

Cottonseed cake

Detoxification process of cottonseed cake



Photo: Apolo Salvador



Embrapa
Agroenergy

Detoxification process of cottonseed cake

Raw material

Process

End product

Cottonseed cake

Detoxification by
macrofungi

Detoxified substrate

Degradation process of antinutritional or toxic compounds (gossypol and phytate) present in cottonseed cake by cultivation of macrofungi, with formation of bioactive metabolites (polysaccharides, proteins, sterols, carotenoids, among others) in the pretreated biomass.

Applications

- + Animal nutrition (monogastric and polygastric).

Advantages

- + Increased digestibility and metabolizable energy of the feedstock through partial delignification and depolymerization of biomass.
- + Alternative treatment of oilseed cakes with restricted use due to toxic factors in animal nutrition.
- + Bioenrichment of cottonseed cake with incorporation of bioactive microbial metabolites.
- + Reuse of residues.

Stage ► TRL/MRL 4 - Lab scale

Take this
technology
to another
stage



Research
with us
for other
potential
uses



Make this
technology
the basis
of your
incubated
company

Person in charge: **FÉLIX GONÇALVES DE SIQUEIRA**