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Passo Fundo - Brasil
Presentation Guidelines

1. Distribution of Agricultural Area by Crops
2. Use of Microorganisms in Brazilian Agriculture
3. Legal Framework
4. Selection and Recommendation of Inoculants
Distribution of Agricultural Area

Area, million ha

Soybean, Corn, Sugar cane, Bean, Wheat, Rice, Coffee, Cassava, Cotton, Others

2014, 2015
Use of Microorganisms in Brazilian Agriculture

Possibilities of Microorganism Applications in Crop Production

- Growth Plant Promoters
- Biocontrol agents
- Biofertilizers
Biocontrol agents

Soybean Lizard – *Anticarsia gemmatalis*

Control only with *Baculovirus* applications
Biocontrol agents

Sugarcane - spittlebug

Control with *Metarhizium anisopliae*
Biocontrol agents

Whitefly *Bemisia tabaci* – bean, cotton e tomate

Control with *Beauveria bassiana*
Rhizobia – Soybean and Bean

• The most common N input – > 22 million ha use rhizobia inoculation;
• Around 6.8 million ton of N mineral are saved each crop season;
• 5.3 billion Euro saved per year.
Inoculant Market in Brazil

ANPII

[Logos of various companies associated with the market]
Inoculant Market in Brazil

Number of Doses per Year

- Soybean peat
- Soybean liquid

Number of Doses per Year:
- 2009: 4,000,000
- 2010: 5,000,000
- 2011: 6,000,000
- 2012: 7,000,000
- 2013: 8,000,000
- 2014: 9,000,000
- 2015: 10,000,000
- 2016: 11,000,000
Inoculant Market in Brazil

Number of Doses per Year

- Bean Peat
- Bean Liquid
- Cowpea

Inoculant Market in Brazil

Number of Doses per Year

Number of Doses per Year

- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016

Poaceae

Others
Legal Framework

Brazilian Agriculture Ministry
Normative Instruction 13/2011

Specifications
Warranties
Registration
Packing
Labeling
Legal Framework

Brazilian Agriculture Ministry
Normative Instruction 13/2011

RELARE
Laboratory Networking of Recommendation, Standardization and Transfer of Microbial Inoculants for Agriculture
RELARE

- Performed by the Agriculture Ministry, inoculant producers, different public and private institutions with researches on microbial inoculants for agriculture.

- Meeting biannually for discussing, presenting results and recommending strains, warranty level, standard methodology etc.
Brazilian Register Process

Company
- Submits Ministry new mo’s or formulation products
- Contracts the research institution for agronomic efficiency test

Relare Meeting
- Presentation of results
- Decision about recommendation

Agriculture Ministry
- Evaluation of report about agronomic efficiency
- Decision about Register
Viele Danke

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