

Proud to be from  
**MATO GROSSO**



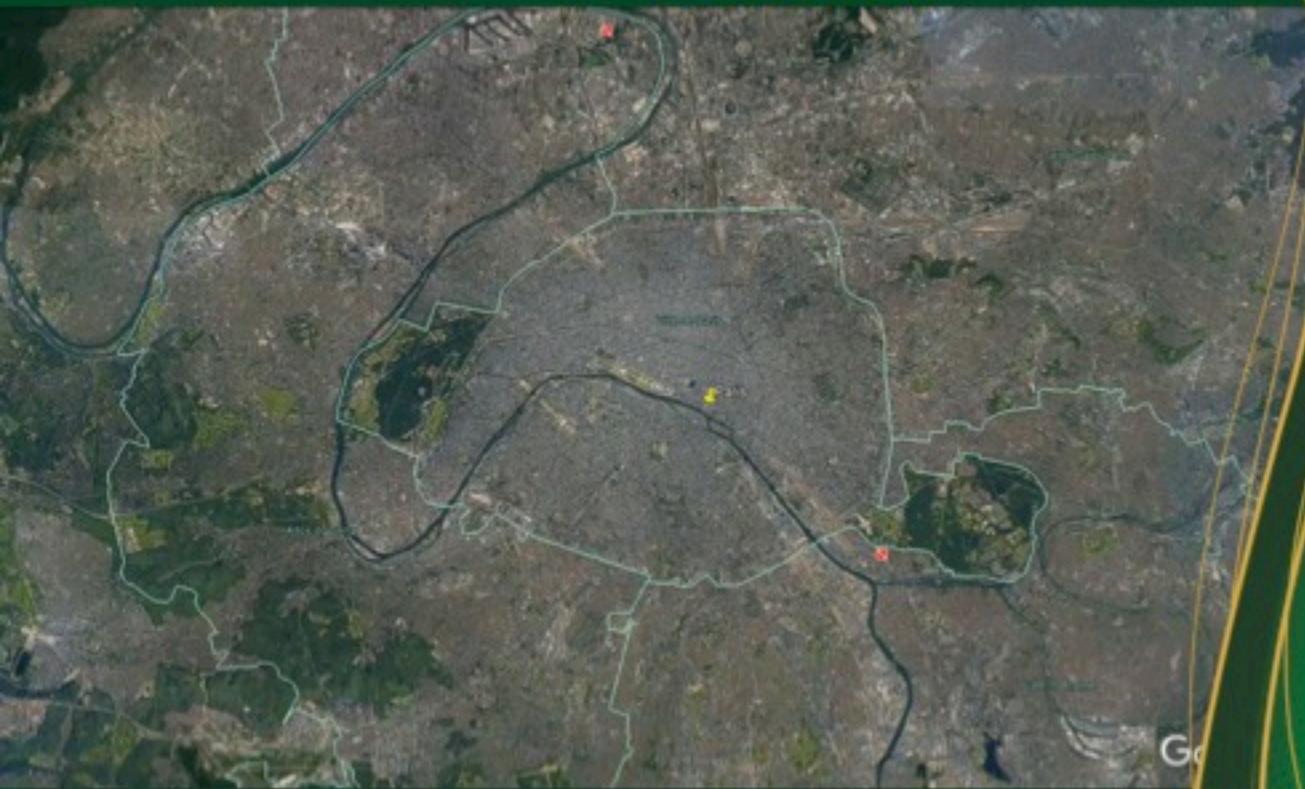
Mato Grosso Soybean and Corn  
Association

**Antonio Galvan**  
President



MATO GROSSO - Total area

**903<sup>,378.292</sup>**  
Km<sup>2</sup>



## PARIS – MATO GROSSO

- Cuiabá
- Sorriso
- Campo Novo dos Parecis
- Querência
- Campo Verde



We have more than  
**5.5 k**  
members

Spread over regional centres, in 35  
towns in Mato Grosso





We have more than  
**5.5 k**  
**members**

Spread over regional centres, in 35 towns in Mato Grosso

**83%** ARE SMALL TO MEDIUM SIZE



## How we work?

Assembly, Board  
And Comissions



We produce approximately 27% of the soybean and corn



Percentage, MT  
in Brazil



Percentage, MT  
in the world



MT x Brazilian percentages

1st CROP

2nd Crop



33%

(MT) World  
percentage



# Soybean and Corn Production in Mato Grosso



**17/18 Crop**  
**Soybean Production – Brazil**

35.1 m Ha - 119.3 m tonnes

**Soybean Production - MT**

9.5 m Ha – 32.5 m tonnes



**17/18 Crop**  
**Corn Production- Brazil**

16.6 m Ha - 80.8 m tonnes

**Corn Production - MT**

4.6 m Ha – 27.4 m  
tonnes



# **Soybean and Corn Production in Mato Grosso**



- Two crops in the same season – soy followed by corn or cotton and pasture;
- Scale, mechanization, technology, conservation;
- No irrigation.



We produce many other grains in the same area where soy is planted



**"NAME AND PROUD"**

**How do we make our  
farming the most  
sustainable in the  
world?**

**Soil Conservation**





**Soil Protection**

**No-till farming  
with straw**





**Research into  
diferente cover  
crops – crop  
rotation, soil  
decompression,  
increase in organic  
matter, hay, pest  
control**





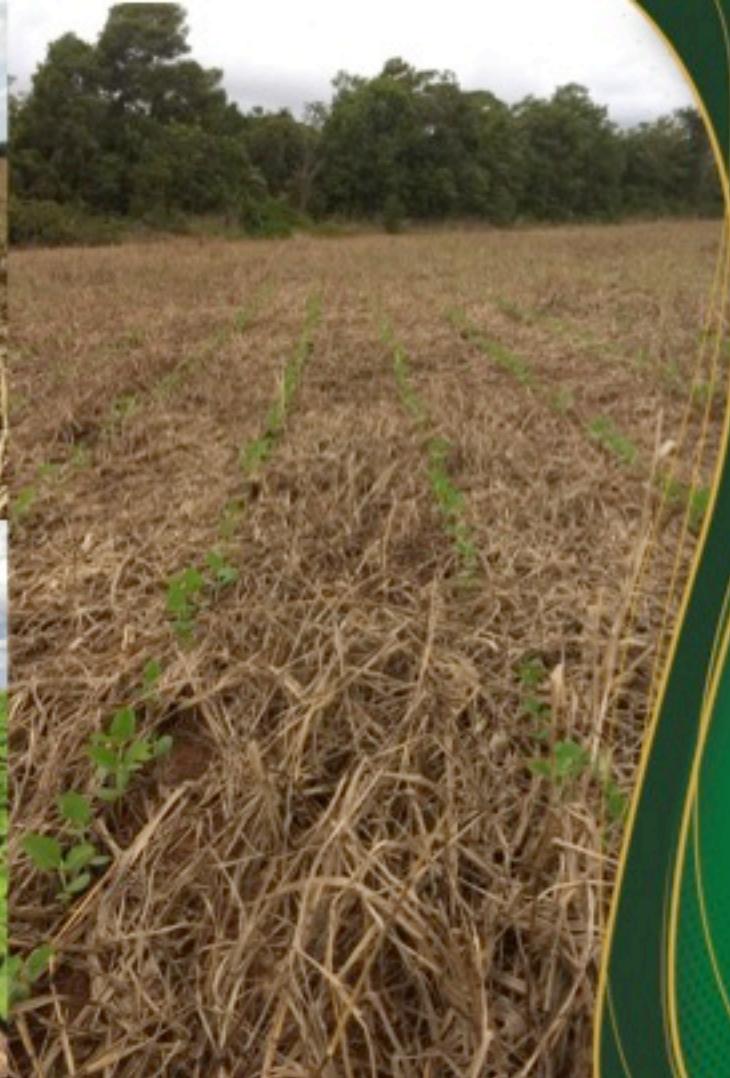
**A number of private companies, public organs and farmers are looking for the best options for cover crops - Also for nematode control**



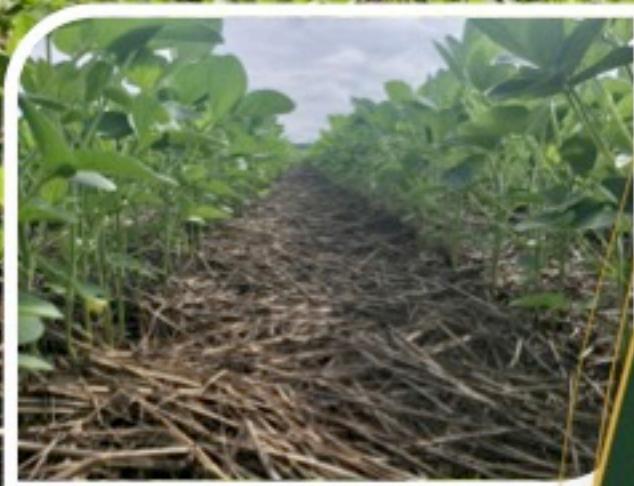


**PARTNERSHIPS  
WITH PUBLIC  
AND PRIVATE  
RESEARCH  
INSTITUTES**





- Soil Protection
- Nematode Control
- Straw cover formation
- Increase in Organic Matter
- Nutrient cycling
- Feed for cattle
- No-till planting in straw cover



**Soil protection**

**Water source  
protection!!!**

**No-till**



**Favouring local  
biodiversity –  
populational  
increases  
(abundance of  
food)**



**Second Crop  
(after soy) – in  
the same area,  
at the end of  
the rainy  
season - CORN**



**Second Crop  
(after soy) – in  
the same area,  
at the end of  
the rainy  
season -  
COTTON**

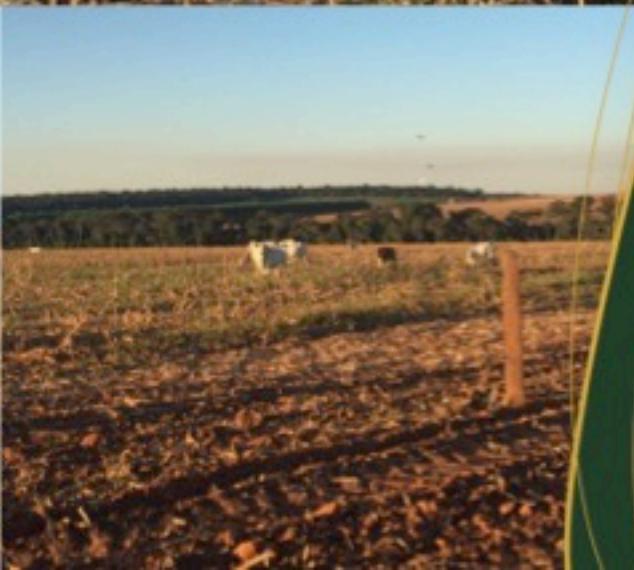


#### PROLONGIN THE SOIL PROTECTION PERIOD

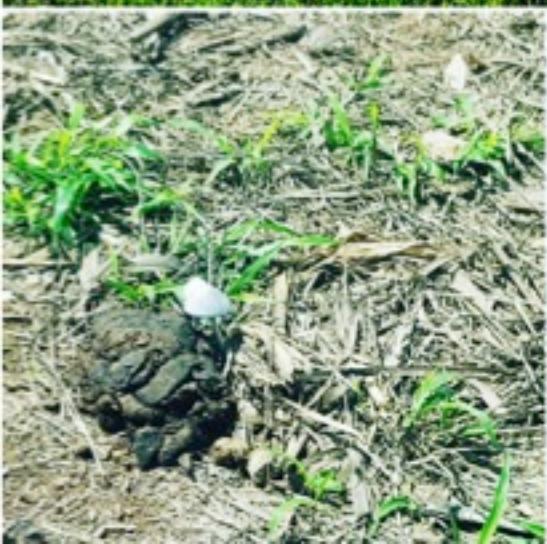
- Consortium with *Brachiária* spp
- Nematode control
- Straw cover formation
- Increase in level of organic matter
- Nutrient Cycling
- Feed for cattle
- No-till planting in straw cover



**At corn harvesting time, there is already a cover crop growing – Brachiaria spp**



**Brachiaria spp,  
which will be  
used as cattle  
feed**



**Brachiaria spp,  
which will be  
used as cattle  
feed**

**Even greater  
nutrient cycling  
and an increase  
in Organic  
Material in the  
soil**



You have seen  
part of this  
production  
sustainability!!!



**Brachiaria spp, in  
the area you  
visited at the  
beginning of the  
year**



**After grazing  
and the first  
rainfall – the soil  
is NEVER  
UNCOVERED –  
THERE IS NO  
EROSION**



Crop  
Livestock  
Integration



Crop  
Livestock  
Integration



# Recuperação de pastagens degradadas

Seminário de Sensibilização e Difusão do Programa ABC

Estado de Tocantins

Palmas, 27 de abril de 2010



Lourival Vilela



Crop  
Livestock  
Integration



Crop  
Livestock  
and Forest  
Integration





**FEED LOTS IN  
MATO GROSSO**

## APROSOJA RESEARCH CENTRE – CAMPO NOVO DO PARECIS, MT



## APROSOJA RESEARCH CENTRE – CAMPO NOVO DO PARECIS, MT





# Soybean Results

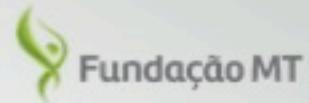
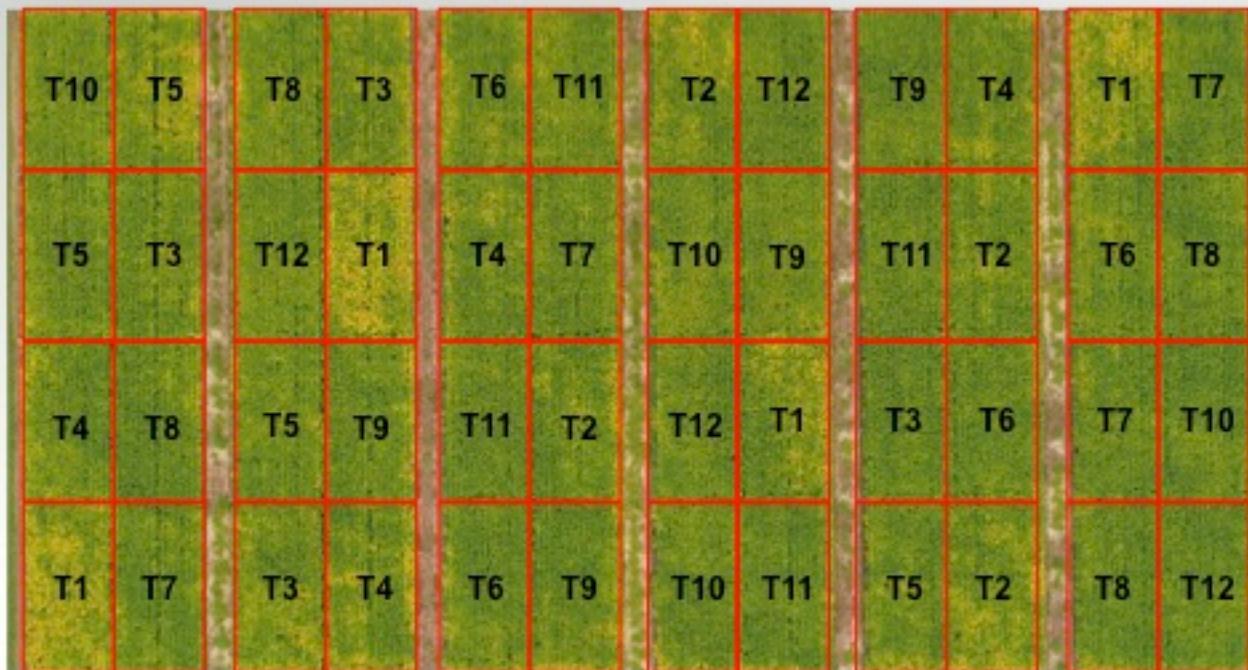
RESEARCH CENTRE- APROSOJA - CAD  
**2017/2018 Crop**

Campo Novo do Parecis- MT



# CAD PARECIS – RESEARCH results (SOYBEAN)

2017/2018 crop



# CAD PARECIS - RESEARCH results (CORN)

2017/2018 crop

Control



0,5 x DR



DR



2 x DR



4 x DR



0,5 x DR (annual)



DR (annual)



10 x DR





# APROSOJA RESEARCH CENTRE – CAMPO NOVO DO PARECIS, MT

## FIELD DAYS – MORE SENSITIVE AREAS – SANDY SOILS –

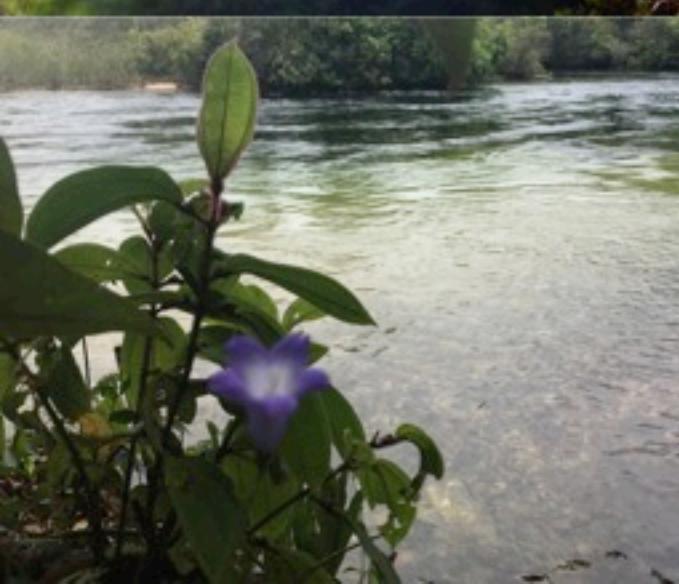




APROSOJA RESEARCH CENTRE – CAMPO NOVO DO PARECIS, MT

FIELD DAYS – MORE SENSITIVE AREAS – SANDY SOILS –





"NAME AND PROUD"

Rivers and lakes  
with pure,  
crystalline water  
– with NO SOLID  
OR CHEMICAL  
RESIDUES

SORRISO

### Rascantes (Onde)

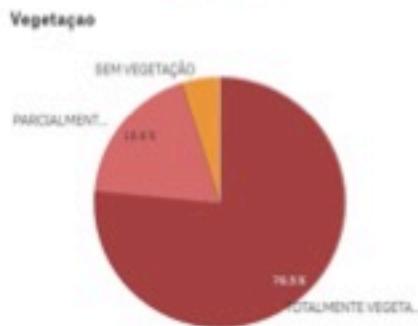
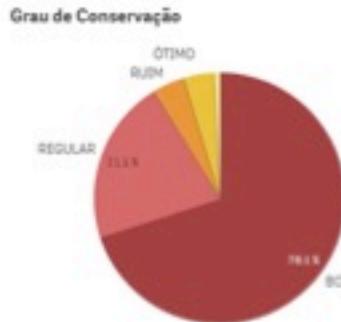
1426

### Ótimo/Bom/Regular (%)

95,09%

### Pyrimidopropazine (%)

4,91%





**In order to WIDEN  
OUR PRODUCTION  
SUSTAINABILITY  
(BEYOND THE  
PROTECTED  
NATURAL AREAS)**

**BIOLOGICAL PEST  
CONTROL**



*Bacillus thuringiensis* (for caterpillars)

*Bacillus subtilis*

(nematodes, leaf diseases, promotes growth)

*Bacillus amyloliquefaciens* (seed treatment against nematodes *Pratylenchus*)

*Bacillus pumilus* (leaf diseases)

*Azospirillum brasiliense* (grass N fixer)

*Bradyrhizobium japonicum* – soy nitrogen fixer

**BIOLOGICAL  
PEST CONTROL  
ON FARM**



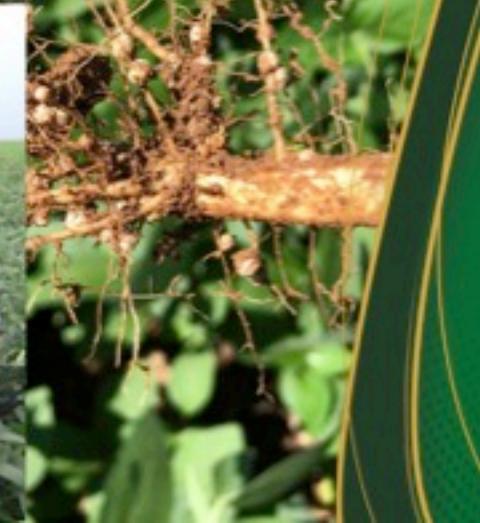


**DIRECT FARMER  
PARTICIPATION**

**PEST  
MONITORING**

**IDENTIFYING  
NATURAL  
ENEMIES**

**CONTINUOUS  
LEARNING**



 **Aprosoja**  
MATO GROSSO

To WIDEN OUR  
SUSTAINABILITY

THE MIRACLE OF  
BIOLOGICAL  
NITROGEN FIXING

# **Soy Nitrogen Fixing through symbiosis with Bradyrhizobium japonicum**

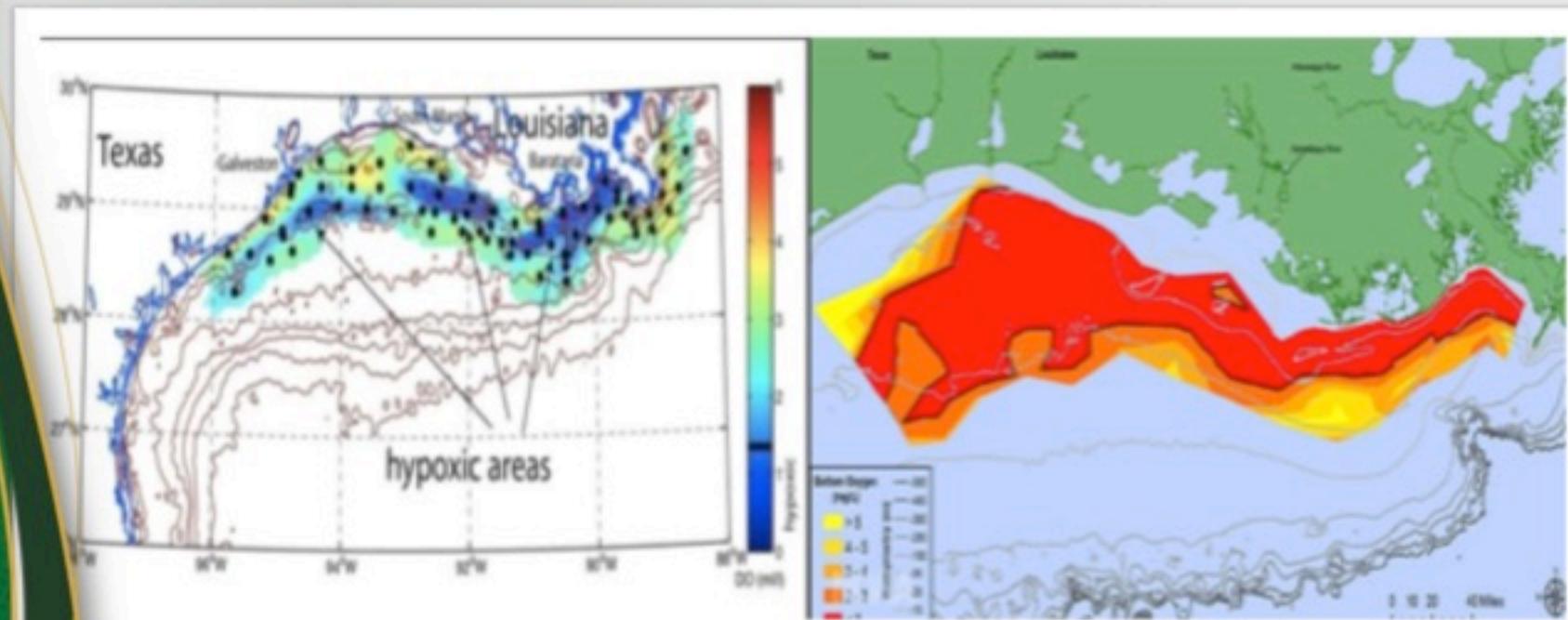


To produce 1 ton of soy, 80 kg N is required

More than 240 kg of N/ha (avoiding need for chemical fertilizers)

With each soybean crop, 539 kg of corn production is added due to N accumulation in the soil

**Internet images showing low oxygen concentration zones in the Gulf of Mexico due to high nutrient levels washed from the region's croplands in the summer.**



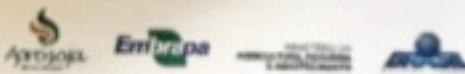


Programa  
**Sôja  
Livre**  
Cultive sua liberdade  
de escolha

Parceiros



Promoção e Realização



[WWW.SOJALIVRE.COM.BR](http://WWW.SOJALIVRE.COM.BR)





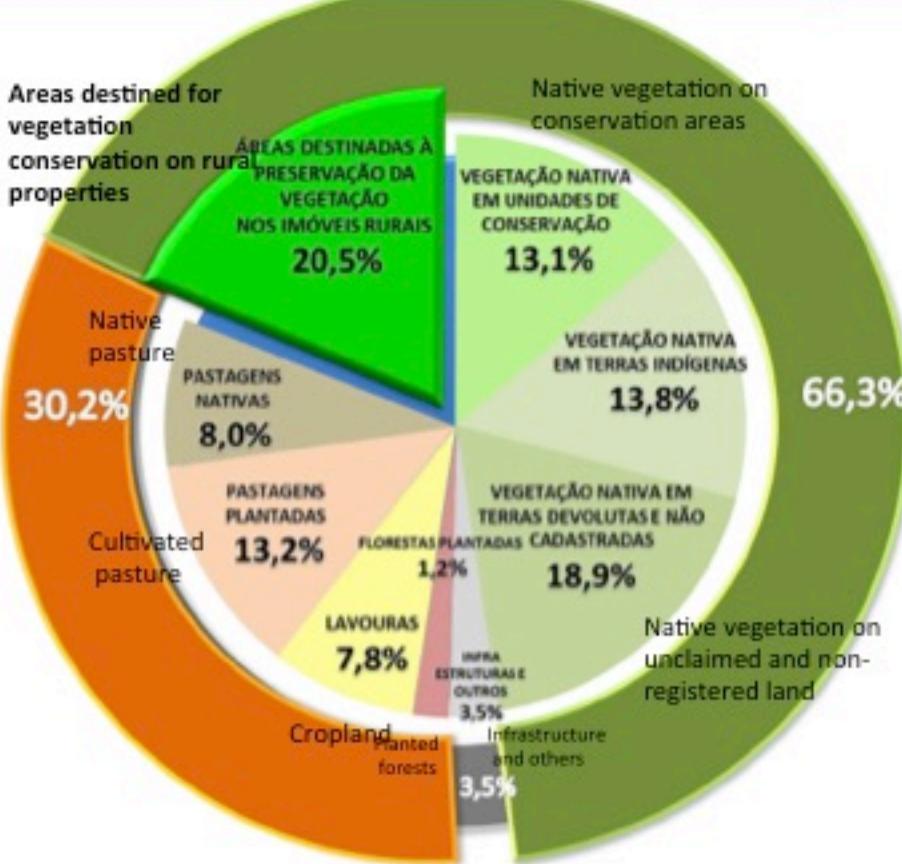
**PARTNERSHIPS  
WITH PUBLIC  
AND PRIVATE  
RESEARCH  
COMPANIES  
(CONVENTIONAL  
– GMO FREE  
VARIETIES)**



## LAND USE AND SOIL OCCUPATION IN BRAZIL (02/2017)

### Farming Use Uso Agropecuário

Sources: SFB; SICAR, EMBRAPA; IBGE;  
MMA; FUNAI; DNIT; ANA; MPOG.



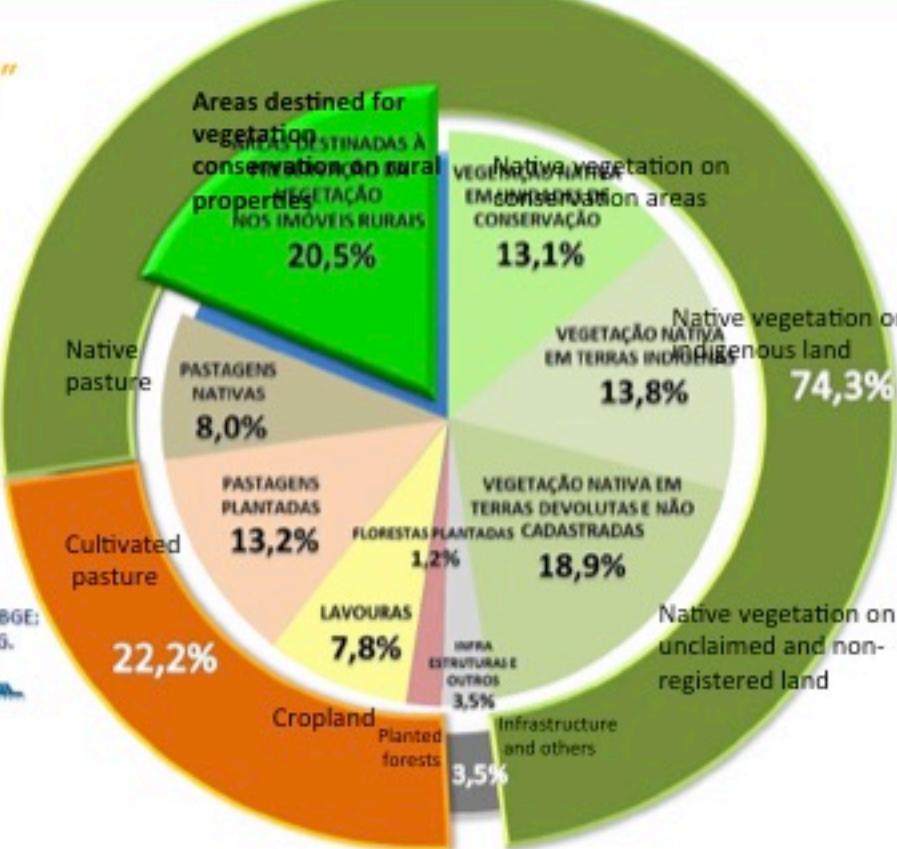
Área destinada à Vegetação  
Protegida e Preservada  
Areas destined for Protected  
and Preserved Vegetation

# OCUPAÇÃO E USO DAS TERRAS NO BRASIL (02/2017)

"NAME AND PROUD"

## Farming Use Uso Agropecuário

Fontes: SFB; SICAR, EMBRAPA; IBGE;  
MMA; FUNAI; DNI; ANA; MPOG.



Área destinada à Vegetação  
Protegida, Preservada e Conservada

Areas destined for Protected  
and Preserved Vegetation

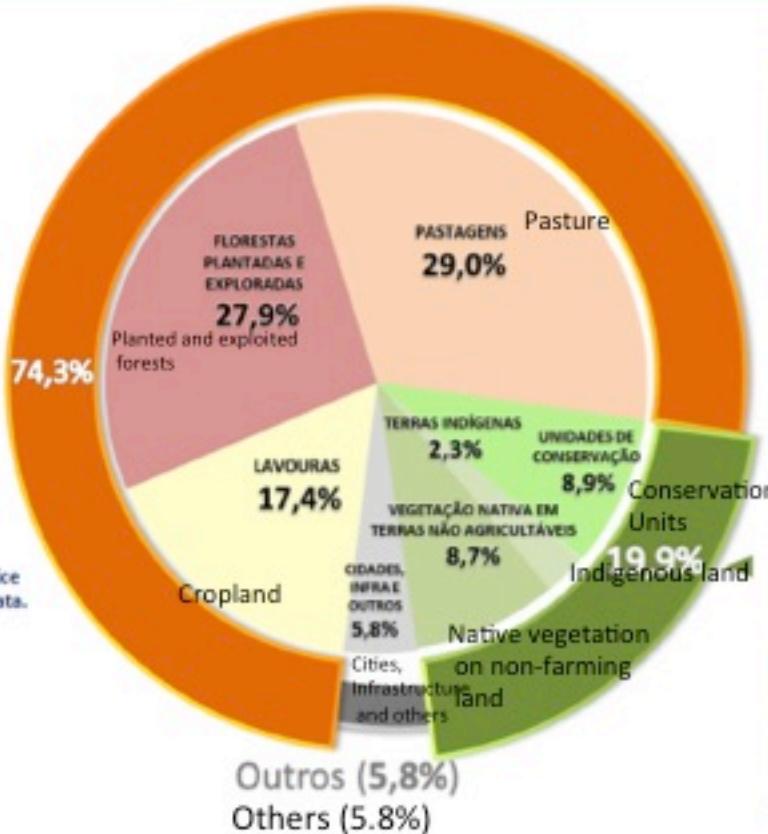
## CATTLE FARMING ON NATIVE PASTURES NO PANTANAL



## ALOCAÇÃO, USO E OCUPAÇÃO DA ÁREA



### Farming Use Uso Agropecuário



Fonte: USDA, Economic Research Service  
using data from the Major Land Use data.



Áreas Destinadas à Proteção e Preservação  
da Vegetação Nativa

Areas destined for Protected and Preserved  
Vegetation

TOTAL DE PROTEÍNA DE SOJA PRESERVADA NO BRASIL  
(EQUIVALENTE A SUPERFÍCIE DE 28 PAÍSES DA EUROPA) (EQUIVALENT TO THE AREA OF 28 EUROPEAN COUNTRIES)

"NAME AND PROUD"



# NASA – USGS - CROPLANDS



Global Food Security-Support Analysis Data at 30 m

USGS Home  
Contact USGS  
Search USGS

Search... • All USGS  This site only  Search

Home

Models & Algorithms

Data & Products

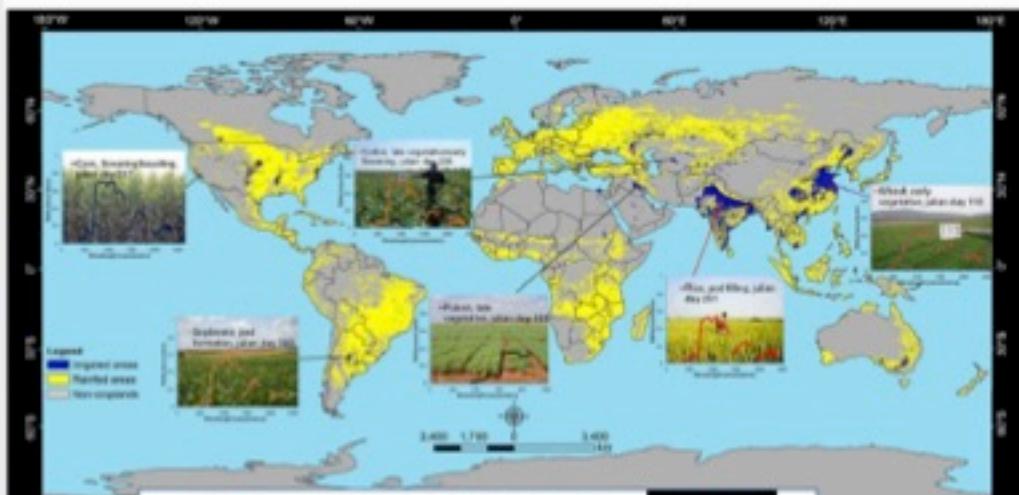
Publications

Links

News & Meetings

Teams

For additional information and data, go to [Croplands.org](http://Croplands.org)



Territorial

CROPLAND IN BRAZIL  
ÁREA CULTIVADA  
DO BRASIL



7,8%

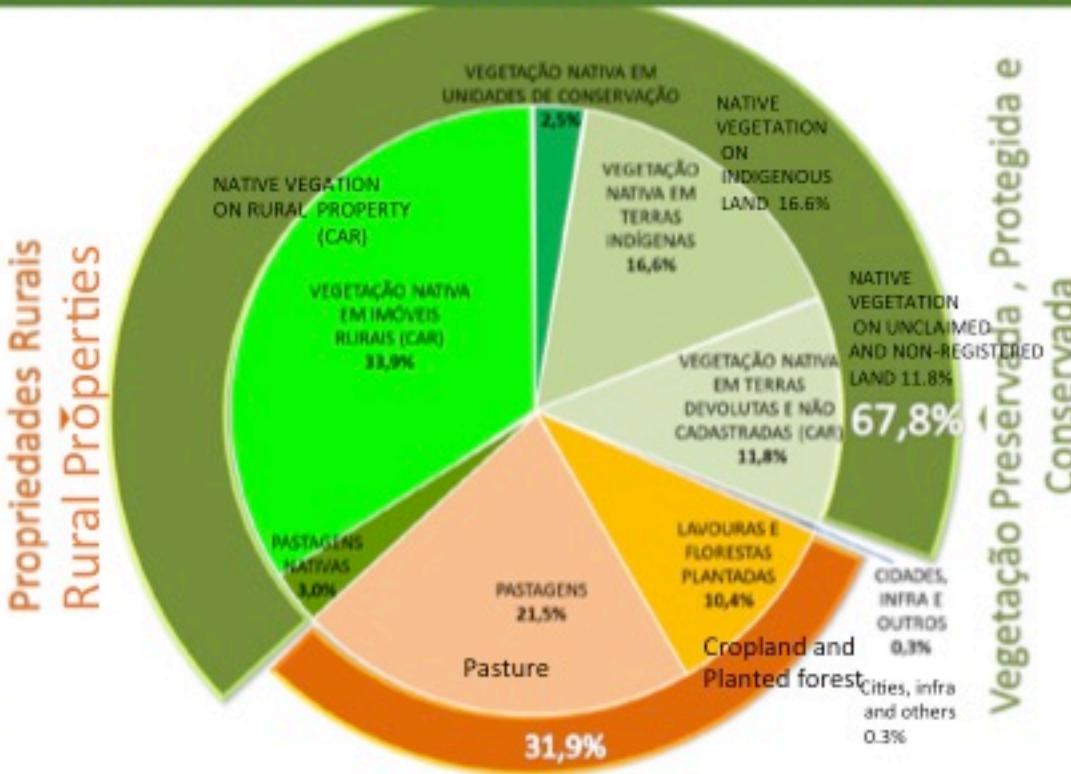
7,6%

The senior support by the USGS  
in FNPY Model Team

Acknowledgments  
Overall Credits for the FNPY



## ATRIE LAND ALLOCATION, OCCUPATION AND USE IN MATO GROSSO



Preserved, Protected and  
Conserved Vegetation

 10.4% Agriculture

 24.5% Pasture

 0.3% Other Uses

 33.9% Area preserved by farmers

 16.6% Indian Reservations

11.8% Non registered Areas at CAR

 2.5% Conservation units

3.0 % Native Pastures



**67.8%**

## Land use

**“NAME  
AND  
PROUD”**



## Brazil: Production of 119.5 milhões tonnes in 2018.

The Brazilian soybean farmers are highly efficient: the average soy yield is 3.4 tonnes/Ha

Grown using a no-till system with multiple crops: integrating crops and livestock; or soy + corn + grass for cattle one year and then cotton

Brazilian soybean: 38% protein.

USA 2017 (dry conditions), an average of 34% protein, the same amount as 2008 and the lowest quality since 1986.

**"NAME AND PROUD"**



"NAME AND  
PROUD"



# Soja Plus

A Programme for  
Economic, Social and  
Environmental  
management of  
Brazilian Soybean





Aprosoja visits farms to advise farmers on how to comply with environmental and labor law requirements.



CONTRIBUTED TO  
GOVERNANCE OF FARMING  
ACTIVITIES



CONTRIBUTED TO CONSERVATION  
OF NATURAL RESOURCES



CONTRIBUTES TO THE WELL-BEING OF  
WORKERS, FARMERS AND LOCAL  
COMMUNITIES.



**Soja Plus**



## CODE OF CONDUCT OF SOYBEAN PLUS



### BASE CONCEITUAL - II

CONSTITUIÇÃO FEDERAL

LEI DO TRABALHO RURAL - Lei 5886/73

CLT - CONSOLIDAÇÃO DAS LEIS DO TRABALHO

NR 31 - NORMA REGULAMENTADORA DE SEGURANÇA DO TRABALHO, SAÚDE OCUPACIONAL E MEIO AMBIENTE DO TRABALHO RURAL

CÓDIGO PENAL – CRIMES CONTRA A ORGANIZAÇÃO DO TRABALHO

### AUDITORIAS DE CAMPO - METODOLOGIA

- AUDITORIAS DE CAMPO E RH
- LISTA DE VERIFICAÇÃO (CHECK LIST)
- VERIFICAÇÃO FÍSICA
- VERIFICAÇÃO DOCUMENTAL
- ENTREVISTAS - GESTORES E COLABORADORES
- ELABORAÇÃO DO PLANO DE CORREÇÃO DAS NÃO CONFORMIDADES

### CÓDIGO DE CONDUTA

#### BASE CONCEITUAL - I

DECLARAÇÃO DOS DIREITOS E PRINCÍPIOS FUNDAMENTAIS NO TRABALHO DA OIT

- ABOLIÇÃO EFETIVA DO TRABALHO INFANTIL (CONVENÇÕES 138 E 182)

- ELIMINAÇÃO DE TODAS AS FORMAS DE TRABALHO FORÇADO OU OBRIGATÓRIO (CONVENÇÕES 29 E 105)

- LIBERDADE DE ASSOCIAÇÃO E DE ORGANIZAÇÃO SINDICAL E RECONHECIMENTO EFETIVO DO DIREITO DE NEGOCIAÇÃO COLETIVA (CONVENÇÕES 87 E 98)

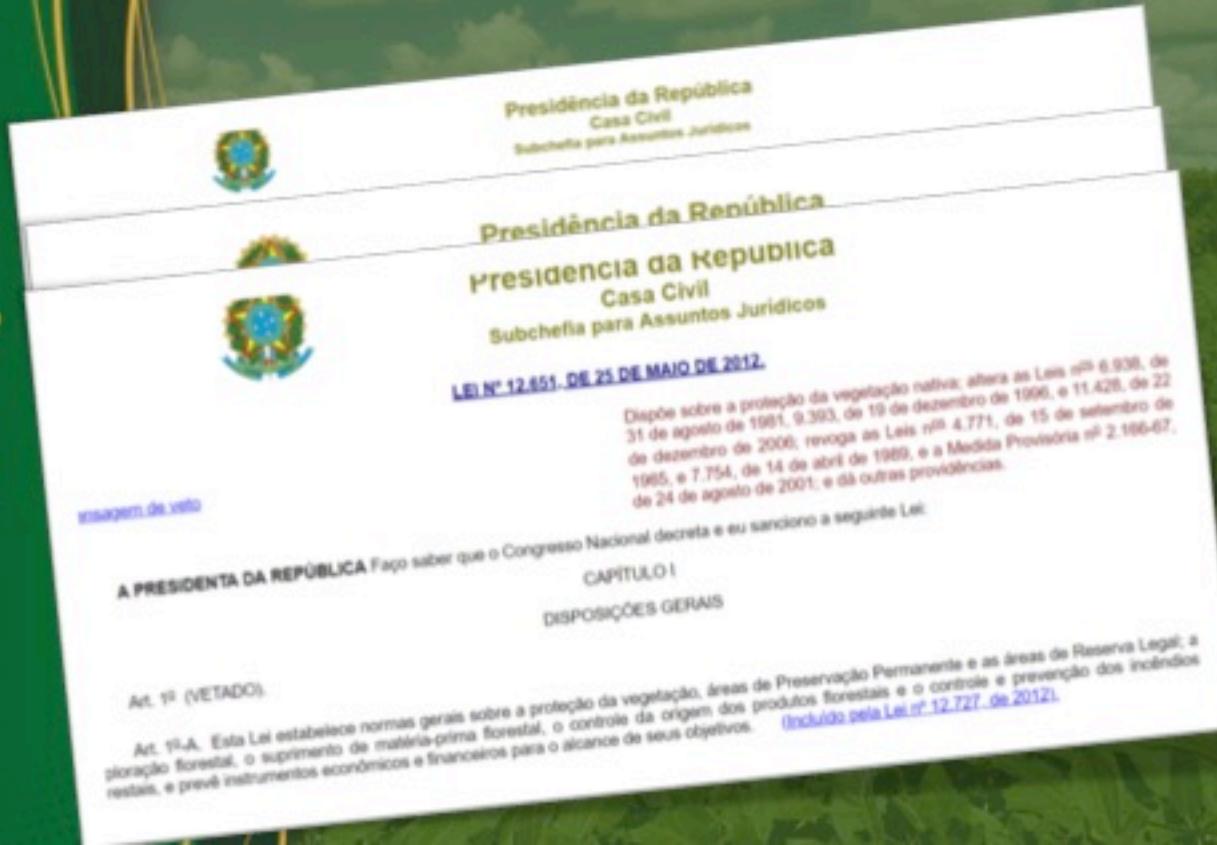
- ELIMINAÇÃO DA DISCRIMINAÇÃO EM MATÉRIA DE EMPREGO E OCUPAÇÃO (CONVENÇÕES 100 E 111).

# THE FOREST CODE

**1934 – The First Forest Code.**

**1965 – Decree bringing it into law, 4771/1965.**

**2012 – The New Forest Code altered the law 1261/2012.**



## **Art . 12**

Art. 12. All rural property shall maintain an area with native vegetation cover, as a Legal Reserve, without prejudice to the application of the rules on Permanent Preservation Areas, observing the following minimum percentages in relation to the area of the property, except in cases provided for in art. 68 of this Law:

I - located in the Legal Amazon:

- a) 80% (eighty percent), in the property situated in a forest area
- b) 35% (thirty five percent), in the property located in a closed area;
- c) 20% (twenty percent), in the property situated in an area of general fields;

II - located in other regions of the country:

20% (twenty percent).



**Soja Plus**



Aprosoja  
Mato Grosso



SENAI  
Mato Grosso

## **SOJA PLUS LINES OF ACTION**

**I. Quality of Life**

**II. Best Practices**

**III. Financial Viability**

**IV. Product Quality**

**V. Social Responsibility**

*\*All actions are free for farmers*





## **WHY WE BELIEVE IN *SOJA PLUS***

**The mission is to promote and foster continuous improvement**

**The program uses a sustainability trio (economic, social and environmental)**

**It helps overcome the lack of rural extension in Brazil, supporting and guiding the farmer**

**It focuses on all parts of the productive chain (production, transformation, commercialization and conservation)**

**Coordinated actions among agents of the productive chain, public sector and society**



## WORK DYNAMIC

- 1. Identify challenges and opportunities**
- 2. Promote actions to support and foster farmers**
- 3. Monitor performance**
- 4. Acknowledge progress**





### Topics:

- Health and safety;
- Labour contracts;
- Risk assessment;
- Adapting rural buildings;
- Environmental and labour laws and norms.

## THE SOJA PLUS COURSE

**Soja Plus**

**PRODUTOR!**  
PARTICIPE DO CURSO  
DE NR31/SOJA PLUS

Qualidade de vida no Trabalho – Saúde e Segurança no Trabalho Rural

NR-31

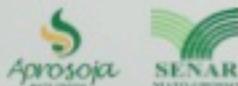
Venha se preparar para enfrentar  
as exigências do mercado!





## **SOJA PLUS TECHNICAL ASSISTANCE IN MT**





## THE SOJA PLUS PROGRAMME PROGRESSION



## BOARD TARGETS – 2018/2020



Number of *Soja Plus* properties: **2000**



*Soja Plus* courses held (a year): minimum **35**



Number of participating **farmers** (on the course): minimum **15**



Number of **properties** participating in each course: minimum **10**



*Soja Plus* properties/ per year: minimum **350**



**Minimum target for each field supervisor: 3 courses/30 properties/year (minimum)**

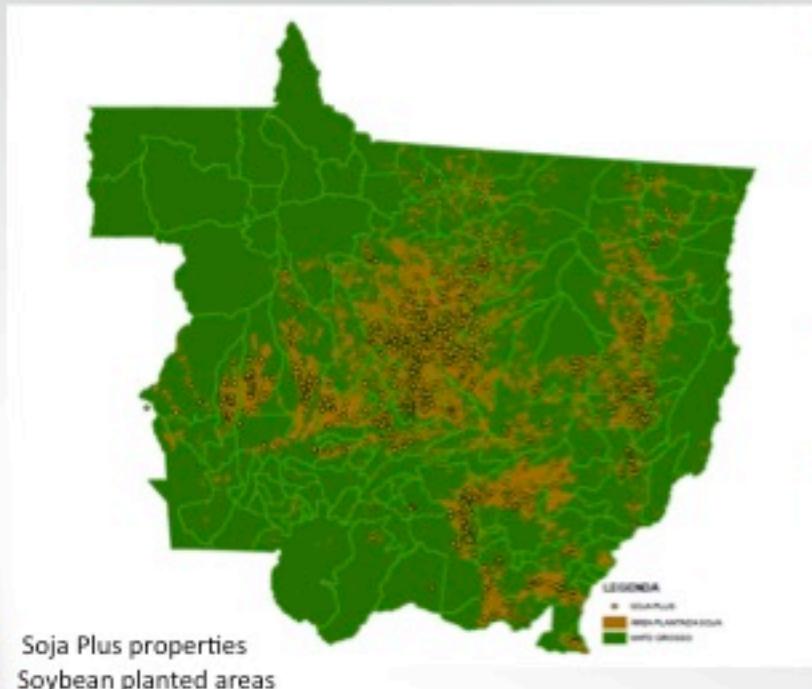


## SOJA PLUS - PROGRESS

SENAI course: Quality of Working Life

**Objective:** Train producers in health and safety management - Duration: 16 hours

**7 anos = 1,198 participating properties**



2011	2015
25 courses	24 courses
392 participants	294 participants
2012	2016
24 courses	25 courses
283 participants	418 participants
2013	2017
18 courses	30 courses
213 participants	325 participants
2014	2018
18 courses	33 courses
263 participants	501 participants

**197 courses held  
2689 participants trained**



Owner of the *Dois Filhos* ("Two Sons") farm

## COMMITMENT TO FAMILY SUCCESSION





**COMMITMENT  
TO FUTURE  
GENERATIONS**





**Soja Plus**



Aprosoja  
Mato Grosso



SENAI  
MATO GROSSO

**Come and Visit  
Mato Grosso**

**The most  
sustainable  
state on the  
planet!**



**Thank you!  
Antonio Galvan  
President**



Salto Belo - Campo Novo do Parecis/MT

[www.aprosoja.com.br](http://www.aprosoja.com.br)