

**Technical Working Party for Agricultural Crops****TWA/46/7 Add.****Forty-Sixth Session  
Hanover, Germany, June 19 to 23, 2017****Original:** English  
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**ADDENDUM TO  
USE OF DISEASE AND INSECT RESISTANCE CHARACTERISTICS IN DUS EXAMINATION***Document prepared by the Office of the Union**Disclaimer: this document does not represent UPOV policies or guidance*

The Annex to this document contains a copy of a presentation on “Use of disease and insect resistance characteristics for Soybean DUS testing”, prepared by an expert from Brazil that was made at the forty-sixth session of the Technical Working Party for Agricultural Crops (TWA).

[Annex follows]

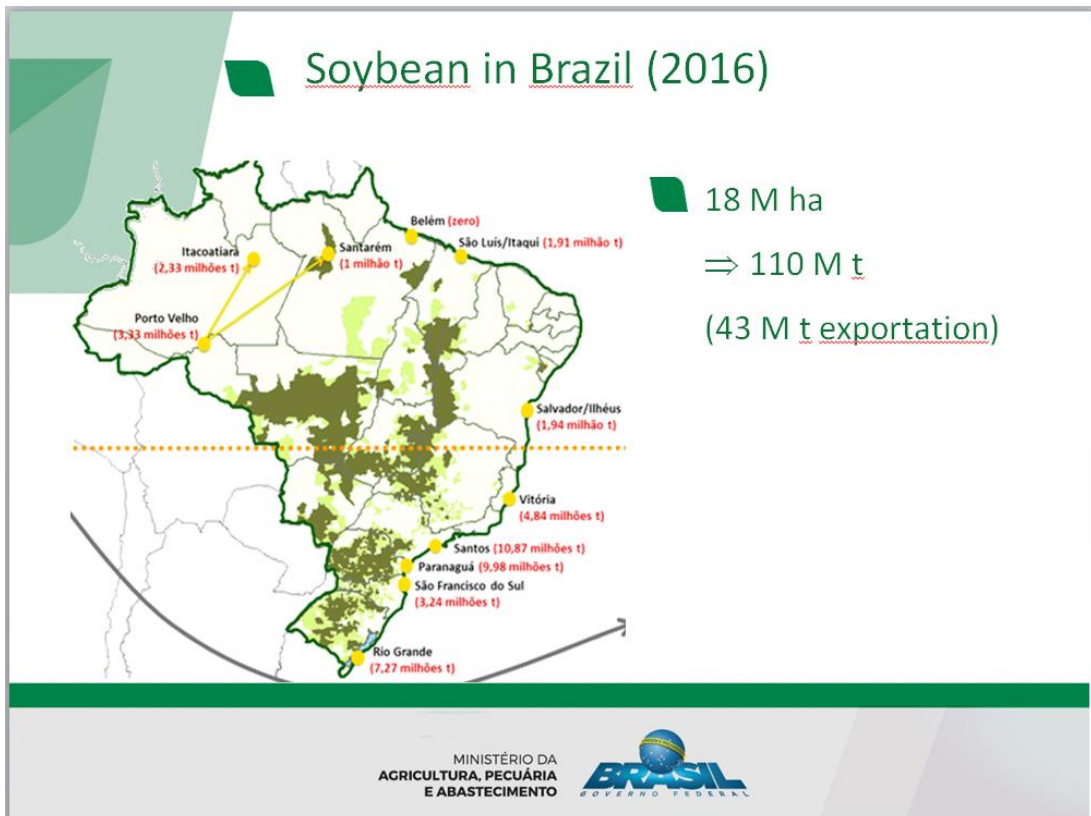
USE OF DISEASE AND INSECT RESISTANCE CHARACTERISTICS FOR SOYBEAN DUS TESTING

Presentation prepared by an expert from Brazil

MINISTRY OF AGRICULTURE, LIVESTOCK AND FOOD SUPPLY  
PLANT VARIETY PROTECTION OFFICE  
- BRAZIL -

Use of disease and insect resistance characteristics for Soybean DUS testing  
Daniela Aviani

46<sup>th</sup> TWA, Hanover, Germany, June, 2017

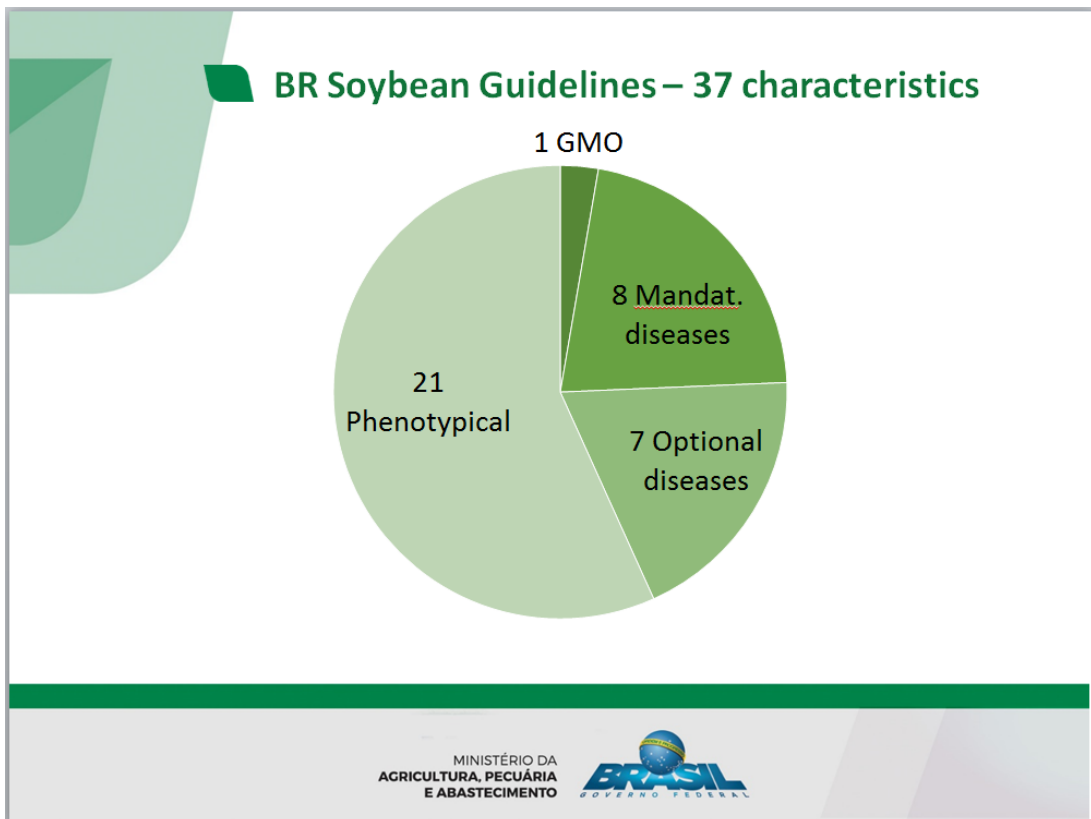
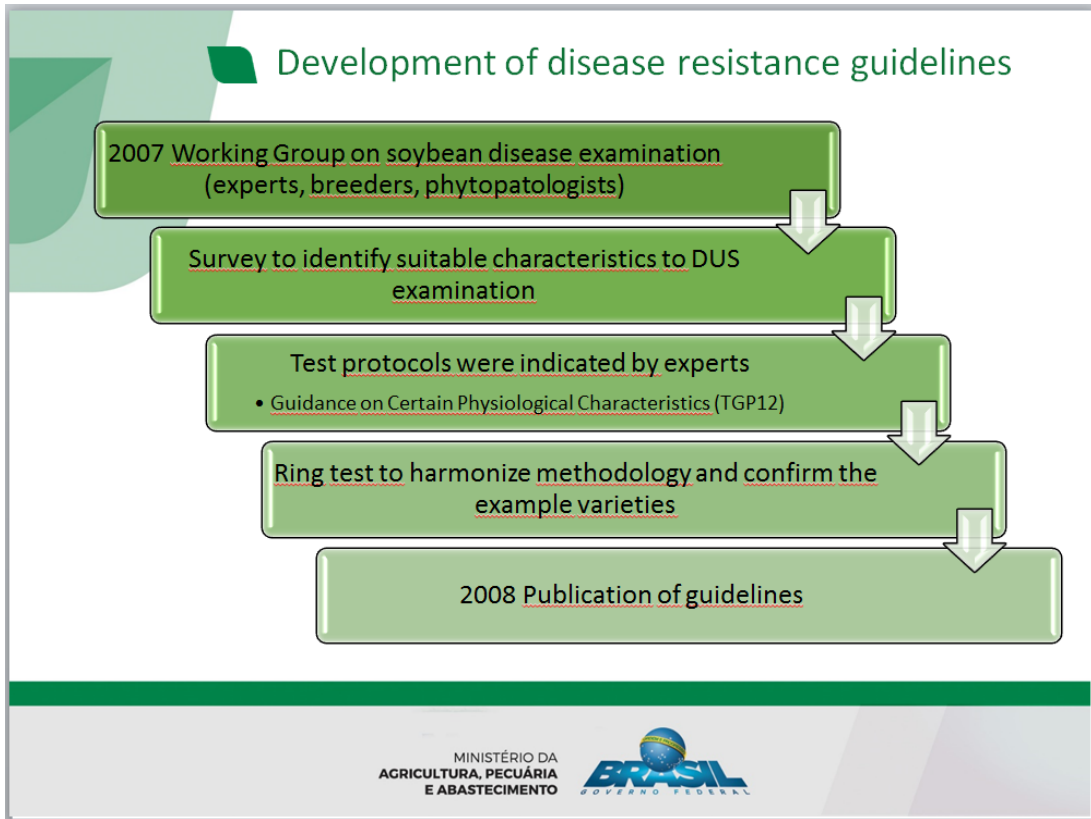


## BR Soybean Protection

- self-pollinated species
- narrow genetic basis
- breeders test system
- training for harmonization/example varieties
- 120 applications/year
- databank comparison (1400 descriptions GAIA)
- distinctness trials
- post-control trials

## Advantages of using diseases characteristics

- varieties are bred for disease resistance
- improve quality of descriptions
- increase reliability of comparison
- good distinctness tool
- usually not expensive
- short duration



## 8 Mandatory disease/insect tests



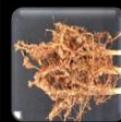
*Xanthomonas  
axonopodis* pv. *glycines*



Cowpea mild mottle  
virus



*Cercospora sojina*  
Races 2; 4; 7; 15  
&  
Races 23; 24; 25



NEMATOIDES  
*Meloidogyne Javanica*  
&  
*Meloidogyne incognita*



*Diaporthe phaseolorum*  
var. *meridionalis*



*Heterodera glycines*  
Race 3

## 7 Optional diseases/insects tests



*Xanthomonas  
axonopodis* pv. *glycines*



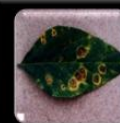
*Phytophthora sojae*



*Cadophora gregata*



VMCS  
Soybean Mosaic Virus








*Corynespora cassiicola*



*Heterodera glycines*  
Race 1  
&  
Race 14

## Final Considerations

-  Characteristic must be precise (pathogen, races...)
-  Inoculum source must be centralized and available
-  Protocols must be widely recognized
-  Protocols must be harmonized (ensure consistency and repeatability)
-  Costs must be taken into account

***Thanks for the attention!***

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