Produce your homemade biodegradable and edible packaging films

Ulisses

UNIVERSITY OF LISBON
INTERDISCIPLINARY STUDIES
ON SUSTAINABLE ENVIRONMENT AND SEAS

Vítor Alves
Assistant Professor
Instituto Superior de Agronomia
Universidade de Lisboa
email: vitoralves@isa.ulisboa.pt

www.ulisses.ulisboa.pt

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Comissão Europeia

Production of biodegradable/edible films

Food grade polysaccharides and proteins may be used to produce

biodegradable and edible films for food packaging

<u>Food grade polysaccharides and proteins such as:</u>

Alginate, chitosan, pectin, carrageenan, gellan, whey protein, gelatin, etc

Gelatin films

Production of biodegradable/edible films

However:

Such food grade polysaccharides and proteins are not thermoplastic

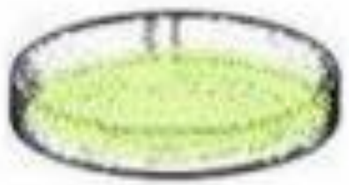
So, they are not processable by extrusion.

Films from those polymers are produced by another method:

The Solution Casting method

Solution Casting method

1. Preparation of the filmogenic solution



2. Transfer to a flat support

3. Drying to water evaporation

4. Solid film

Homemade Biodegradable and edible Gelatin films

Materials:

Tap water - 400 g

Food grade gelatin (without or with colour) – 10 g

Food or medicinal grade Glycerin (glycerol) – 2.5 g

Methodology:

Watch the following video:

https://www.youtube.com/watch?v=sTYW6zebOOk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