



Tackling Europe's food waste problem: Using potato waste to develop novel agricultural films and pots

In Europe alone, the harvesting and processing of potatoes creates three million tonnes of skins, 800 kilo tonnes of pulp and four million cubic metres of potato juice each year. The residues and by-products can be used to develop innovative bio-based products.

The project has built a flexible, multi-feedstock pilot plant in the North of Spain to develop the following products from potato wastes and by-products:

- Biodegradable and compostable plant pots (combining potato fibre and bioplastic).
- Biodegradable agricultural mulching films.
- Proteins for use as a food ingredient and edible coatings.
- Bioactive compounds for use in active packaging and edible coatings.
- Microfibrillated cellulose fibres - barrier coatings for food packaging.

Get in touch:

For further information, visit www.agrimax-project.eu



An innovative approach

- 33-53% of potato (pulp and peel) will be valorised.
- Capacity to process at least 500 litres of potato by-products per hour.
- Residues can be broken down using ultrasound.
- Proteins are extracted from potato juice by a series of solid-liquid separation steps.
- The same equipment and processes can be used to create a range of biobased products from multiple feedstocks.
- Online stakeholder platform coordinates the provision of potato wastes and by-products from regional producers to ensure that the pilot plant runs throughout the year, maximising efficiency.

Creating environmental, societal and economic impacts

- Value is created from waste, reducing waste disposal costs and waste going to landfill.
- The impacts of the products and their production are assessed via; life cycle analysis, techno-economical assessment and a societal and ethical analysis.
- Biodegradable and compostable materials improve sustainability.
- Opening new markets and building demand for sustainable biobased products.

