

BIOFERTILIZERS IN BRAZIL

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1. Background information:

This report was prepared by IPNI Brazil. It is based on questions and answers for objectiveness. Much of the content in this report is based on information from companies working with biofertilizers in Brazil. IPNI Brazil does not endorse technical information on these products unless it is published or is our own research. In case of any doubt please do not hesitate to contact IPNI in Brazil.

2. Questions and answers:

Does the Brazilian legislation for fertilizer include information for biofertilizer?

Yes. These products are defined by the Brazilian legislation as containing active or organic agents, free of agrototoxic substances, which are able to act, directly or indirectly, upon part or the whole cultivated plant, as to increase yields, without considering its value as hormonal or stimulant. The last statement is to avoid confusion with the definition of products containing hormones or stimulants.

Has the use of biofertilizers been increasing in Brazil?

Yes. The main reason is the strong commercial appeal related to its benefits to soils and the environment as a whole, and also because it generally utilizes industry byproducts and/or residues. The use of biofertilizers has been duplicating yearly.

How much of these products have been actually utilized in Brazil?

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Around 60.000 to 70.000 tons yearly. So, still very low market.

What are the industries working with biofertilizers in Brazil?

They are: (1) Embrafós, (2) Instituto de Fosfato Biológico (IFB), (3) Biofosfatos do Brasil, and (4) Liderfós. Embrafós was the first (around 1995) and Liderfós is starting its activities this year with an initial prediction of 10.000 tons. Information to contact these companies is listed in item number three of this report.

Is there a company leader in this sector in Brazil?

Yes. IFB has been more effective in this sector. Headquarters are in Goiânia, Goiás, where they produce the microbiological cultures, which are then distributed all over the country. IFB has defined itself as a company for developing research aiming new products for plant nutrition. The company works in partnership with several other companies in Brazil. Its main product is named BioAtivo, which they postulate that solubilizes phosphate rock (PR) and also promotes nitrogen biological fixation. The product has a patent number PI-9401724-7 by the Instituto Nacional de Propriedade Intelectual (Brazilian Institute for Intellectual Property). According to the company, one of the main purposes in the process is to utilize urban swage sludge as raw material to produce the biofertilizers. Another company, Biofosfatos do Brasil, utilizes sugarcane filter cake (byproduct of ethanol and/or sugar production), mixed with PR, as the main raw material.

Which are the main crops utilizing these type of products?

Beans, maize, rice, sugarcane, soybean, eucalyptus, citrus, tomatoes, cotton, forage crops and carrots.

What do companies claim as advantages with these products?

(1) Lower soil acidification, (2) higher longevity for P bioavailability for commercial crops, (3) substitution of soluble P sources at same P rates, (4) better cost/benefit ratios, (5) more environmentally friendly.

Are there studies with the use of microorganisms aiming oxidation of elemental sulfur?

Yes. Prof. Marcio Lambais of ESALQ/USP is doing some studies related to this topic.

3. Companies, Institutions or Researchers dealing with biofertilizers in Brazil:

3.1. Companies:

3.1.1. EMBRAFÓS - Indústria e Comércio de Fertilizantes Ltda

Rua José Soares Garcia , 270 - Distrito Industrial II

CEP: 14781-150 - Barretos/SP

Phone/Fax.: (17) 3323-6201

<http://www.embrafos.com.br>

3.1.2. IFB – Instituto de Fosfato Biológico Ltda

Av. Gameleira, 3620 Qd.E

Parque Santa Maria - Goiânia-GO CEP : 74740-460

Phone/Fax: (62) 3273-7000

<http://www.ifb.agr.br>

3.1.3. Biofosfatos do Brasil Indústria e Comércio de Fertilizantes Organominerais Ltda

Estrada Municipal Armando Sanfelice (ARR 281) km 7,5

Caixa Postal 729 - Cep: 13.601-200 - Araras/SP

Phone: (19) 3551.6374 and 3551.6375

<http://www.biofosfatos.com.br>

Gilberto Tozatti: Sócio Diretor - tozatti@gconci.com.br

3.2. Institutions:

3.2.1. Universidade do Extremo Sul Catarinense (UNESC)

<http://www.unesc.net>

3.2.2. Universidade Federal de Goiás (UFG)

www.agro.ufg.br

3.2.3. Embrapa Arroz e Feijão

<http://www.cnpaf.embrapa.br>

3.2.4. ESALQ/USP

<http://www.esalq.usp.br>

3.3. Researchers:

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