

BIOCHEM show case

Obtain sweet gale oil in a sustainable way

Problem

Bog myrtle is a plant that grows in north and west parts of Europe. It has been used since Vikings times for its insect repellent properties. Also known as sweet gale, the essential oil obtained from the plant was shown to have deodorant, antioxidant (more effective than tea tree oil) and skin protection properties.

Boots, a UK personal care company sought to use it as a natural ingredient in their Botanics range to treat sensitive skin and acne.

Technical solution

A process for extraction of sweet gale oil from bog myrtle was developed that used mobile units in plantations in the Scottish Highlands. These old crofter communities are being regenerated by the opportunity with the primary processing taking place in the field. The top 10cm of the plant is clipped and the oil extracted by distillation with water. The use of sweet gale oil in a range of products, including anti-aging creams, is expected to lead to this becoming a 50m industry.



Benefits

- Distillation unit recycles its water
- Localised processing minimised transport and energy impacts
- Waste material composted
- Encourages mixed agricultural economy and supports community
- Harvesting method encourages bushy growth which provides cover for wildlife

Additional information

Boots

Website

http://www.boots-uk.com/Corporate_Social_Responsibility.aspx