



Seedcare[™]
Beyond Seed Protection[™]

syngenta®

**5th Seed
Congress
of the Americas**

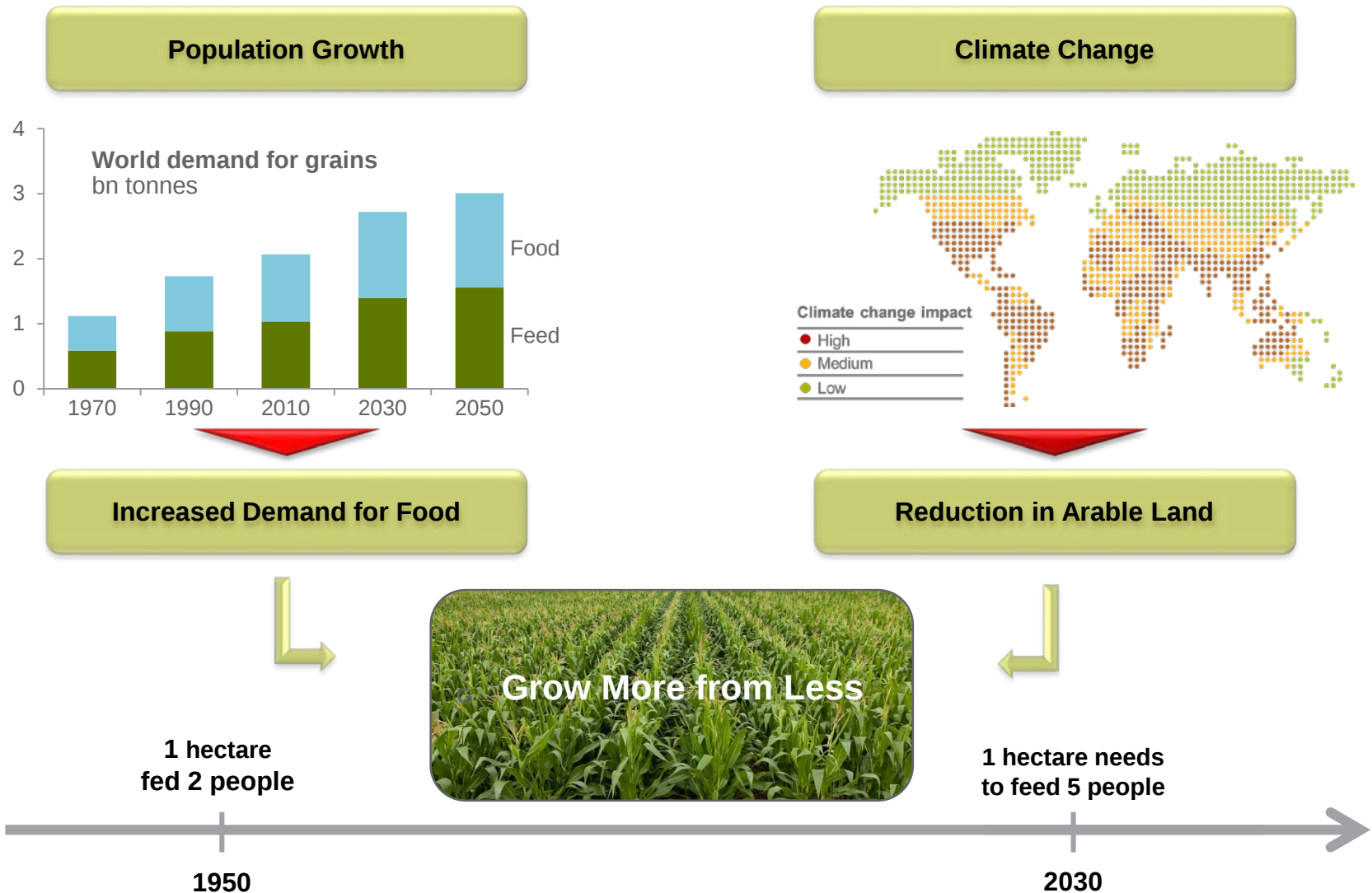
Convencion
Semillas Mejoradas para un México Productivo
AMSAC 2015
ASOCIACIÓN MEXICANA DE SEMILLEROS, A.C.

Creating Value for the Seed Industry and its Customers through Seed Applied Technologies

SAA – ST Working Group
Cancun, September 9th 2015

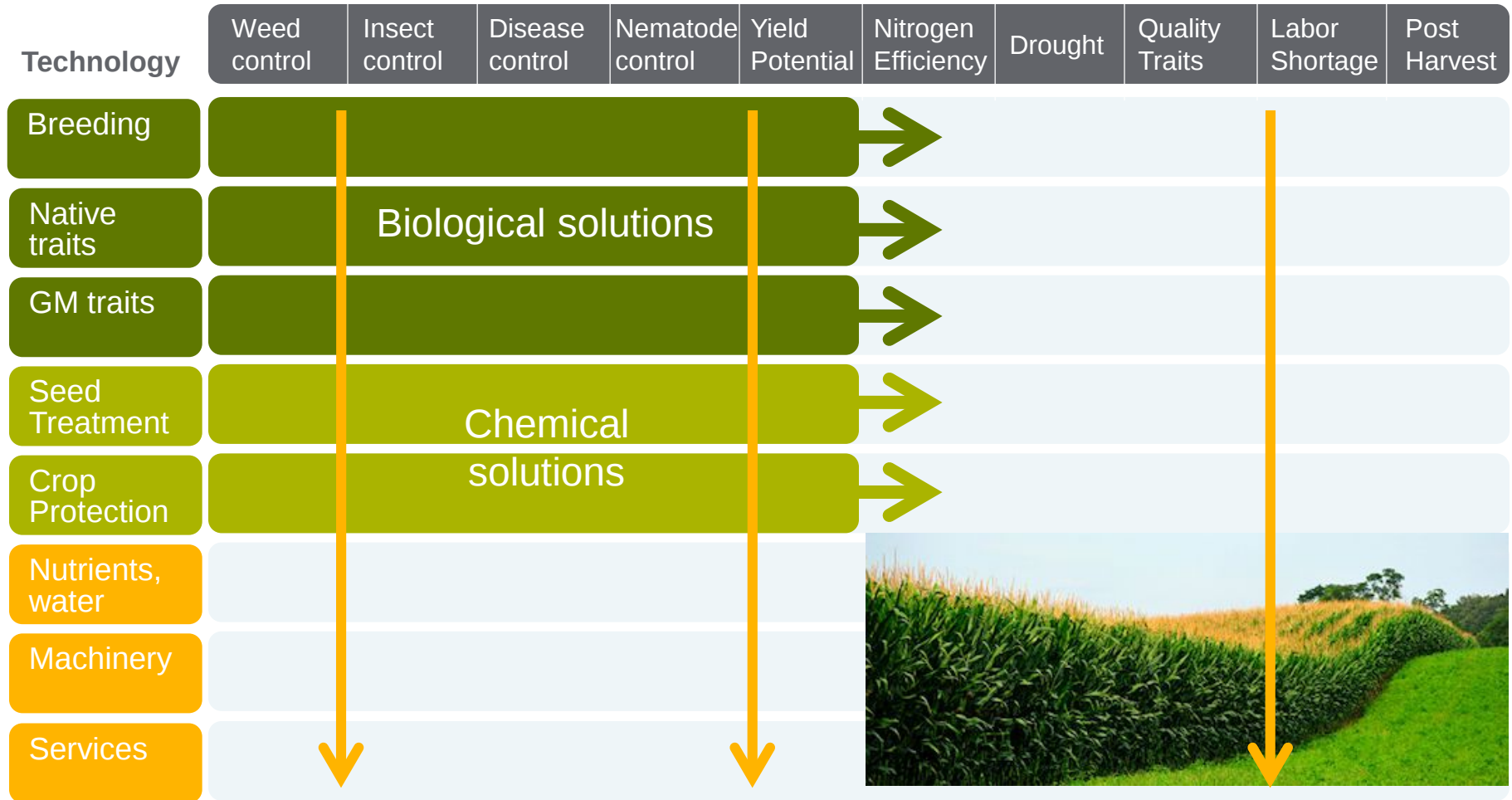
Ioana Tudor
Global Head of Seedcare
Syngenta. Basel Switzerland

The challenge we face – to grow more from less!

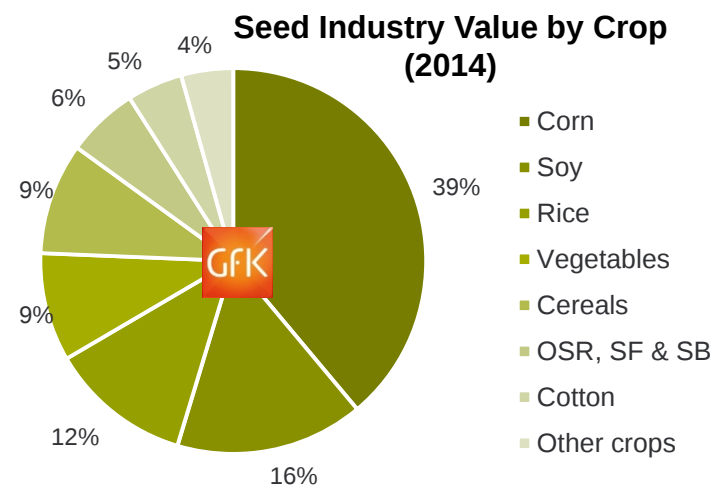
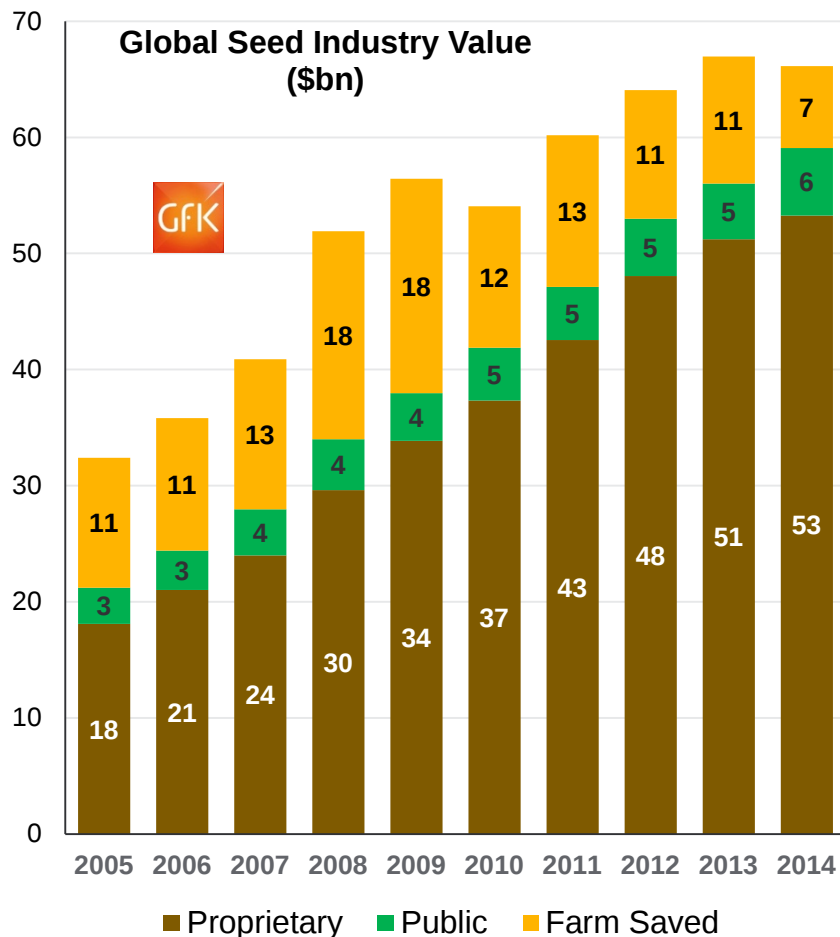


Growers can maximize yield by integrating multiple technologies

Growers pain points



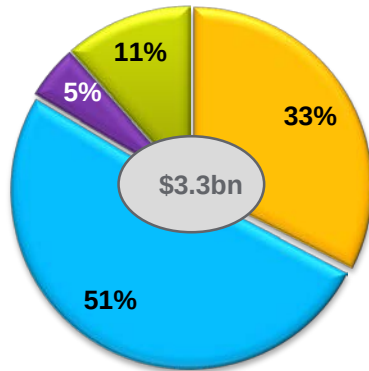
Proprietary seed market continued growth



- Proprietary seeds market growth of 9% vs global industry growth of 3% over last 5 years.
- Corn, Soybean, Vegetables and Rice account for >75% of the market (soy highest growth)
- Hybrid crop adoption and the proprietary market channel held steady despite downward price pressures in 2014.

Seed treatment market outlook

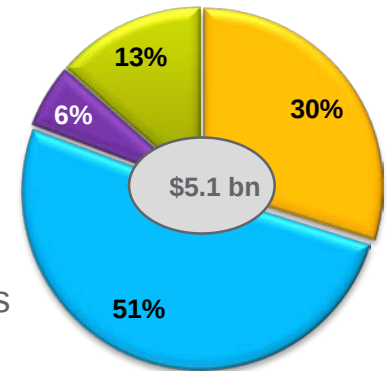
2014



Product category

■ Fungicide
 ■ Insecticide
 ■ Nematicide
 ■ Abiotic Stress Management

2020

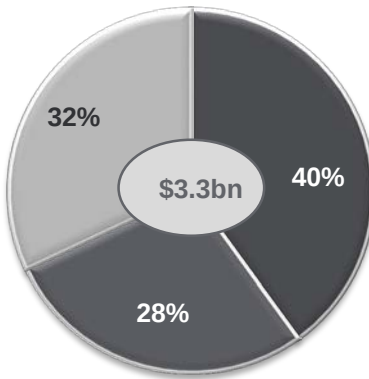


Market growth continues ~ 7-8%

New, differentiated products lead growth in key markets

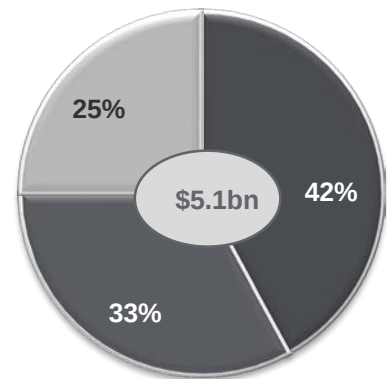
Strong growth in emerging markets

Growth in all crops, largest contributions from Corn, Soy and Oilseeds



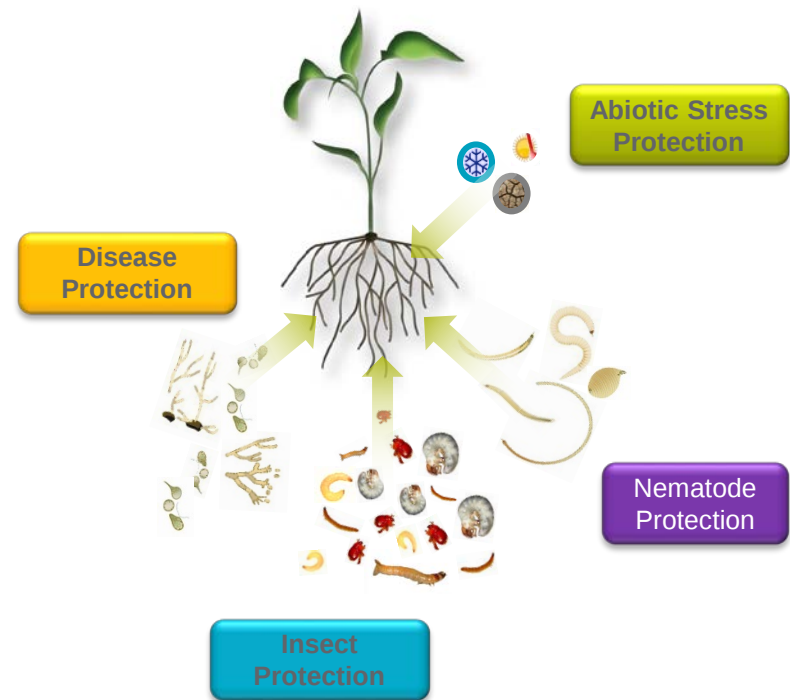
Treatment location

■ Seed Company
 ■ Multiplier / Retail
 ■ On-Farm

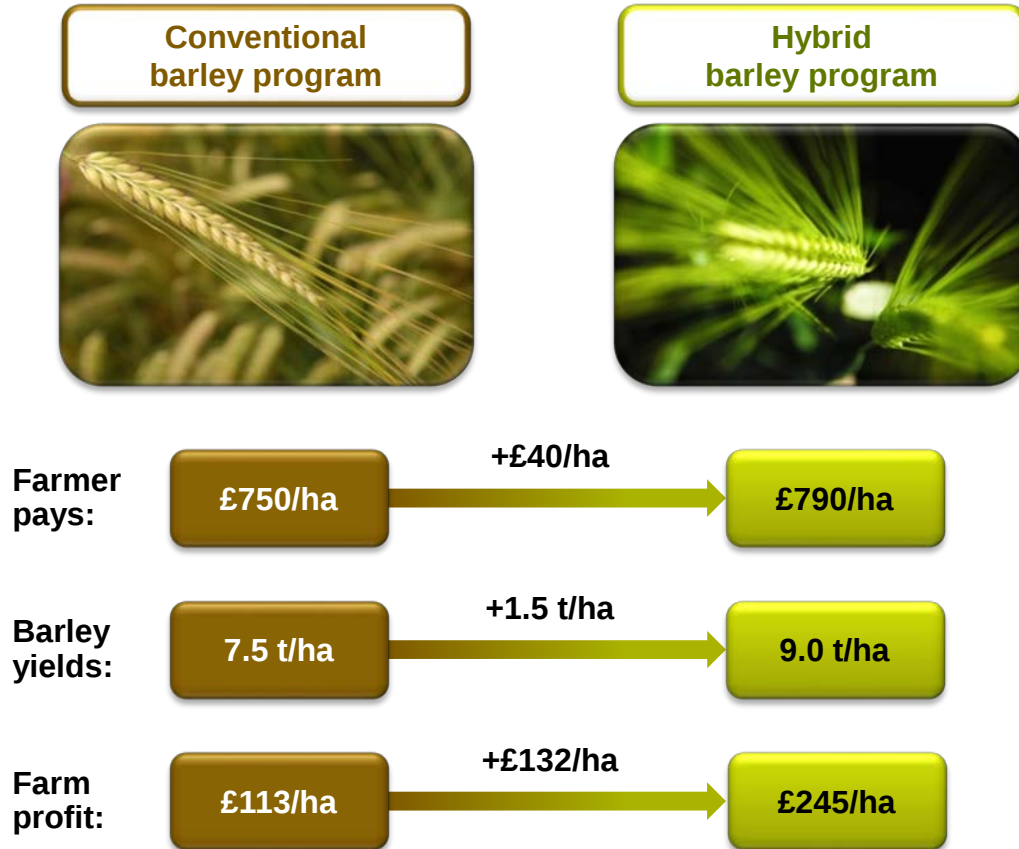


Seed treatments aid the adoption of high performance seeds and unlock high yield potential for growers

- Maximizing yield potential through protection from pests, disease and abiotic stress
- Protecting grower's investment: 1 seed = 1 plant
- Promoting high value seed through unique colouring and marker technology
- Providing complementary modes of action enabling trait resistance management



Europe: adoption of hybrids and high value seed treatments generates value and grows more from less...



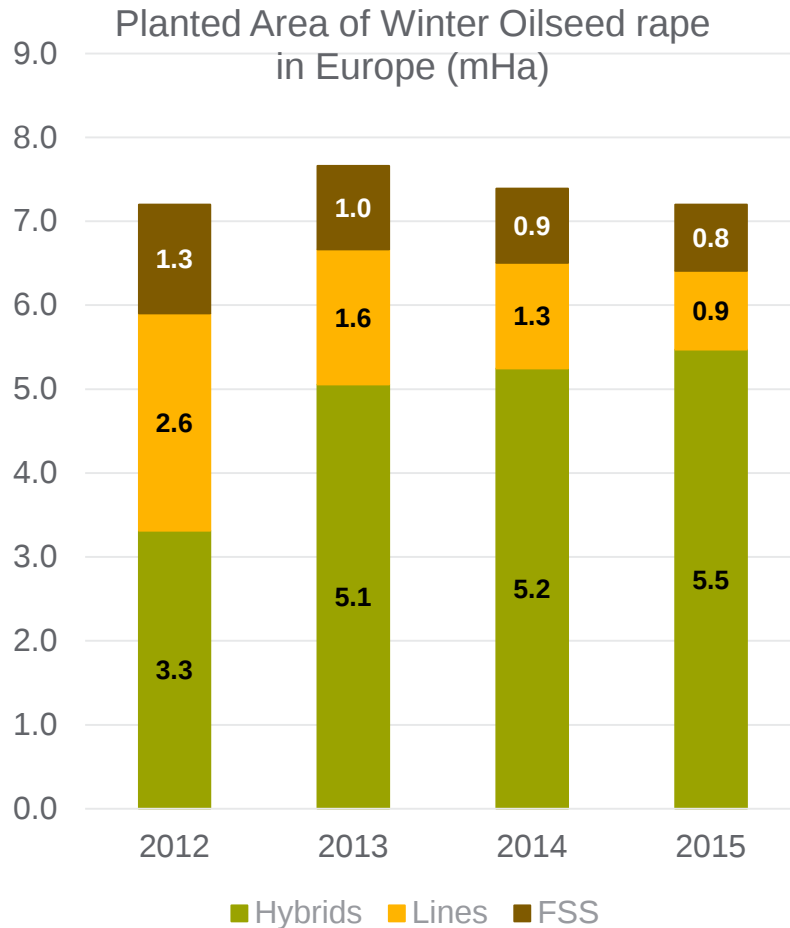
ROI = 3.3 : 1

- Barley feed market transformed through adoption of hybrids
- 100% of Hyvido seeds treated with Seedcare products: (Landor CT, Vibrance, Vibrance Gold)
- Value of seed/seed treatment market ~\$75m today, reaching \$700m by 2030
- Seed treatment between 12-16% of value



UK example: Feed barley price: £115/t. Variable and fixed costs included. No rent or finance charges included.

Europe: hybrid adoption negatively impacted when seed treatment protection no longer available...



- Suspension of neonics in European Union: major contributor to decrease in WOSR planted hectares 2013 – 2014 (4%)
 - Trend continuing into 2015
- Significant slow down in hybrid adoption (growth of 53% in 2013 and then only 4% in 2014!)
- Some farmers hesitant to buy hybrids as they consider investment risky without early insecticide protection
- Few switched back to lines (certified)

China: Seedcare helped a multinational customer with a unique anti-counterfeit solution through Cruiser Extra C

A leading hybrid had more than 5m hectares planted area over a decade in China. Market share started to shrink due to copied seeds and new varieties from 2012. Seedcare tailored an exclusive offer to fight against copied seeds and competition from 2013.



Advertised as new premium offer



Farmer meeting & In-store demo

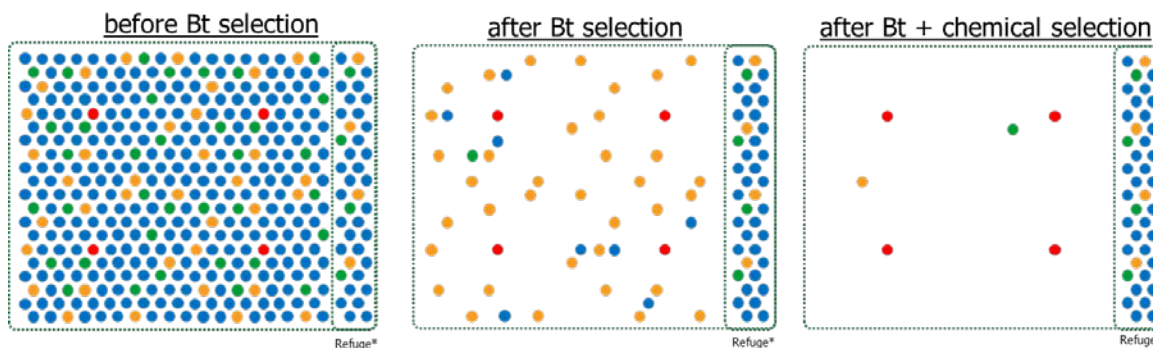
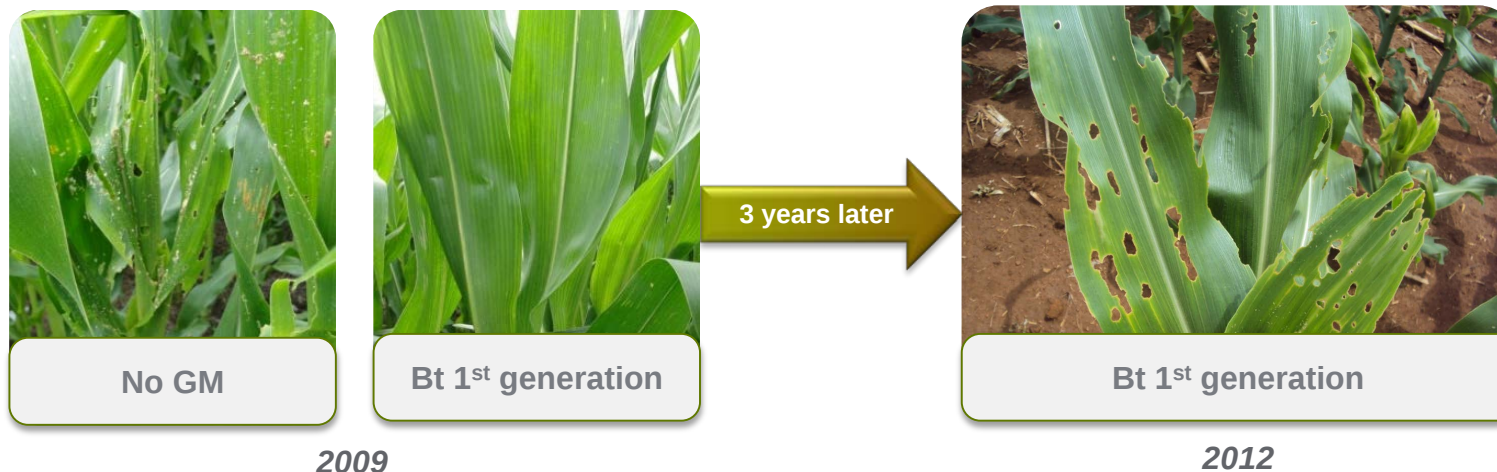


Check



Seed treatments provide complimentary resistance management tools to traits

Background: Breakdown of Bt efficacy against *S. frugiperda* is now common in Latin America



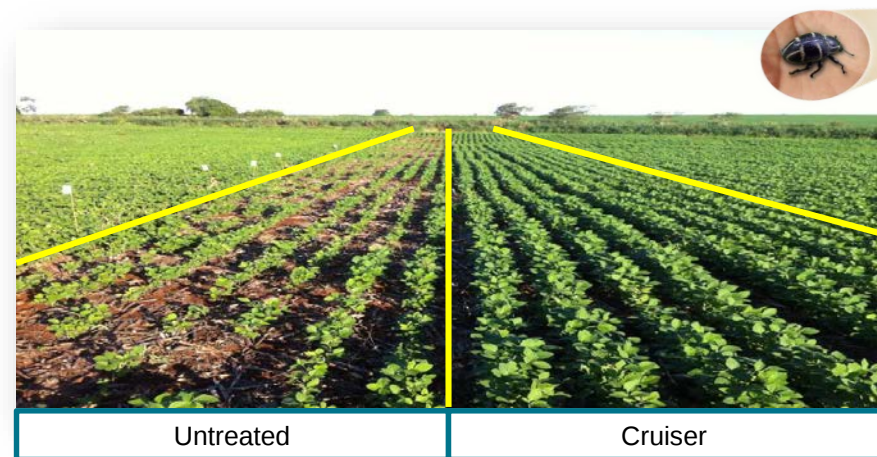
- Sensitive to both (Bt & chemical)
- Resistant to Bt
- Resistant to chemical
- Resistant to both (Bt & chemical)



*A second non-Bt mode-of-action
dramatically eases selection pressure*

Brazil: benefits of seed treatments to soybean farmers

- Protects investment in high-quality seeds
- Proven return on investment
- Best application for certain seed-borne and early season pests and diseases
- Simple and convenient
- Less exposure (worker, crop, environment)
- Ultra-low use rates (e.g. 5% of crop protection rates)



Seed treatments enabling high value soybean market in Brazil

Differentiated portfolio of seed treatment products (including chemicals, biologicals, inoculants, nutrients) applied at industrial level:

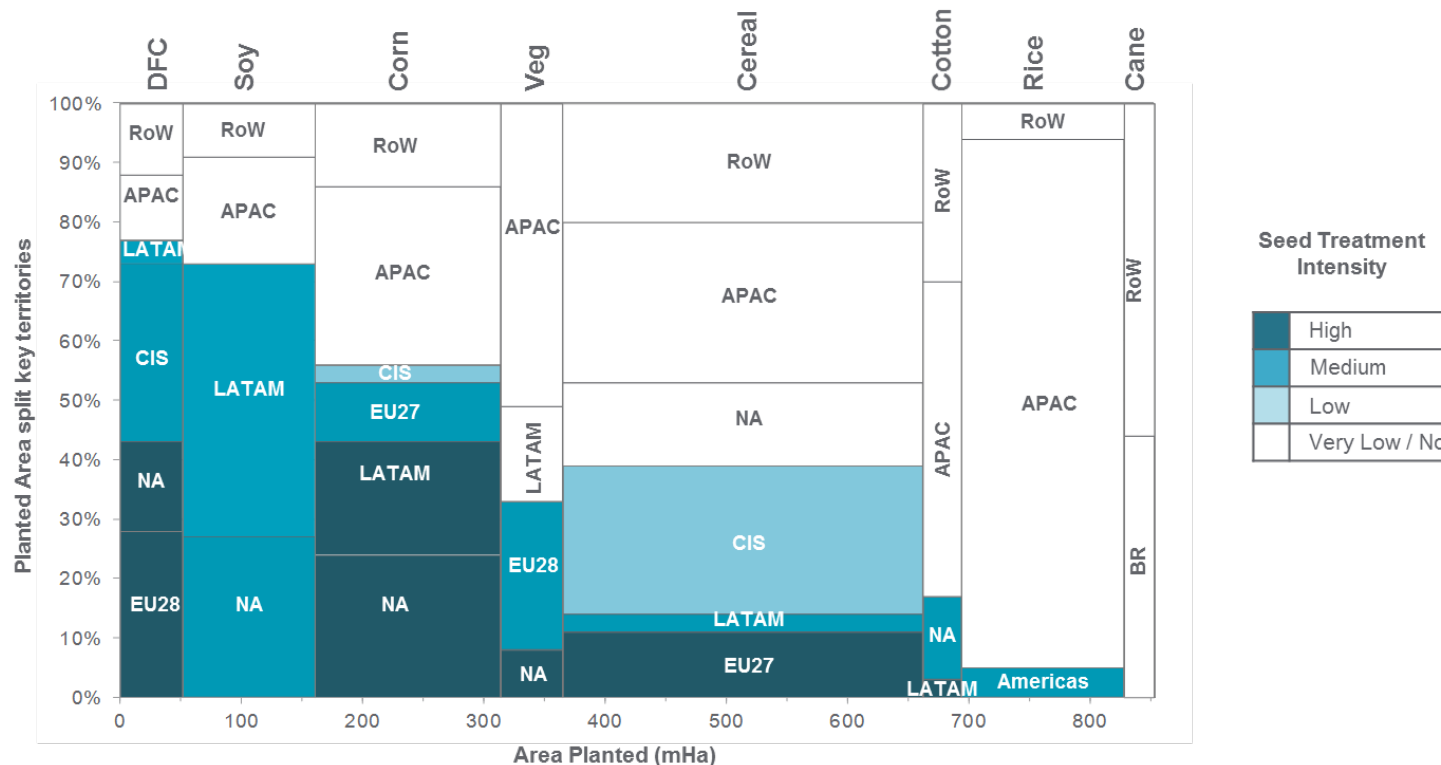
- Performance:
 - Protects own high-value products (germplasm, traits)
 - Maximizes yield potential through protection against biotic & abiotic stresses
- Quality: complete „in-the-bag offer“, no re-opening needed
- Margin opportunity for seed companies



High value seed market enables more R&D investment to further improve yield



The use of seed applied treatments reflects the adoption of high value certified seeds across crops and territories



Key Seeds Drivers

1. Hybridization: Wheat, Rice
2. Adoption of GM Technologies: Corn, Soybean
3. Native Trait development: Vegetables

Implication for Seed Treatments

- Increased adoption in new crops / territories
- Intensification of treatment (fungicide insecticide & nematicide combinations)
- Expansion in abiotic stress protection

The Mexican agricultural industry can benefit from seed applied technologies



OUTLOOK FOR MEXICO...

- GM trait adoption in Corn & Soybean
- Rapid Increase in use of Certified Seed

SEED APPLIED TECHNOLOGY ENABLES...

- Preparation for trait introduction (multi mode of action)
- Complementary to seed performance
- Differentiation & addition of value to the seed bag

BENEFITS!

- Revenue stream for seed companies
- Added value for growers through increased yield
- Promotion of certified seed → your business in Mexico

