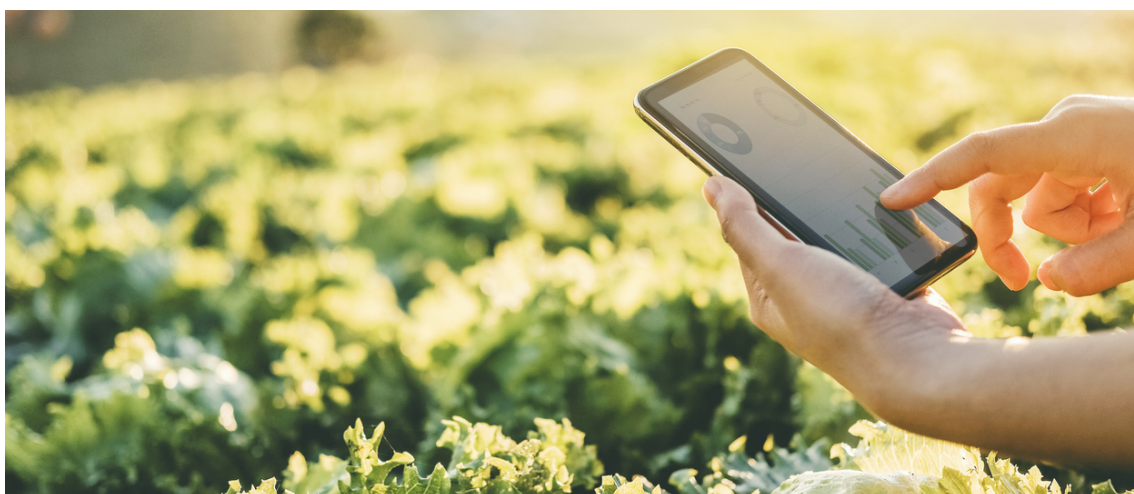




## Bio-inputs application helps farmers to control pests and diseases



Farmers can now consult on their cell phones a list of biobased products indicated for nutrition, pest and disease control of several crops. The Bio-inputs application puts in the palm of your hand a catalog with 580 biobased products available in Brazil, designed to fighting more than 100 pests and weeds and to increase nutrient absorption, boosting growth of a variety of plants.

From this total, 265 are biopesticides, including bioacaricides, bioinsecticides, biofungicides and ant control agents. The other 315 items are inoculants, a bio-input that contains microorganisms beneficial for plant development. All products are registered with the Ministry of Agriculture, Livestock and Food Supply (MAPA).

This application is one of the actions from the National Bio-input Program launched by MAPA on May 27th. The idea is to consolidate a national catalog for biobased agricultural inputs, granting free, easy and fast access to a wide knowledge base for use in farming, in storage and processing of agricultural products.

Making this register available for the public will help connect supply and demand, supporting at the same time industry and farmers. "Many times people want to use bio-inputs, but they don't know how to find them," explains biologist Mariane Carvalho Vidal, coordinator of the ministry's Bio-input Program.

# Bioinsumos



It is necessary to ensure quality for these products, checking all stages of the process. That means, tracking from manufacturing to field application, so that they arrive properly in the field and are effective, affirms Mariane. For this reason, the catalog promotes use of bio-inputs, bringing indications from manufacturers; product label; registration number at MAPA, among other information related to pest control and inoculants. To give you an idea, in the case of "sugarcane borer", this app offers indication of 39 biobased products, considered control agents for this pest, which is a moth and causes great losses in sugarcane farming.

## Handy

The application allows fast and easy search for information in the database. "The tool is useful, especially for farmers and rural extension services who want to use more sustainable products in their crops, which is a huge trend today, both in organic farming and conventional production systems", says the agronomist and researcher at Embrapa Agriculture Informatics, Gustavo Costa Rodrigues.

Developed in partnership with Embrapa Agriculture Informatics, this app is available for mobile devices using Android and iOS operating systems. The application features two classes of bio-inputs: inoculants and pest-control, which includes insects, fungi and weeds. "With the implementation of the Program, we expect to expand this set of information", says Mariane.

Bio-inputs include seeds, fertilizers, products for plant and animal nutrition, biopesticides made from micro-organisms for pest control, herbal products or technologies that have biological agents in their composition. Inoculants are products, processes or technologies that contain microorganisms applied to stimulate plant development.

The app brings updated information up to April 2020, extracted from MAPA's databases. This information was organized, standardized, processed and integrated to facilitate consultations. Contents from technical-scientific literature on biological control were also added, which were available from the Agricultural Research Databases ( BDPA ), at Embrapa Agency for Technological Information ( Ageitec ) and Embrapa Production Systems ( SPO ).

"These are reliable information, validated by Embrapa", emphasizes the development analyst at Embrapa Agricultural Informatics Isaque Vacari. According to him, new features are already foreseen, adding other classes of products in future versions. And it is possible to develop new versions for the app, whenever there are updates on new bio-inputs registered at MAPA's database.

# Bioinsumos



## Functionality

The main feature of this application is to bring information to farmers on two subjects. The "Biobased Products" module focuses pest control, such as insects, fungi and weeds, showing an alphabetical list in which pest names are described, both scientific and common names, as they are popularly known. Numbers and classes of products are also indicated for each pest: microbiological acaricide, biobased control agent, microbiological bactericide, ant control agent, fungicide and microbiological ant control agent.

Each pest has a profile record with a brief description, in addition to photographs, to facilitate identification by farmers. The app also brings a record of each product indicated for control, specifying brand, manufacturer, registration number by MAPA and for which pests it is recommended. It is also possible to see product specification and even to know in which crops they were tested, consulting labels for each one of them. In addition, it is possible to download the label, or package leaflet, on your mobile as well as share it by message, e-mail or Bluetooth.

In the inoculants module, there are images of different crops, such as lettuce, peanuts, potatoes, beans and rice, for example. For each of them, there is a form indicating the number of products tested in these cultures available in the app; supplier's name and CNPJ; type of fertilizer; species; guarantee and finally its physical nature, that is, solid or liquid. For instance, in the case of beans, there are 51 available products suitable for the crop.

## How to access:

Access the Bio-inputs app here:

- For Android
- For IOS

See all apps developed by Embrapa here

Nadir Rodrigues (MTb/SP 26.948)  
Embrapa Agriculture Informatics  
Press contacts:  
informatica-agropecuaria.imprensa@embrapa.br  
Telephone: +55 19 3211 5747