





Tackling Europe's food waste problem: Using cereal waste to develop novel products for the food, packaging and agricultural sector

Cereals are the most widely cultivated crops, however, 35% of the crops is lost or wasted at the farm and food-processing level. To address this problem, Agrimax has developed a range of biobased products from cereal residues and by-products.

- Microfibrillated cellulose fibres - barrier coatings for the food packaging sector.
- Thickening agent and natural additives from oat husk for the food sector.
- Biopolymers and mycelium-based materials for agricultural and packaging sector. 
- Ferulic acid, phenolic compounds and fibres from wheat bran for the packaging sector and/or food ingredients.
- The project has built two flexible, multi-feedstock pilot plants in the North of Italy and South of Spain for developing their production at scale. 

Get in touch:

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



An innovative approach

- 50-100% of cereal residues at the pilot plant are valorised.
- Capacity to process: wheat cereal up to 30kg per batch and oat cereal 15 kg/h per batch.
- Residues are pre-treated using ultrasound or heat, then extracted using a range of enzymes and/or chemical reactions.
- The same equipment and processes can be used to create a range of biobased products from multiple feedstocks.
- An online stakeholder platform coordinates the provision of waste from regional producers to ensure that the pilot plant runs throughout the year, maximising efficiency.

Creating environmental, societal and economic impacts

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

