Process for the production of biodegradable plastic material from cellulosic vegetable waste

The invention relates to a method for the production of biodegradable plastic material, obtained from vegetable waste materials, comprising the operations of:

- Dissolution with tri-fluoroacetic acid of a powder at least partially dehydrated of said vegetable waste material, in order to bring in solution a cellulosic fraction of said material;
- Removal of the tri-fluoroacetic acid solvent.

At the aforementioned solution of vegetable waste in tri-fluoroacetic acid could be added with additive like microcrystalline solutions of cellulose, biodegradable or biocompatible polymers or waste of fibers in tri-fluoroacetic acid. Films, leaves, shaped articles or fibers could be obtained with mold casting, extrusion or electro-spinning.

Bio-plastics, plastic industry

Recycling, plant-waste, parsley, spinach, cacao, cereals, essential oils, cellulose, vegetables