FERTINAGRO BIOTECH will turn European manures into sustainable fertilizers

The poor management of slurry or manure derived from livestock activity, the difficulty in handling and transport, and the high concentration of farms in regions without sufficient land nearby to take advantage of such slurry as mineral fertilizer, causes the emission of greenhouse gases and the contamination of both soils and surface and groundwater.

The plant nutrition company of the Térvalis Group, Fertinagro Biotech, has been working for years to tackle this great environmental problem, mitigate climate change and provide, in turn, an advantageous solution for the performance of livestock and agricultural activity. As a result of this work, Fertinagro Biotech has just been selected by the European Union (EU) within the Fertimanure project to implement its slurry treatment technology, as well as to advise and complement the formulation of fertilizers from other technologies treatment of cattle droppings that will be developed in the project. Within the Fertimanure project, Fertinagro Biotech has been the only EU company with solutions in the market that has achieved it.

> This project is aimed at obtaining a balanced and sustainable fertilizer with a process that encourages a rational use of water and that will allow the registration of livestock activities as fertilizer. This may also be marketed as a sustainable plant nutrient in the market.

It has been achieved thanks to the slurry treatment technology developed and patented by the R&D department of Fertinagro Biotech, as well as for all the company's know-how in the optimization of crop fertilization. The treatment facilities will be located in the same place where livestock waste is generated so that the farmer or farmer can extract a fertilizer from their own raw material, as suitable for self-consumption as for sale.

Fertimanure Project: benefits for agriculture, livestock and the environment

This solution will save large amounts of CO2 emissions into the atmosphere. According to their reports, the partial replacement of mineral fertilizers will achieve an estimated reduction of 12,290 equivalent tons of carbon dioxide per year in the long term. The European Commission has approved to allocate 8.5 million euros to this new project, of which half a million euros correspond to Fertinagro Biotech to carry out the research that will last 4 years.

In addition to the environmental advantages, Fertinagro Biotech's technologies and know-how allow us to revert very important solutions to society, as farmers and ranchers will be able to manage the manures they generate directly at their facilities. The transformation of slurry into fertilizer will be carried out on their own farms and will be based on the needs of the ideal crops for the farmer, so the result will be a custom fertilizer.

The slurries will be transformed into the best possible fertilizer adapted to the needs of each specific area, type of crop, climatic conditions and environment. This also broadens the spectrum of crops that can be applied and corrects the problem of the moment of application of the nutrient to the crop.

Farmers and farmers can, with this system, generate wealth, since the fertilizer transformed into their own spaces can be marketed as fertilizer. Therefore, it is a solution that cuts pollution, with a zero kilometer and highly beneficial for livestock and agriculture professionals.

Traditionally the recovery of nutrients from a manure or slurry does not compensate for its high cost or because the resulting product is not so rich. However, applying the technological processes of Fertinagro Biotech, as well as agronomic advice on use, quality products are obtained that avoid the need for fertilizer companies to buy, process and resell raw materials extracted from the slurry. In this way the process is much more economically and environmentally viable.

According to Ignasi Salaet, deputy director of R & D & I at Fertinagro “this project we are going to work on is an example of circular economy and sustainability for Europe. It also means great market opportunities. ” “The slurry,” he adds, “is a decompensated material that is applied extensively as a background nitrogen fertilizer, however, when the plant needs nitrogen, it has already disappeared, it has volatilized; that's why we had to find solutions. ”

Part of the project will also be carried out at the Fertinagro facilities in the province of Teruel using the slurry of the pig sector; they will take it carries out trials in stone fruit fields and, from Fertinagro Biotech, the five agents that generate the most livestock waste generated in Europe will be advised on what the raw materials resulting from their manures are lacking to determine the Integral and Sustainable Fertilization Plan more suitable for them.

This project, which has received funds from the Horizon 2020 program of the European Research

and Innovation Union under agreement No. 862849, is an example of circular economy and sustainability for Europe. In addition, it is an investigation aligned with Fertinagro's values since it applies the “Multi-actor Approach” (MAA); This means that it focuses on solving real problems faced by European farmers, developing new solutions that meet their needs and working closely with them.