

# Cottonseed cake

## Detoxification process of cottonseed cake



Photo: Apolo Salvador



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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**