

## Method of making a sorbent, the sorbent obtained by this method and the uses of the sorbent as feed additive and medicine

### Description

The European Communities have the exclusive rights on a technology developed by the Stepanov institute of Belarus. This invention relates to the fields of biotechnology, microbiology and ecology and is used for sorption of various eco- and endo- toxicants. In particular, the sorbent can be used in veterinary medicine as a treatment and prophylaxis mean.

The method consists in a particular physico-chemical treatment of seed husks of black sunflowers, a common industrial waste in Europe. The surface of the enterosorbent obtained by this physico-chemical treatment can be modified by adsorption of metallic ions or by microbial biomass of probiotic bacteria, like for example *Bacillus Subtilius*, *Lactobacillus*, or *Bifidobacterium*.

The sorbent can be used for prophylaxis and treatment of toxicoses, free-radical pathologies, diarrhea syndromes which are caused by ecotoxicants, for viral and bacterial infections, for prophylactic and treatment of animal diseases caused by mycotoxins, pesticides, bad-quality forages (with high peroxide index) for all kinds of animals. The innovative sorbent can also be used for the treatment of infections caused by bacteria *Salmonella enteridis*, *Escherichia coli*, *Clostridium perfringens*, viruses of the Newcastle disease, infectious bronchitis and infectious laryngotracheitis. Alternatively, the sorbent can be administered simply as a fibre additive in feed to obtain a cleaner and healthier livestock. Potential applications for human prophylaxy or medication are currently investigated.

### Innovative aspects and main advantages

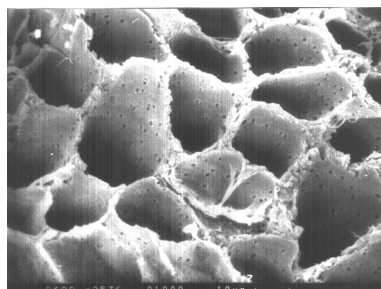
- Fibre additive for food and feed
- Prophylactic mean
- Simple production process
- Medicine
- Recycling of industrial waste

### Areas of application

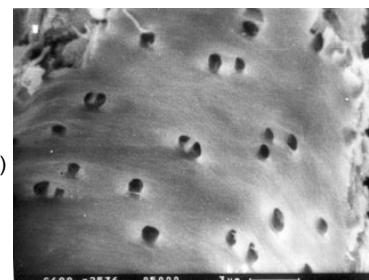
- Natural feed additives
- Supplement feed and single feed
- Veterinary medicines
- Care and hygiene product
- Potential use in human medicine and prophylaxy

### Stages of development

Patent Priority date 11/07/2006  
Patent pending PCT/BY2007/000001  
Argentina P070103072  
Belarus A20060716 & A 20060837



Sorbent surface morphology (1000x)



Sorbent surface morphology (5000x)

### Licensing contact

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