF OPINION

Biodegradability in soil of BiomeSoil resin

Installation

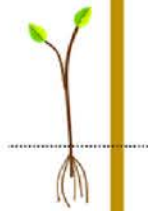
Step 1: Plant

Prepare the site, dig cavity, and plant bare root or cell grown sapling.



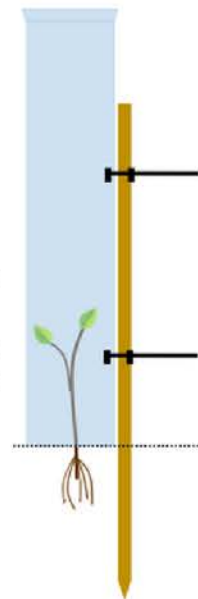
Step 2: Support

On windward side, hammer tree stake into the ground, 3-7cm from the sapling.



Step 3: Protect

Position shelter over sapling, slide cable tie(s) over the tree stake, gently push into ground.



Step 4: Secure

Tighten releasable cable ties and utilise second loop to complete.

