



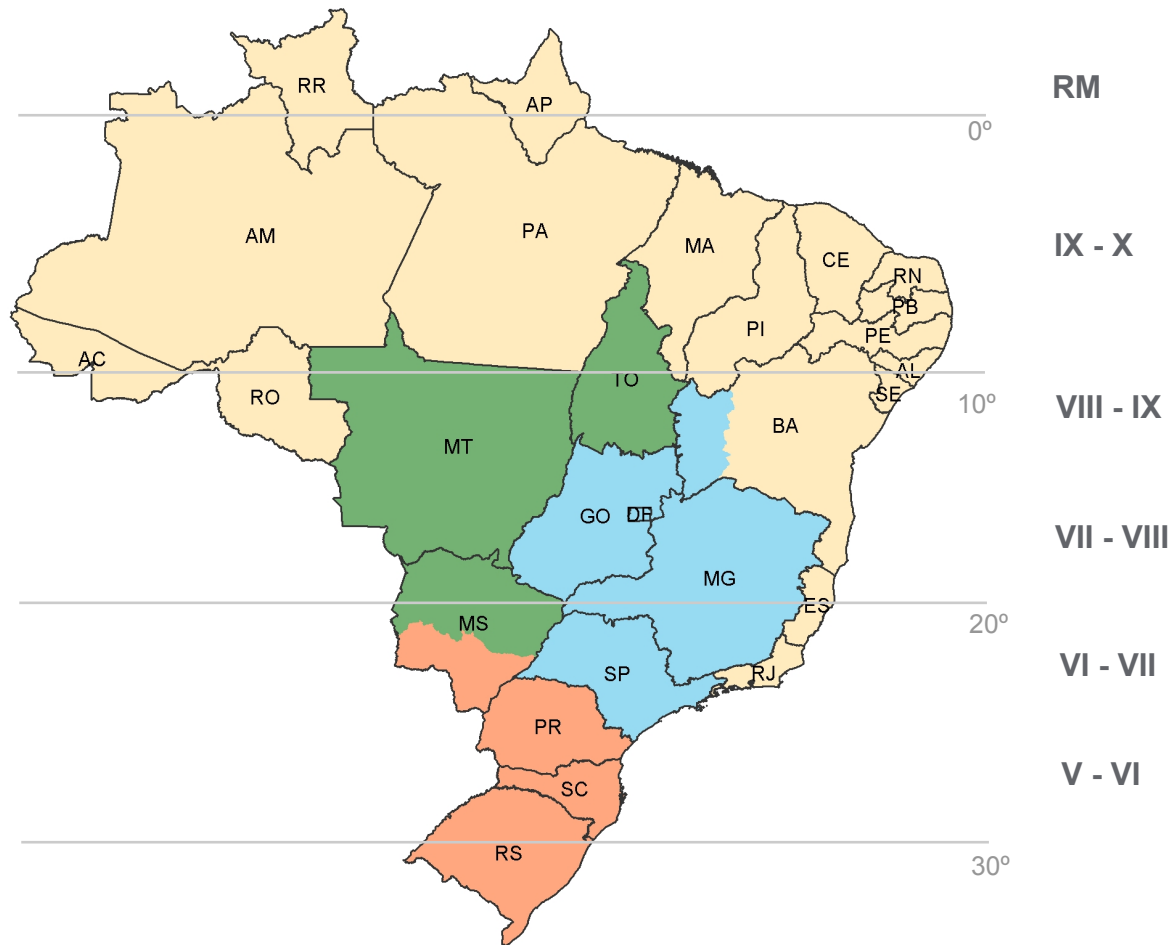
Soybean Production Systems in Argentina and Brazil

Dr. Glenn R. Bowers, Global Head, Soybean Breeding
Syngenta Seeds, Inc.
Soybean Breeders Workshop, St. Louis, MO
February 22, 2011

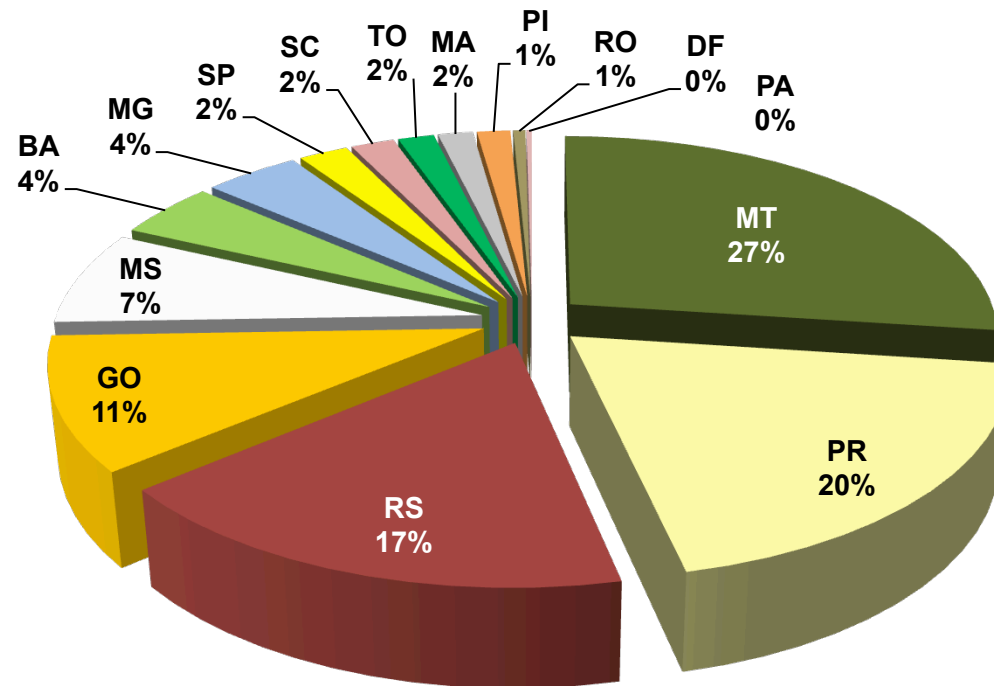
Classification: External Use

Soybean Production in Brazil

Soybean Production Areas in Brazil



Planted Area by State in Brazil, 2009-10



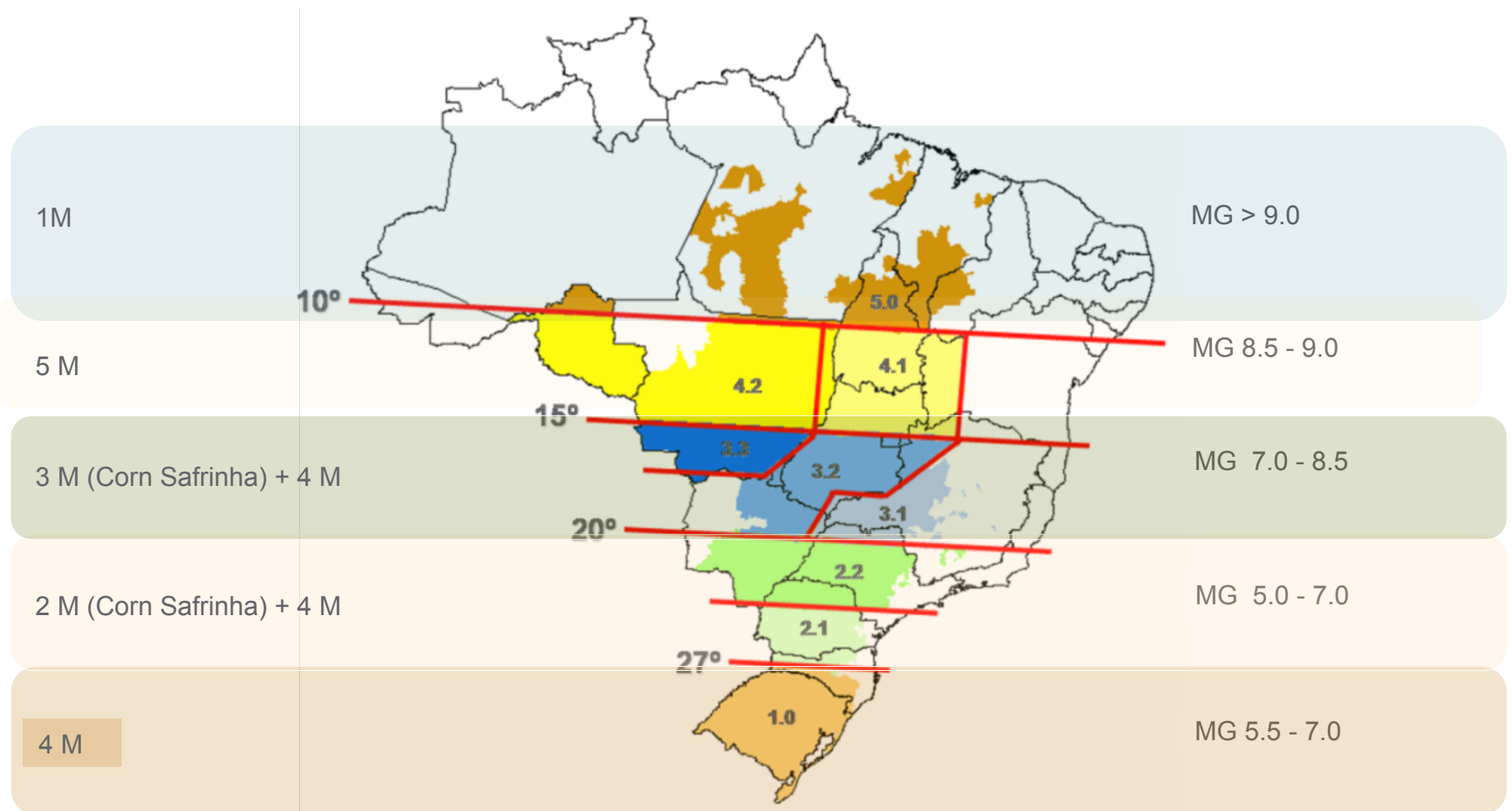
Cultivated Area (1.000 ha) = 22.837

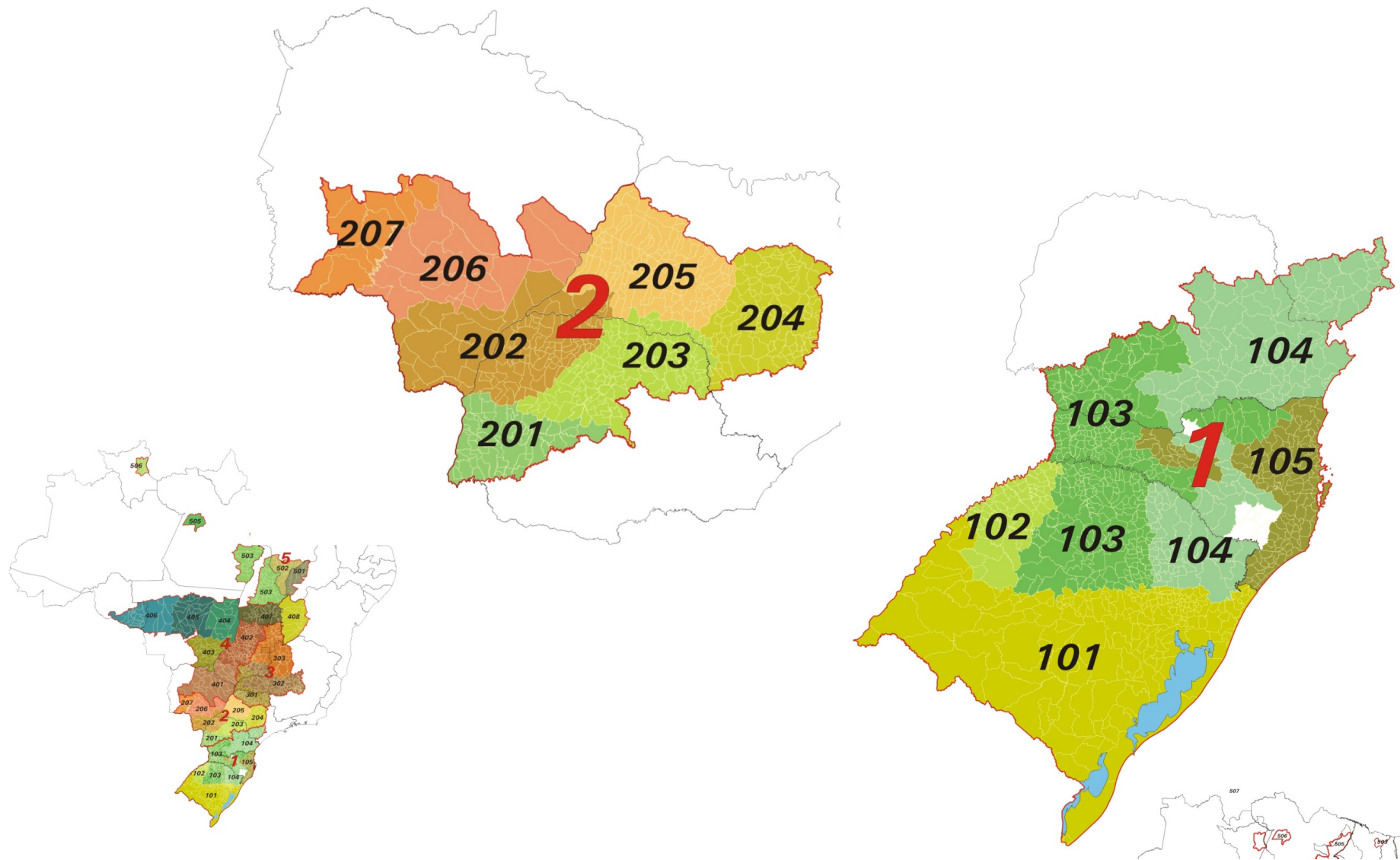
Soybean Cultivated Area (Has.) - Evolution



Harvest	07/08	08/09	09/10
Brazil	20.739	21.264	22.837
	Cultivated Area	Cultivated Area	Cultivated Area
MT	5.610	5.772	6.185
PR	3.882	3.969	4.452
RS	3.798	3.771	3.957
GO	2.089	2.249	2.409
MS	1.720	1.716	1.700
BA	900	928	1.014
MG	841	848	957
SP	455	460	497
SC	372	383	439
TO	300	318	365
MA	345	352	351
PI	228	274	336
RO	98	105	122
DF	52	49	53
PA	50	70	--

Brazilian Production Regions

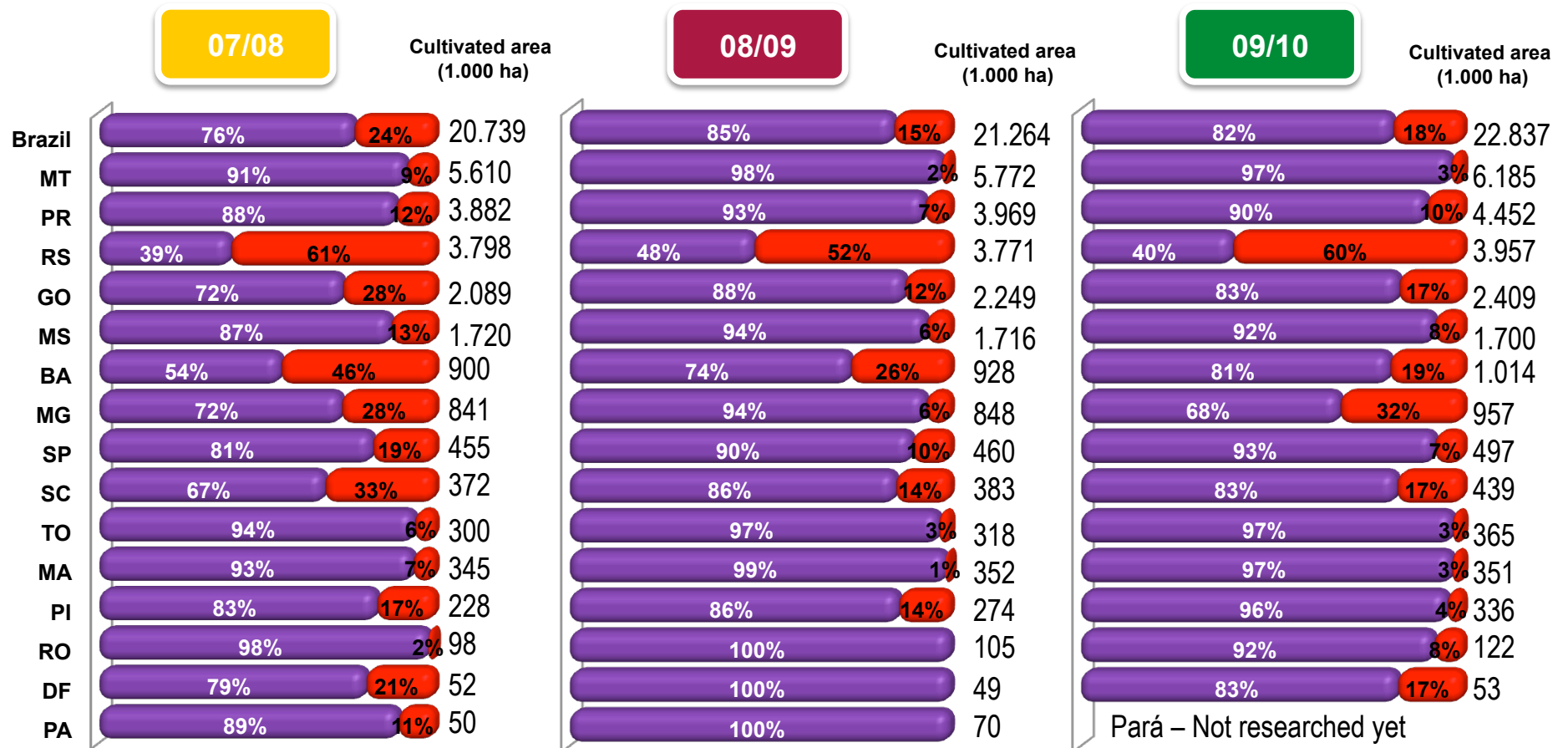




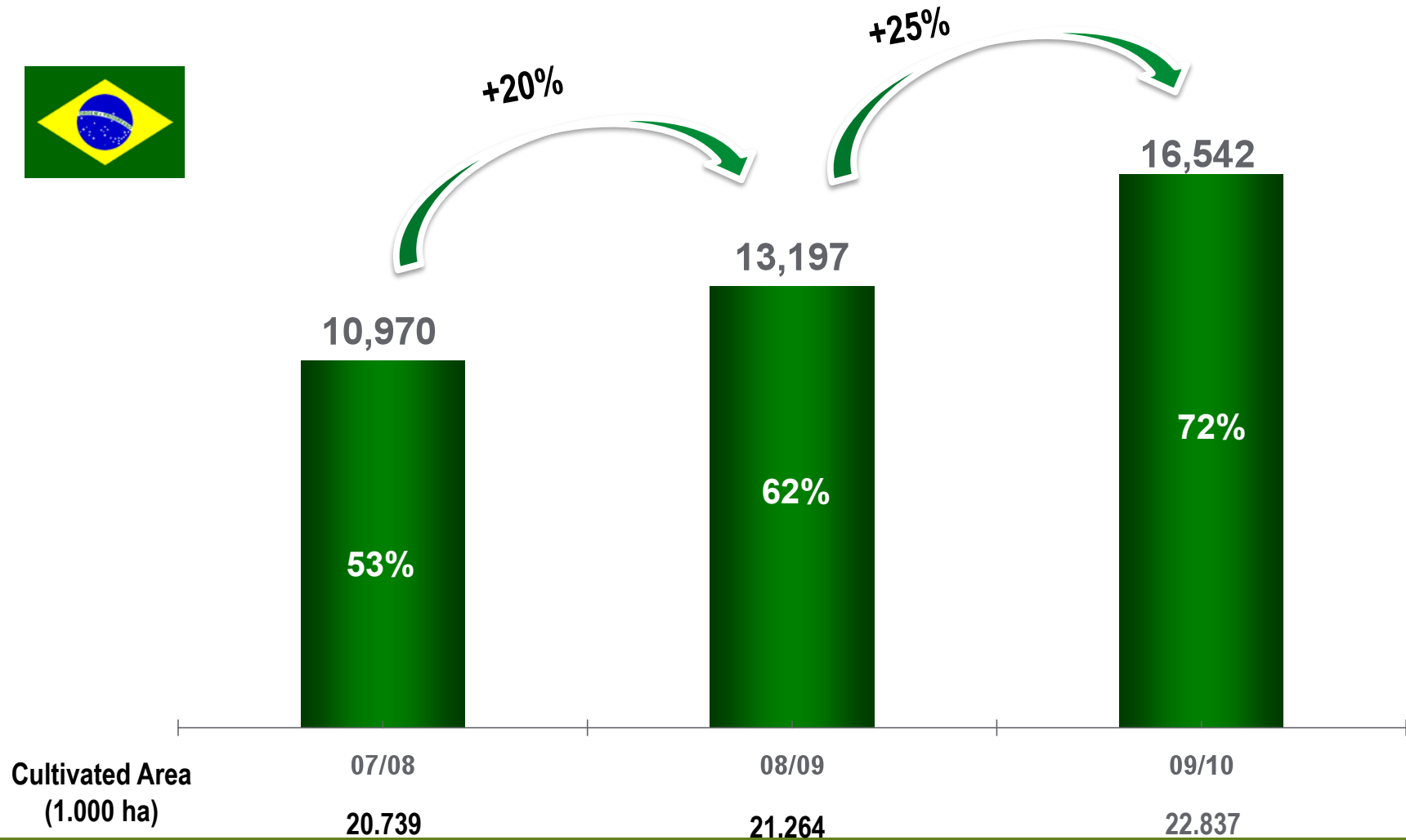
Certified Seed vs. Saved Seed – Total Market

All indications in %.

■ Certified ■ Saved

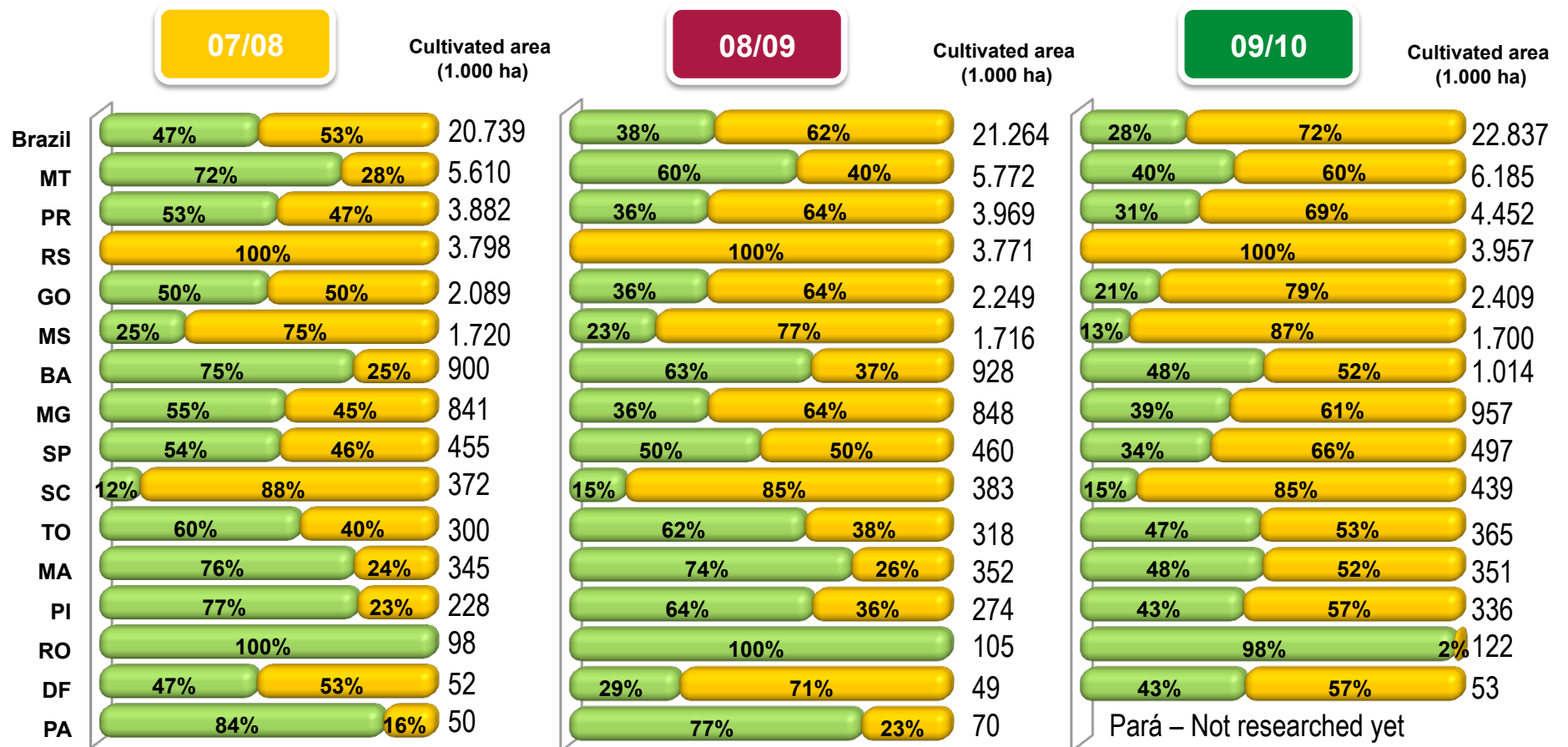


Transgenic Area - Evolution



Conventional x Transgenic Varieties

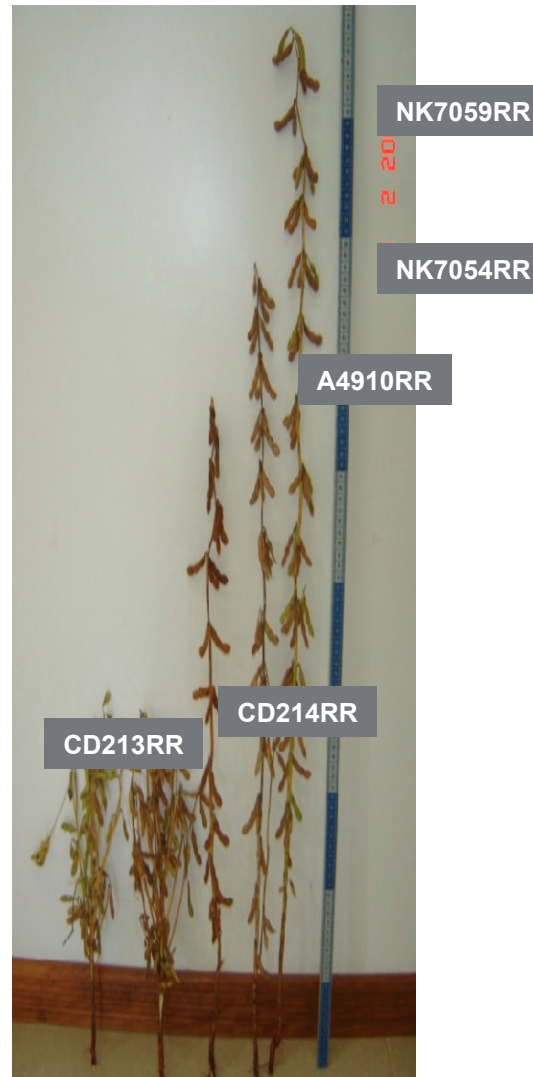
■ Conventional ■ Transgenic



Stem Termination

Transition from determinates to indeterminates

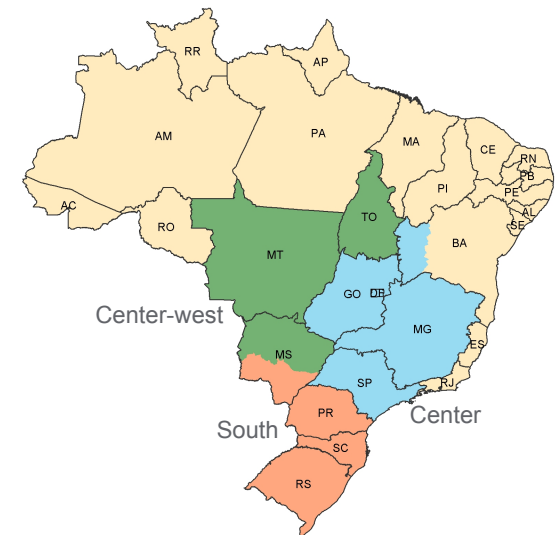
- 50% of the production in the South
- 10% of the production in the Center



} 10 cm

Disease occurrence in all Brazilian soybean regions

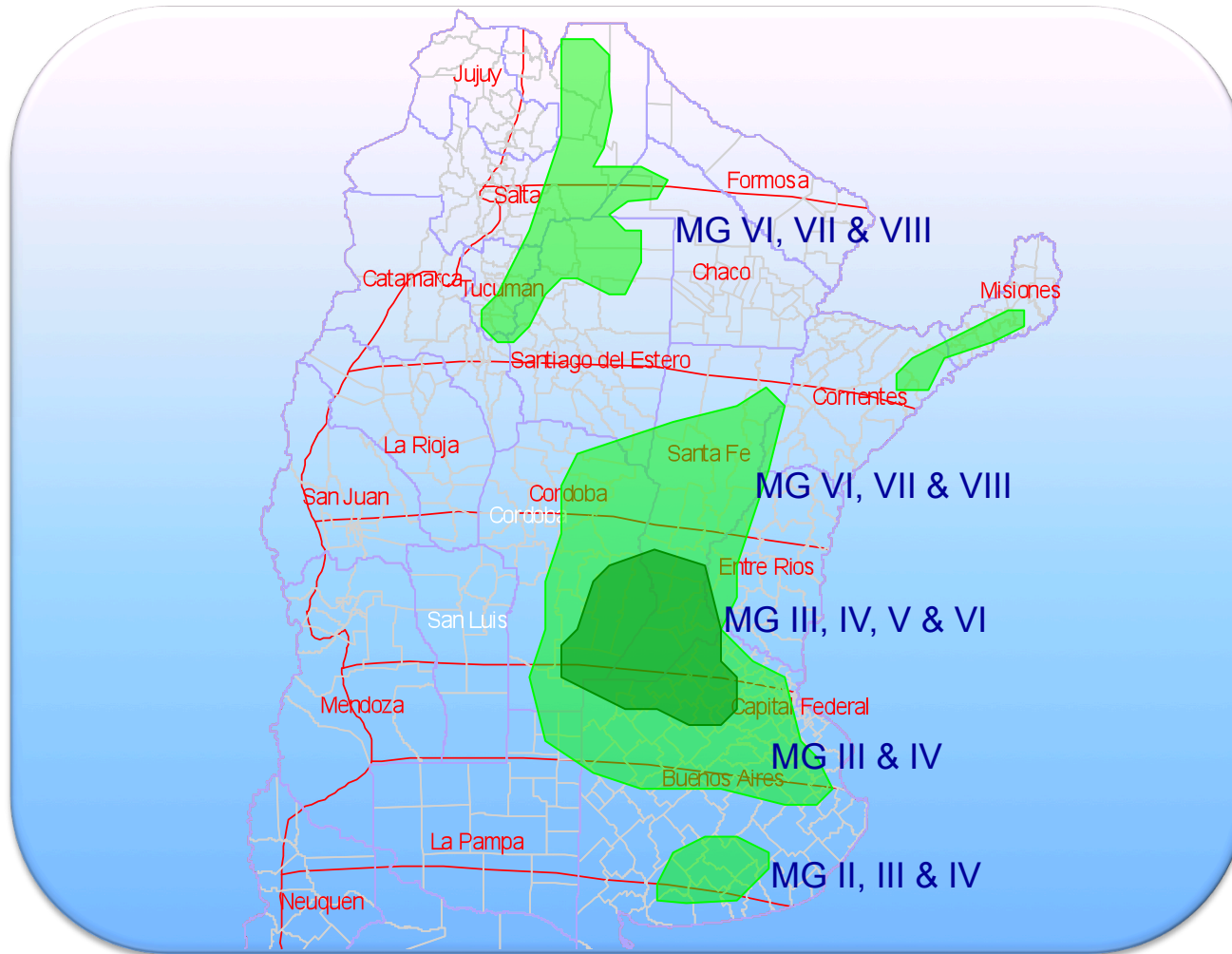
DISEASE	IMPORTANCE BY REGION		
	Center-west	Center	South
Soybean Rust (<i>Phakopsora pachyrhizi</i>)	High	High	High
RKN (<i>M.incognita/javanica</i>)	High	Moderate	Moderate
SCN (<i>Heterodera glycine</i>)	High	High	Mod-low
<i>Pratylenchus brachyurus</i>	High	High	Mod-low
Target Spot (<i>Corynespora cassicola</i>)	Moderate	Moderate	Mod-low
White Mold (<i>Sclerotinia sclerotiorum</i>)	Moderate	High	High
SDS (<i>Fusarium</i>)	Low	Moderate	Moderate
Anthracnose (<i>C. truncatum</i>)	Moderate	Moderate	Mod-low
Phytophthora Root Rot	Low	Low	High
<i>Rhizoctonia solani</i>	High	Moderate	Low
Brown Stem root (<i>Phialophora gregata</i>)	Low	Mod-low	Mod-low
Stem Canker (<i>Diaporthe meridionalis</i>) *	High	High	High
FELS (<i>Cercospora sojina</i>) *	High	High	High
Bacterial Pustule *	High	High	High



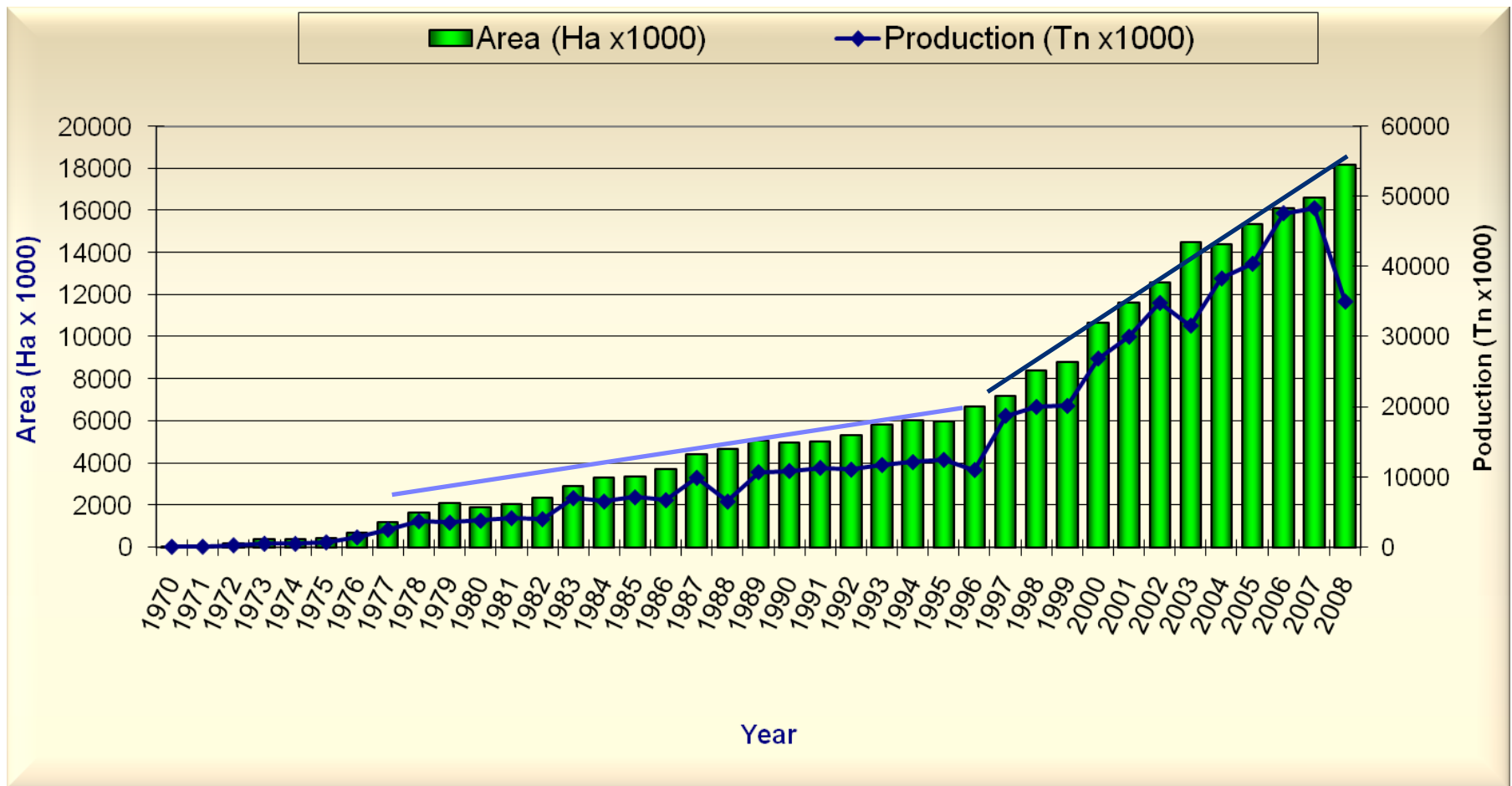
* Required for the PVP process

Soybean Production in Argentina

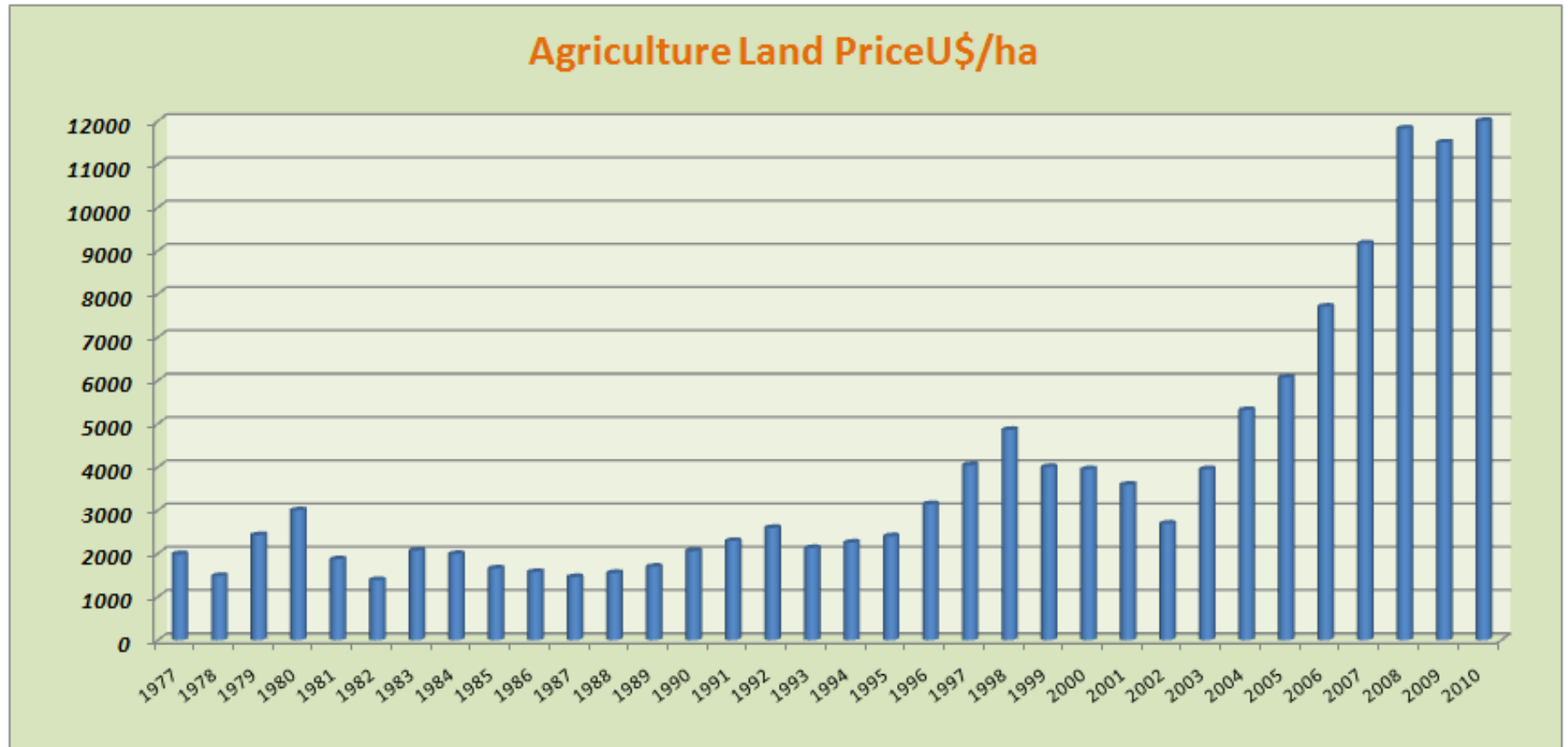
Soybean Production Areas in Argentina



Argentina Soybean Production Evolution

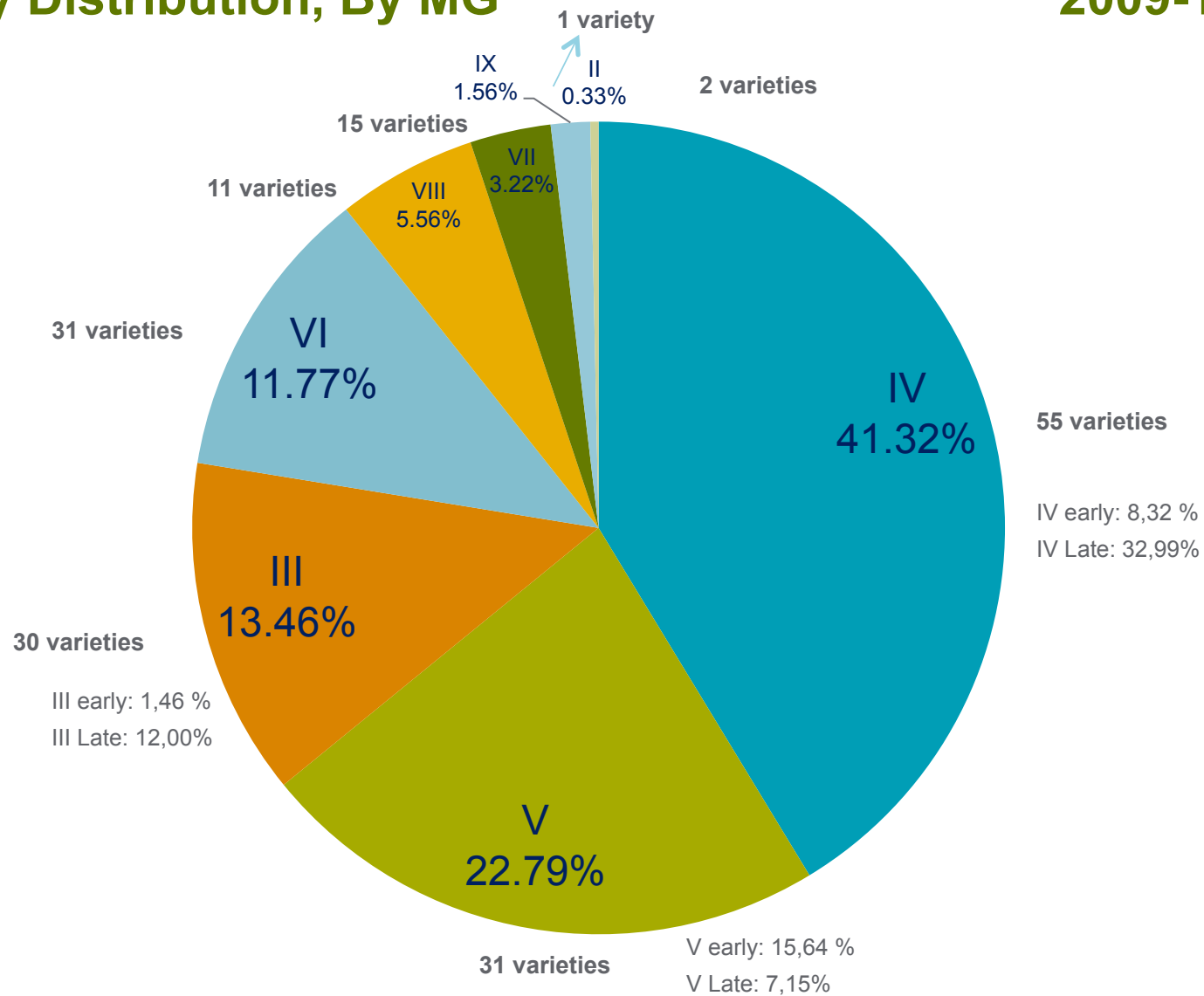


Land Prices – Pergamino/Venado Tuerto Region



Variety Distribution, By MG

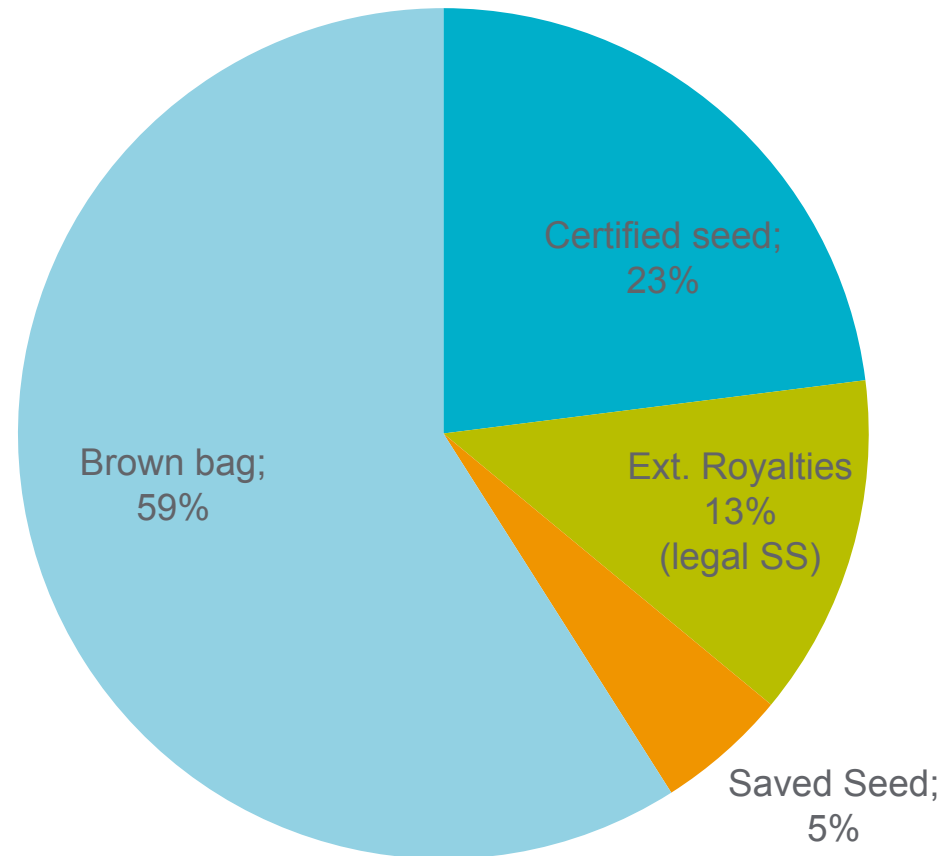
2009-10



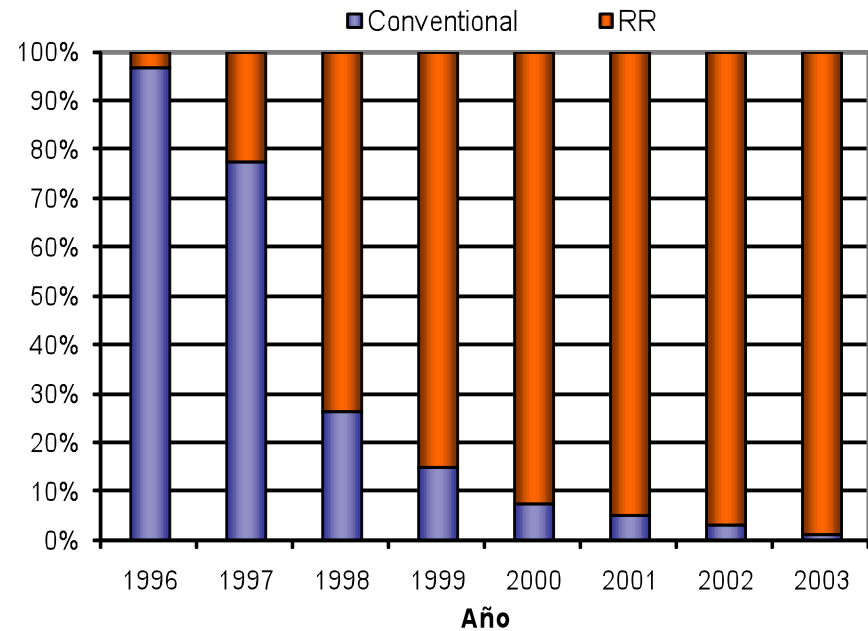
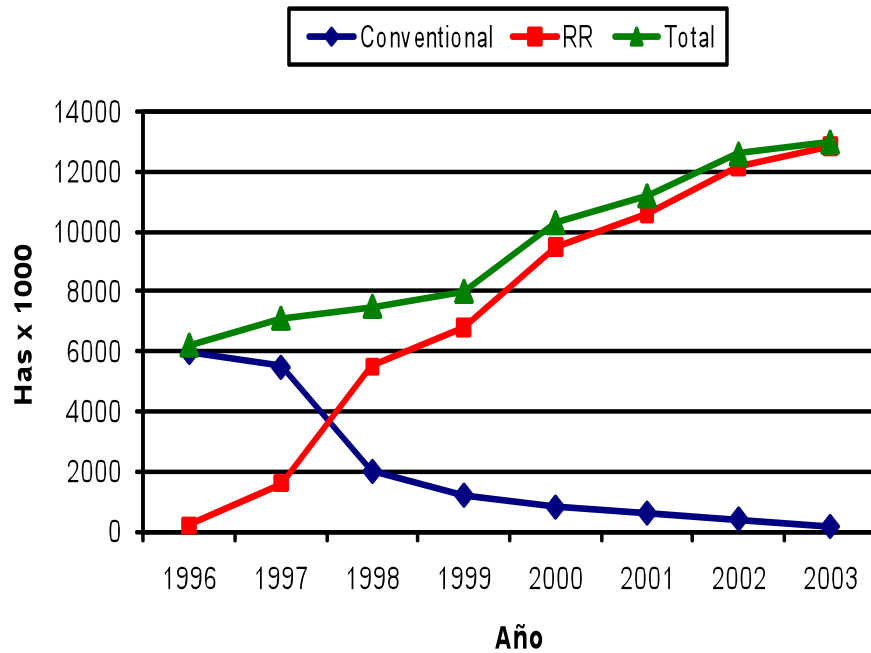
176 soybean varieties on the market

Source of Soybean Seed Planted in Argentina

- Soybean planted area 2009 – 2010:
 - 18,700,000 Has
- Certified Seed area:
 - 4,341,000 Has
 - 23%



Transgenic Soybean Adoption Rate in Argentina



Maturity Group, Stem Termination and Defensive Traits

MG	Stem	% Total	Defensive Traits
II	Indeterminate	1.0	PRR, WM
III	Indeterminate	15.0	PRR, WM
IV	Indeterminate	46.0	SCN, PRR
V	Determinate	3.5	SCN, RKN, SC, FLS, SDS
V	Indeterminate	11.5	SCN, RKN, SC, FLS, SDS
VI	Determinate	4.0	SCN, RKN, SC, FLS, SDS, CR, Rust
VI	Indeterminate	6.0	SCN, RKN, SC, FLS, SDS, CR, Rust
VII	Determinate	3.5	SCN, RKN, SC, FLS, SDS, CR, Rust
VII	Indeterminate	3.5	SCN, RKN, SC, FLS, SDS, CR, Rust
VIII	Determinate	6.0	SCN, RKN, SC, FLS, SDS, CR, Rust

