SCION
FORESTS ■ PRODUCTS ■ INNOVATION

Biodegradation and compostability testing

The facility allows accurate assessment of biodegradation in a range of environments including compost, soil, water and marine.

Biodegradation

Biodegradable products can be broken down by naturally occurring microbes like bacteria, fungi, and algae. No additives are needed and the end products are water, carbon dioxide and/or methane, and biomass. No fragments remain in the environment.

The biodegradation facility

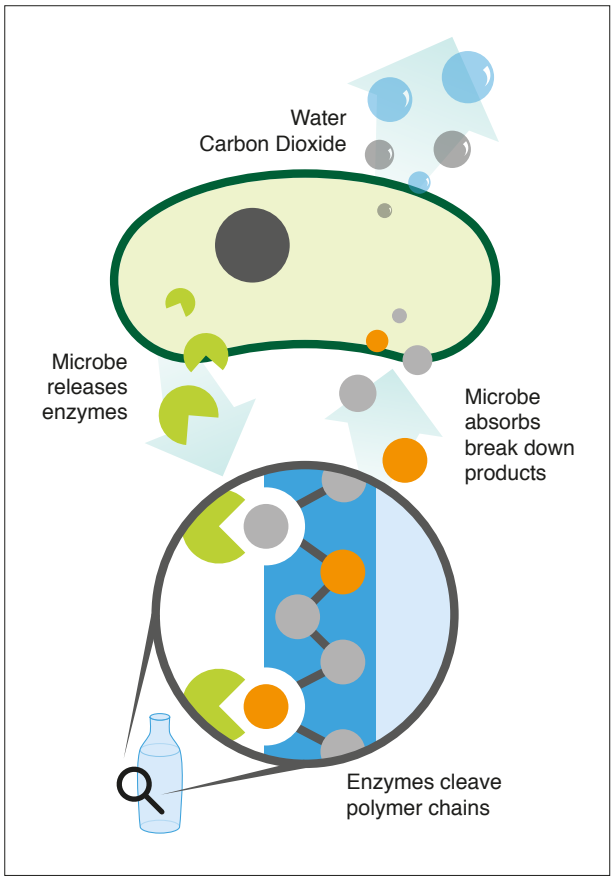
Scion's biodegradation facility is designed to measure how materials biodegrade in an aerobic environment.

Samples are tested under controlled temperature, moisture and airflow conditions that can be varied to meet individual test standards.

The material can be tested in a range of environments (e.g. compost, soil, water, marine) and for any period of time.

Carbon dioxide is released as materials biodegrade in aerobic conditions. The quantity of CO_2 produced by the microbes is used to determine how much of the material has biodegraded at any time. The facility is designed to accurately measure the cumulative CO_2 created as the material biodegrades.

Knowing the original carbon content of the material, the biodegradation percentage can be calculated by comparing the starting carbon to the cumulative CO_2 and to a control material.



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About Scion

Scion is the Crown research institute that specialises in research, science and technology development for forestry, wood and wood-derived materials, and other bio-material sectors.

Scion's purpose is to create economic value across the entire forestry value chain, and contribute to beneficial environmental and social outcomes for New Zealand.

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Prosperity from trees *Mai i te ngahere oranga*

February 2019