



R&D Pipeline Update

The Beginning of What's Next

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Capital Markets Day
March 10-11, 2021

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Head of R&D, Crop Science Division





Cautionary Statements Regarding Forward-Looking Information

This presentation may contain forward-looking statements based on current assumptions and forecasts made by Bayer management.

Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Bayer's public reports which are available on the Bayer website at <http://www.bayer.com/>.

The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.



R&D Strategic Priorities

Delivering World Class Innovation

1

Pursuing sustainable innovation to shape the future of agriculture

2

Delivering the leading R&D pipeline in scale, productivity and value

3

Leading the development of next-generation biotech traits

4

Optimizing large and diverse germplasm library with advanced breeding technologies

5

Advancing new approaches in small molecule and biologicals

6

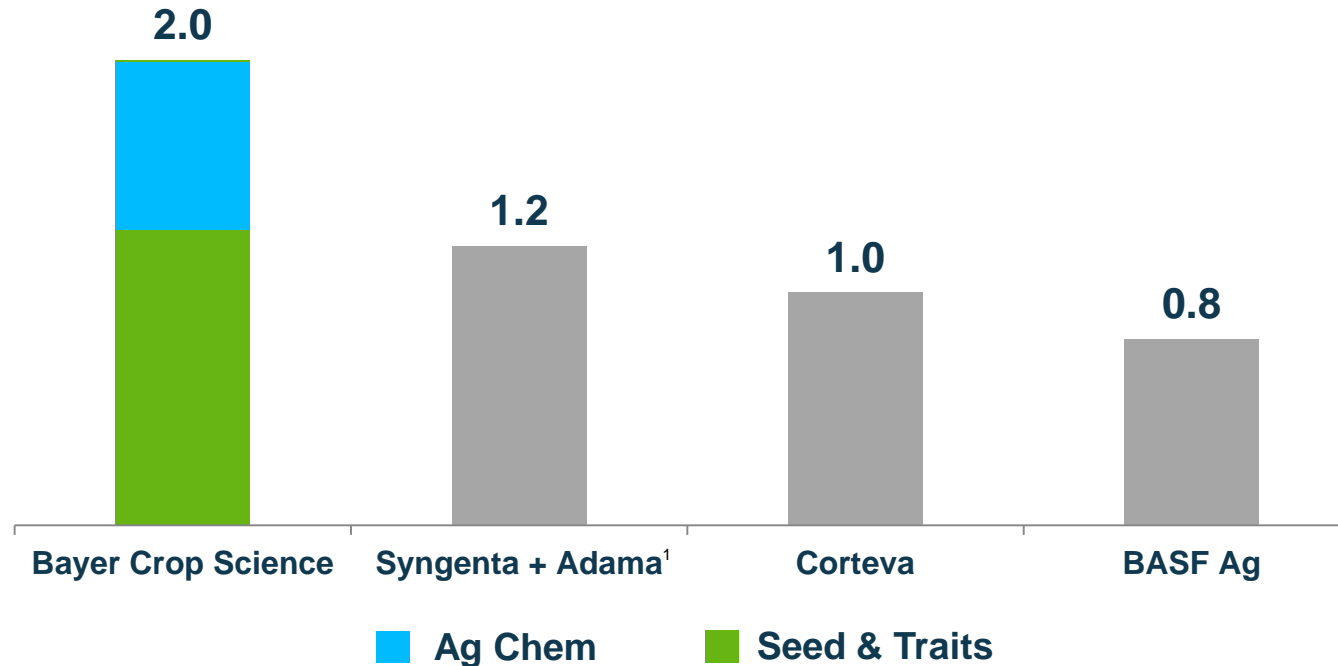
Unlocking opportunities for new business models, powered by data science



Unmatched R&D Investment Powers Industry-Leading Portfolio

Shaping the Future of Agriculture with Sector's Most Productive Innovation Platform

Ag R&D Investment (€bn)³



#1 R&D Platform
in Crop Science



- Fueled by **~7,100** R&D employees² in **>50** countries

¹ Represents the legacy Syngenta results plus Adama. Excludes non-agro business sales of ADAMA (nutritional supplements, aromatic products, industrial products). Syngenta Group formal reporting did not begin until H1 2020.

² Includes permanent and temporary employees

³ Company information ; exchange rate: FY 2019: ~1.14 USD/EUR. 2020 Reported results for all companies except Syngenta = 2019 reported results. Bayer R&D excludes impairment charges.



>100 Technology Agreements Fuel Open Innovation Model

From LEAPS to Licensing, Partnerships Power the Ability to Drive Disruptive and Iterative Innovation

Partner of choice, with >100 technology collaborations, customer-sponsored research initiatives, venture capital agreements and crowdsourcing powering our open innovation model

Sustainable Protein Supply



Solutions to Help Farmers Control Crop Threats



Breakthrough Biology and Next Generation Genomics



Transformational Technology/AI Unlocking New Research and Business Models





Breadth and Depth of Five Core R&D Platforms Power Innovation

Convergence of Leading R&D Platforms to Unlock Next Layer of Value Creation in Agriculture

BEST-POSITIONED TO DISCOVER, COMBINE AND TAILOR SOLUTIONS FOR GROWERS

SEEDS & TRAITS



Breeding

Leading germplasm libraries

Advanced breeding and data science technology application

1.7P calculations in cloud-based algorithms

>3,200 unique field testing locations

>430 deployments annually in corn, soybeans, vegetables



Biotech

Extensive protein libraries and leaders in protein optimization technology

First to combine RNAi technology with biotech

>1.5bn datapoints generated by Precision Genomics team to deliver biotech traits and accelerate genetic gain

>20 new and next-gen. traits in development

Reach **>350m** acres annually

CROP PROTECTION



Chemistry

Strong discovery platform for molecules with new modes-of-action and differentiated profiles

2x new small molecule candidates in discovery since 2015

30-60 molecules selected for field trials a year

Expect **~100** new formulations to launch in the next decade



Biologicals

270,000 microbes in collection

>100,000 strains characterized every year with in silico, in vitro and in planta assays

>1,400 trials in 38 countries in 2020

~80m acres of commercial products in row crops annually

DIGITAL AG



Data Science

#1 database of grower and field trial seed performance data in the industry

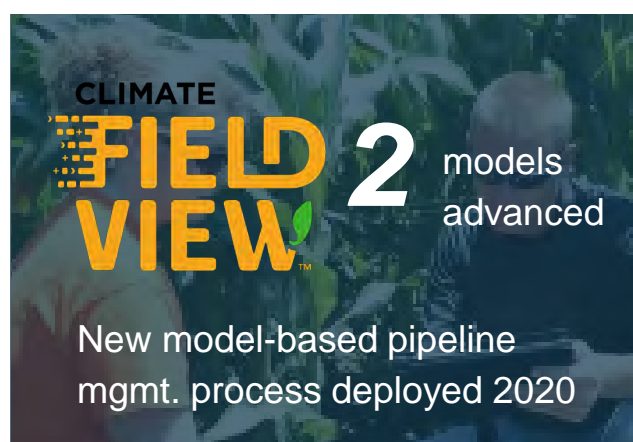
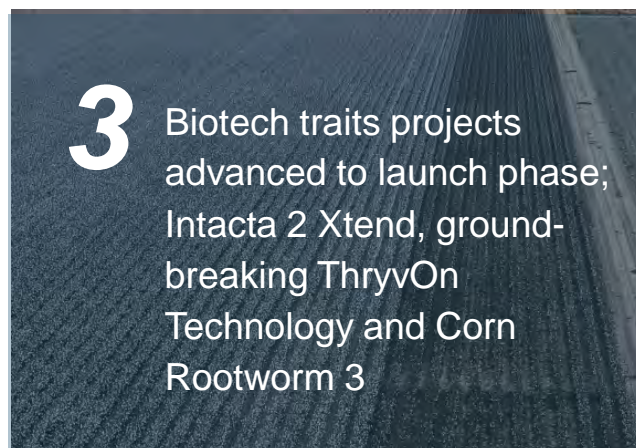
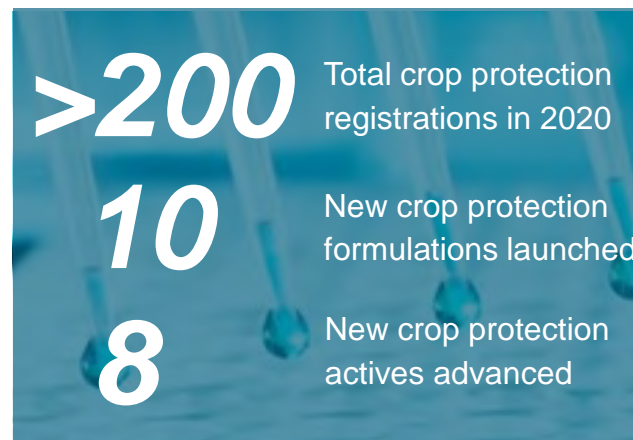
>69bn data points of product performance under real-world farmer management practices

>150m subscribed acres across 23 countries



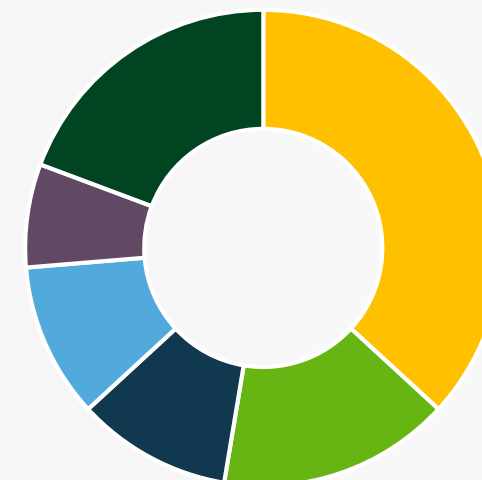
Meaningful Advancement of Most Valuable R&D Pipeline in Ag in 2020

Converting Industry Leading Investment into New Products for Farmers



Value of Up to €30bn in Peak Sales¹

~50% Incremental



■ Corn
■ Soybeans
■ Fungicides
■ Herbicides
■ Insecticides
■ Other

¹ Represents non-risk adjusted estimated peak sales for the combined breeding, biotech, crop protection and environmental science pipelines, as well as new business models and new value areas.



Unmatched Innovation Pipeline is Set to Drive Growth

Total Pipeline Peak Sales Potential Up to €30bn²; ~50% Incremental

	Peak Sales Potential	Corn S&T	Soybean S&T	Herbicides	Fungicides	Insecticides	Other, Vegetables, Environmental Science
		~€10-11bn	~€4-5bn	~€3bn	~€3bn	~€2bn	~€5-6bn
Expected Ongoing Refreshment		150+ New Hybrids Commercialized Annually	150+ New Varieties Commercialized Annually	35+ New Formulation Launches in the next Decade	20+ New Formulation Launches in the next Decade	20+ New Formulation Launches in the next Decade	~130 Vegetable Hybrids/Varieties Commercialized Annually 20+ New Formulation Launches in the next Decade
Select Planned Product Launches	2021 – 2024	SmartStax^{PRO} VT^{PRO}4⁺ Short Stature Corn Hybrids	TENDFLEX^{SOYBEANS} PLATAFORMA INTACTA²_{XTEND}	INCELO[®] Mateno[®]	DELARO[®] Complete iblon[®] TECHNOLOGY (Isoflucypram) Fox Supra (Indiflin [®]) ¹ Xivana[®] (Fluoxapiprolin) ³	Plenexos (Spidoxomat) ³ Belt Smart	ThryvON[™] TECHNOLOGY Carbon Business Model
	2025 – 2030	Short Stature Corn Trait Next Generation Herbicide Tolerance Traits	Soybean Herbicide Trait Stack with Five-Tolerances 3 rd Gen. Soybean Insect-Control Trait	New Non-Selective PPO Herbicide ¹ New Mode of Action Herbicide	New Fungicide for Asian Soybean Rust	Decis Phoenix Novel Mite Solution	4 th Generation Bollgard Cotton Trait Dicamba-Tolerant Canola Trait

Note: Subject to regulatory approvals and pending registrations. Represents a subset of the pipeline. Launches are all approximate.

¹ In collaboration with Sumitomo ² Company estimate ³ Products not registered in all jurisdictions



next-generation
biotech
traits

Scale and Expertise in Biotech Crop Development Lead the Industry

Developing World-Class Biotech Traits and Crops

Trait Development Process (12-15 years)





Next-Gen Soy Traits to Offer Greatest Weed Control Flexibility

Technologies Provide Solutions to Address Farmer Needs, Herbicide Resistance Challenges

Fourth-Gen Phase 3

5 herbicide
tolerances

- Glyphosate
- Dicamba
- Glufosinate
- HPPD
- 2,4-D



Control

Soybean HT4

2020 Demo Plot in Monmouth, Illinois
(First treatment is dicamba and Enlist @ V3
followed by Liberty and Callisto @ R1)

¹ In collaboration with Sumitomo

Fifth-Gen Phase 2

6 herbicide
tolerances

- Glyphosate
- Dicamba
- Glufosinate
- HPPD
- 2,4-D
- PPO¹



Control

Soybean HT5

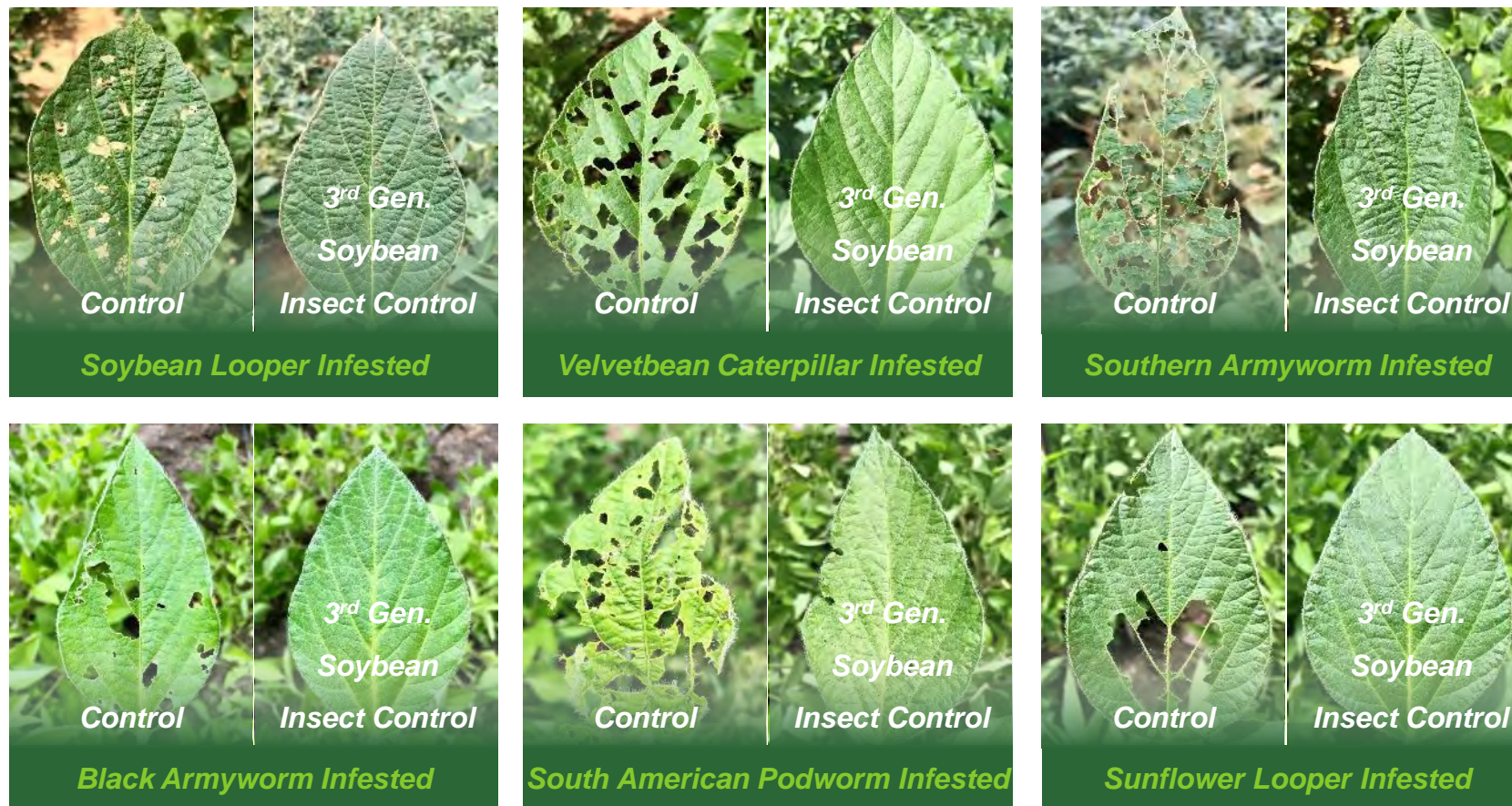
2020 Demo Plot in Monmouth, Illinois
(3X rate PPO herbicide @ V3 & R1)



Enables
continued use
of conservation
tillage and no-
till systems
which improve
carbon
sequestration
and soil health

Third-Gen Intacta Further Enhances Insect Control Spectrum

Intacta 2 Xtend launches in 2021; Next-Generation Currently in Phase 3



- Builds on the Intacta franchise technologies by delivering multiple modes-of-action for insect control
- Phase 3
- Acre opportunity focused on Brazil market



Reduces insecticide use and the environmental impact of the crop protection program

¹ Pending regulatory approvals
Always read and follow label instructions. Products not registered in all jurisdictions.



First Biotech Trait to Launch for Piercing and Sucking Insects

NEW: USDA Deregulation of Trait Paves Way for 2021 U.S. Stewarded Ground Breakers Program

- Protein design and optimization resulted in a protein that controls targeted piercing/sucking insect pests through expression in the plant tissues they attack
- Built-in technology will help protect cotton and may help reduce insecticide applications for tarnished plant bugs and thrips species¹, providing more management flexibility



Reduces
insecticide use
and the
environmental
impact of the
crop
protection
program

¹ ThryvON™ Technology has proven protection against tobacco thrips (*Frankliniella fusca*); Western flower thrips (*Frankliniella occidentalis*); tarnished plant bug (*Lygus hesperus*); and the Western Tarnished Plant bug (*Lygus lineolaris*). Scouting is critical to determine which and how many insecticide applications are recommended when economic thresholds are met

Glendora, Mississippi, U.S.A.
Planting date May 13, 2020; Picture taken Nov. 4, 2020



Next-Gen Insect Control Traits in Corn Launching Near-Term

Below- and Above-Ground Insect Control Refresh with Broader Spectrum, Better Efficacy

Aug. 9, 2019 Demo Plot Root Dig in Waterloo, Iowa, U.S.



Non-CRW



SmartStax® PRO

- **ADVANCING TO LAUNCH:** Recent China import approval paves way for planned commercial launch in 2021-2022 for Corn Rootworm 3, i.e. SmartStax PRO and VTPRO4
- Includes novel RNAi MOA introduced through CRW3
- Acre opportunity of >75m

2018-2019 Season at V5-V6 in Sorriso, MT, Brazil



Control (Non Bt)

4th Gen. Lep
Protection

- **NEW:** Recent full cultivation approval in Brazil represents a critical milestone for planned commercial launch in 2025
- First 2 new MOA in Brazil for fall armyworm in more than a decade



Root and leaf protection ensures optimum use of fertilizers and sunlight for maximum yield potential.

Game-Changing Short Stature Corn Shows Improved Standability

High Wind Events in Bayer Field Trials Consistently Demonstrate a Reduction in Severity of Damage

Three Approaches to Short Stature Corn To Provide Market Access Flexibility

Breeding: Phase 3

- Advanced breeding used to introgress naturally occurring short stature characteristic into elite germplasm

Biotechnology: Phase 3

- In collaboration with BASF, uses transgene to shorten internodes; enables applicability across wide-array of germplasm

Genome Editing: Discovery

- Multiple, elegant approaches to generate short-stature corn, creating potential for opportunities in multiple markets

- In this photograph from Iowa in summer 2020, Short Stature Corn plots (surrounded in red) are still standing, compared to wind damaged taller corn that borders it.



advanced
breeding
technologies





Annual Germplasm Upgrade Drives Growth and Attracts Partners

Global Germplasm Libraries and Advanced Breeding Tools Deliver High-Performing Seeds

Corn



- Deployed >200 new hybrids in 2020; offer >1,350 hybrids globally
- >7 bu/acre U.S.A. yield advantage with leading hybrids¹ in like-for-like trait package hybrid comparisons

Soybeans



- Deployed >200 new varieties in 2020; offer >850 varieties in the Americas
- **Top volume XtendFlex Soybeans have a 4+ bu/ac advantage vs. Enlist E3 in germplasm trials²**

Cotton



- Deployed >10 varieties in 2020; offer >25 varieties in the U.S.
- U.S. lint/acre yield advantage with leading varieties; 2020 was 88 lbs./ac advantage for Deltapine vs. top-planted competitor varieties

Vegetables



- Deploy ~130 varieties annually; focus in tomatoes and peppers; sell over 21,000 vegetable hybrids and varieties in 22 crops annually
- Focus on disease resistance and yield with new launches

Protect performance with seed-applied solutions

Provides for annual price mix gains as growers trade up to higher-performing seeds

Digital Ag becomes proof point for performance advantage

¹ Bayer estimates – Annual yield advantage calculated each year by comparing 3 leading DEKALB products within each state having a minimum of 100 comparisons to national competitor products containing similar crop protection traits as of February 2021. All comparisons are head-to-head using +/- 2RMs and weighted average calculated using 15% moisture. ² Data as of October 22, 2020. 2020 Bayer Commercial Germplasm Trials (94 locations in 2020 reporting data located in IL, IN, IA, KS, MD, MI, MN, MO, NE, OH, SD, TN, and WI) Bayer Commercial Germplasm Trials = 9 of the top 10 volume forecasted XtendFlex products.

Scale and Leading Technology Drives New Seed Development

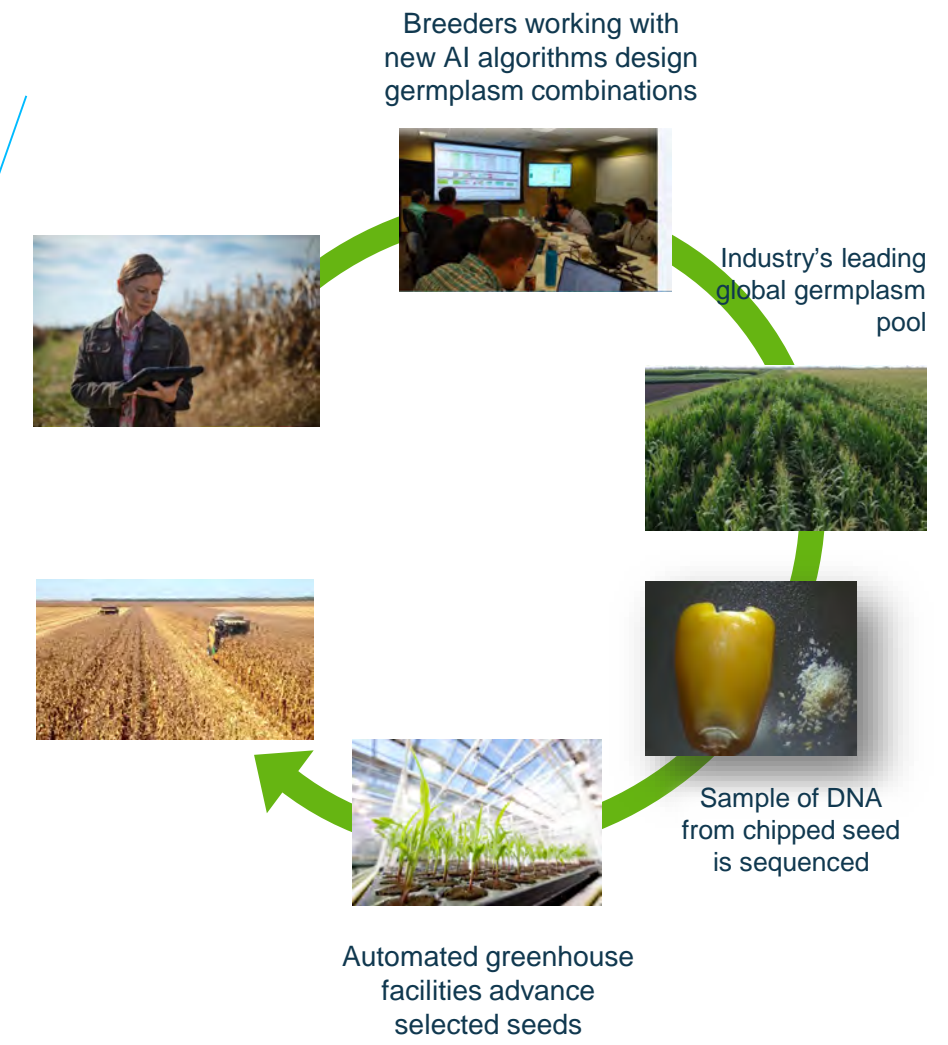
Optimizing Extensive Germplasm Library to Develop New Capabilities for Better Customer Solutions



Precision Breeding: Moving from Selecting the Best with Breeding 3.0 to Designing the Best Seeds for Farmers

Uses Advanced Genetic Models and Selection, Environmental Modeling and Predictive Analytics

- Powered by customer needs and insights, our data scientists **generate digital product concepts and requirements**
- Using our vast germplasm library and cutting-edge genomic selection model, **AI models – supervised by scientists – design germplasm to meet concepts**
- New breeding and selection methods and our automated greenhouse facilities **quadruple the rate of product improvement**
- Prescriptive field testing operations evaluate potential new products across diverse growing environments/farming practices to **advance best product concepts** for customers

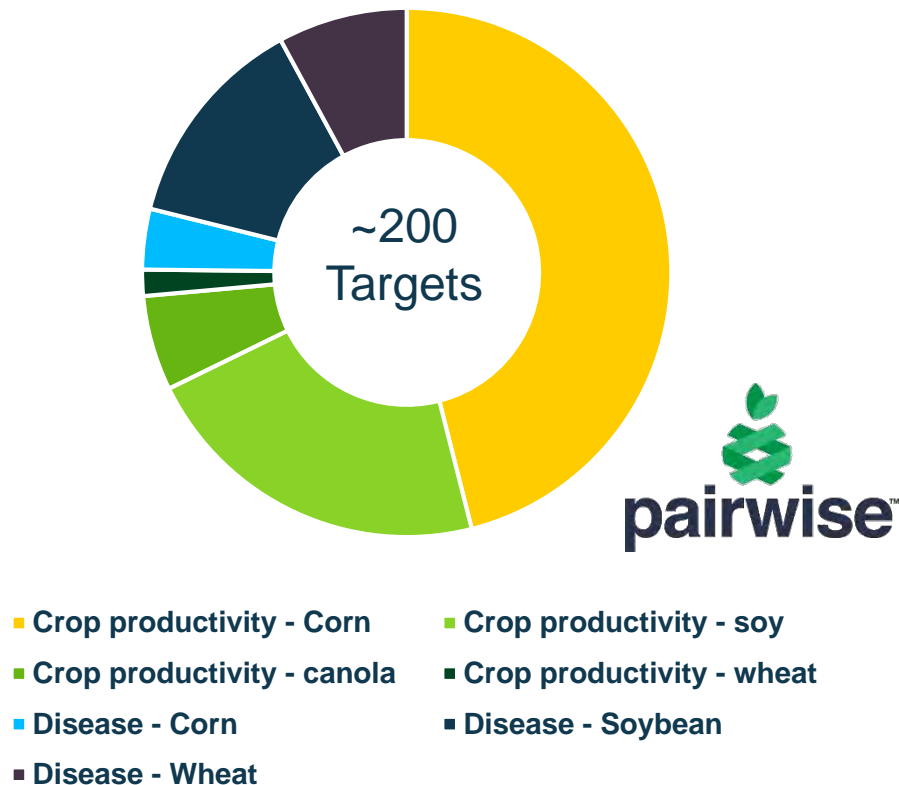




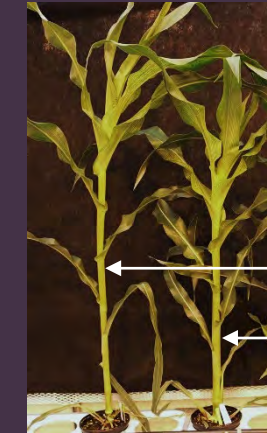
Gene Editing Targets With High Commercial Relevance Accelerating

Nearly 200 Target Identified in Several Technically Challenging Focus Areas

Gene Editing Pipeline Targets Across Crops
Collaboration with Pairwise Included



- Corn crop productivity editing target results in short stature corn phenotype



Control
Edited

- Corn crop productivity editing target results in increased kernel rows





new approaches in
crop
protection





Small Molecule Candidates in Discovery Phase Double

Driven by Continued Strategic Enhancements to Identify and Optimize Candidates

Drivers

Weed, Insect and Fungal Resistance

Regulatory Pressure on Old Chemistries

Increasing Regulatory Hurdles for New Products

Strong Reliance on a Few Modes of Action



Redefining Our Approach

Supported by Data Science Approaches



Biological Screening

increased automation and data science



Phenotyping

finds new starting points missed with conventional screening



Target-based Screening

direct focus on new Modes of Action



Early Safety Testing

drives optimization toward registrable compounds



>70%

New/unknown MoAs of all running Discovery projects (all Indications).

2x

New Small Molecules Candidates in Discovery since 2015



Well Positioned to Maintain Track Record of Success in Small Molecules

Bayer Has Launched At Least One New Active Ingredient (AI) Per Year Since 2007

Industry Leading Performance in CP Development

- Across all indications, the company has consistently – and significantly – outperformed all other players in Crop Protection
- 15 new AIs launched since 2007; ~10 AI in the current development pipeline

Early Safety Testing Focuses Efforts on Registrable Compounds

- Increasing regulatory standards globally make it more challenging – and expensive – to bring CP innovation to market
- However, Bayer expects to maintain high innovation output, increasing the proportion of novel MoA in the second half of the decade

Industry Leading In-House Innovation Engine Supplemented by Strategic Technology Development Agreements

- Development capability and capacity to enable key innovation from other ag companies to addresses critical key grower needs not covered by in-house innovation; doing consistently, with 6 co-developments from 2010-2025
- Highly trusted partner to smaller ag players, enabling them to bring their innovative solutions to a broader community of growers.

A Promising Project Pipeline: Active Ingredients in Development Phase of Pipeline (Phases 2-4)

Herbicides

- **Novel PPO Herbicide¹** Phase 3
- **New Herbicide MOA** Phase 3

Fungicides

- **iblon** Advancing to Launch
- **Fox Supra¹** Phase 4
- **Xivana** Phase 4
- **New Fungicide** Phase 2

Insecticides

- **Plenexos** Phase 3
- **Novel Mite Solution** Phase 3

¹ In collaboration with Sumitomo

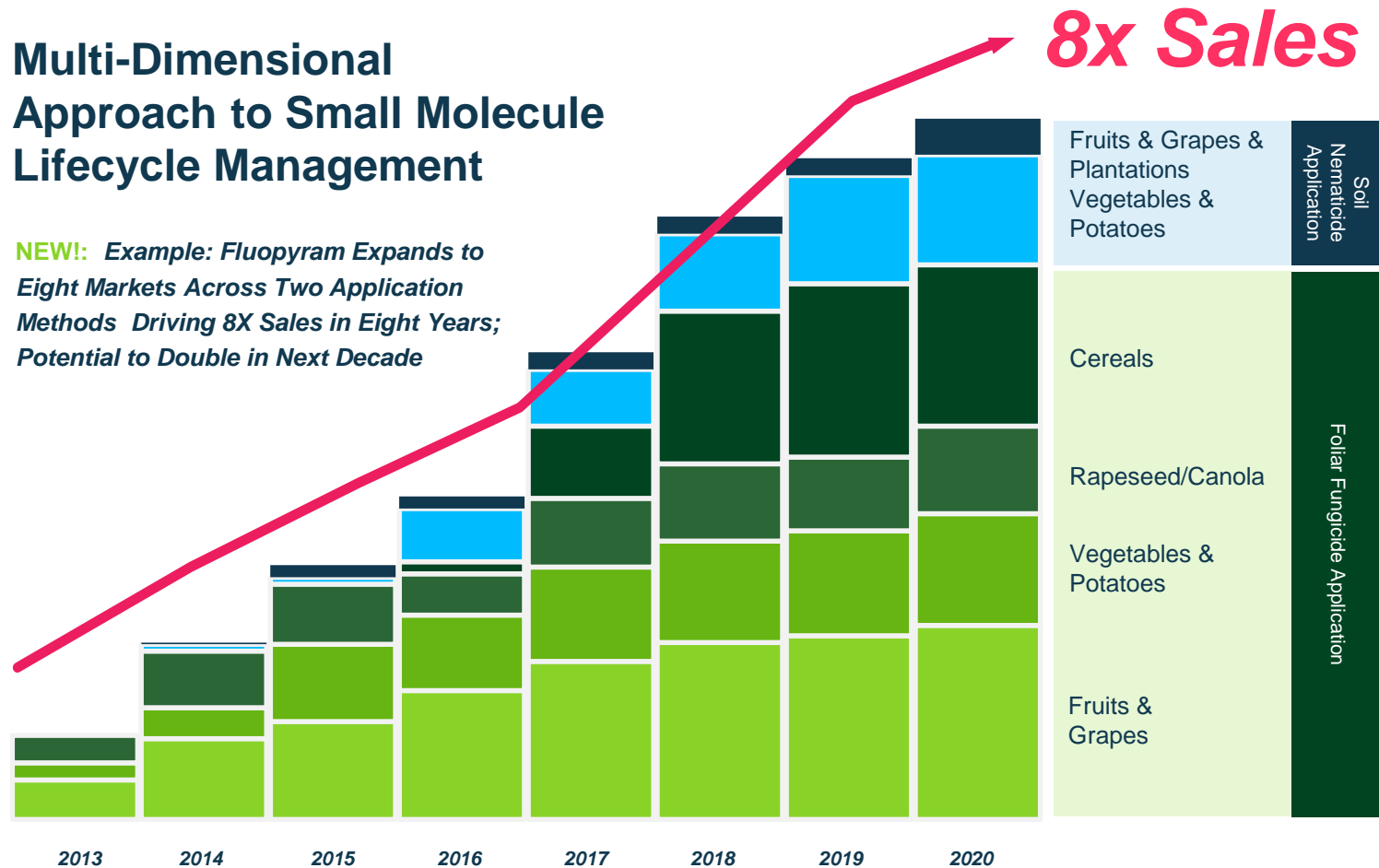


Scale, Innovation Underpin Excellent Life Cycle Management

Sustains Value Generation from Crop Protection Small Molecule Chemistry

Multi-Dimensional Approach to Small Molecule Lifecycle Management

NEW! Example: Fluopyram Expands to Eight Markets Across Two Application Methods Driving 8X Sales in Eight Years; Potential to Double in Next Decade



Enablers of Unique Life Cycle Management in Crop Protection

Active Ingredient Stewardship

- Sustainable and consistent resistance management
- Responsible maximum soil loading guidelines

Grower Convenience

- Differentiated formulations for the application methods
- Ready mixture solutions for built-in resistance management and broader spectrum of activity
- Compatibility for tank mix and rotation in the program of treatment, especially with biologicals

Plenexos: The Next Generation Ketoenol Insecticide

First Launches Expected in 2024; > €300m Peak Sales Potential

NEW: First ketoenol insecticide expected to offer both foliar and soil uses

Plenexos will enhance ketoenol insecticides by offering:

- High plant mobility, which ensures high efficacy against key sucking pests (aphids, white flies) at low dose rates for foliar and soil uses
- Will feature a broad crop scope, as the ketoenol Spidoxamat² is suitable for application in arable and horticulture crops (soybeans, cotton, fruits and vegetables)
- Regulatory submissions in key markets planned in 2022, approvals expected starting in 2024
- Targeted markets: LATAM, NA, APAC and TAMECIS¹

Developed under the guidelines of Bayer's new Sustainability Development Policy, to meet regulatory requirements of today and tomorrow



Increases
productivity
per acre
through
improved
insect control

Always read and follow label instructions. Products not registered in all jurisdictions. ¹ TAMECIS stands for Turkey, Africa, Middle East, Commonwealth of Independent States ² Commercialization is dependent on multiple factors, including successful conclusion of the regulatory process. The information presented herein is provided for educational purposes only and is not and shall not be construed as an offer to sell, or a recommendation to use, any unregistered pesticide for any purpose whatsoever. It is a violation of federal law to promote or offer to sell an unregistered pesticide.



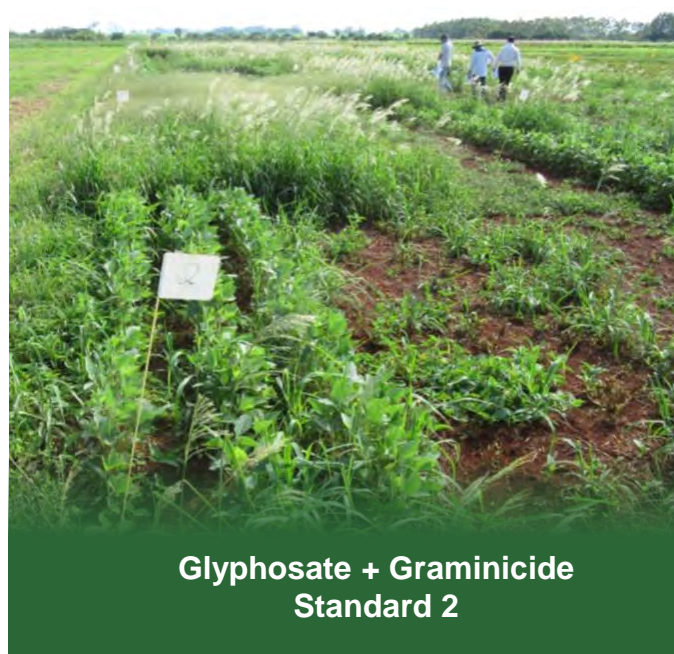
New Herbicide Molecule Unlocks Greater Flexibility

First New Mode of Action for Post Emergence Weed Control in 30 Years Advances to Phase 3

Potential to build on #1 position in global herbicides¹



Glyphosate
Standard 1



Glyphosate + Graminicide
Standard 2



Mix Partner + New Herbicide
Product concept with new active

- **NEW:** Project advances to Phase 3, following Phase 2 advancement last year
- Allows use in various market segments, beyond traditional nonselective use
- Opens new opportunities for herbicide tolerance trait systems in major crops; discovery program launched

¹ Internal estimates



Enables
continued use
of conservation
tillage and no-
till systems
which improve
carbon
sequestration
and soil health



Fox Supra Fungicide Upgrades Fox Franchise in Brazil

New technology to control Asian Soybean Rust; >€500m Peak Sales Potential Opportunity

Builds on #1 position in soybean fungicides¹

- Long-lasting solution to offer unrivaled control of Asian Soybean Rust, the most difficult to control and commercially most relevant disease for soybean growers in Brazil
- Indiflin^{®2}, a new technology which is exceptionally strong in Asian Rust control, is an innovative AI that will be the new technological backbone of the Fox family
- Fox Supra combines the next-generation technology Indiflin[®], with Prothioconazole, another leading soy fungicide with a different mode of action, both helping to reduce the development of resistance and to broaden the spectrum of efficacy to other relevant diseases
- The outstanding and long-lasting disease control provided by Fox Supra will enable growers to increase yield



Standard (Fox)



Fox Supra



Increases
productivity
through
improved
Asian Soybean
Rust control

¹ Internal estimates ² In collaboration with Sumitomo.

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Exploring New Product Concepts Drives Future Growth for Biologics

Open Innovation approach broadens product offerings with exceptional product development and support





Serenade[®] : Delivering Biologic Growth in Expanding Markets

Accelerated growth in emerging soil and expanding foliar bacterial markets across fruit & vegetable



NEW – Serenade Soil Activ propels growth of Serenade brands >€150M peak net sales in next 10 years

Serenade “lighthouse” brand and unique *Bacillus amyloliquefaciens* strain QST 713 delivers sustainable solutions in emerging soil and expanding bacterial disease markets via Tailored Solutions

- Serenade ASO brand offers unique MOA components to control foliar bacterial and fungal diseases, while reducing resistance risk and reducing residues
- Serenade Soil Activ provides farmers handling efficiency with low use rates and higher concentration of spores for fast root colonization, generating increased marketable yields with improved quality and nutrient density
- Serenade Soil Activ launching in the U.S. and Australia in 2021, in Turkey in 2023 and broader global uses to follow
- Targeted markets: **NA, EMEA, APAC and LATAM**



Sustainably increases marketable yield with spores optimized for improved root colonization

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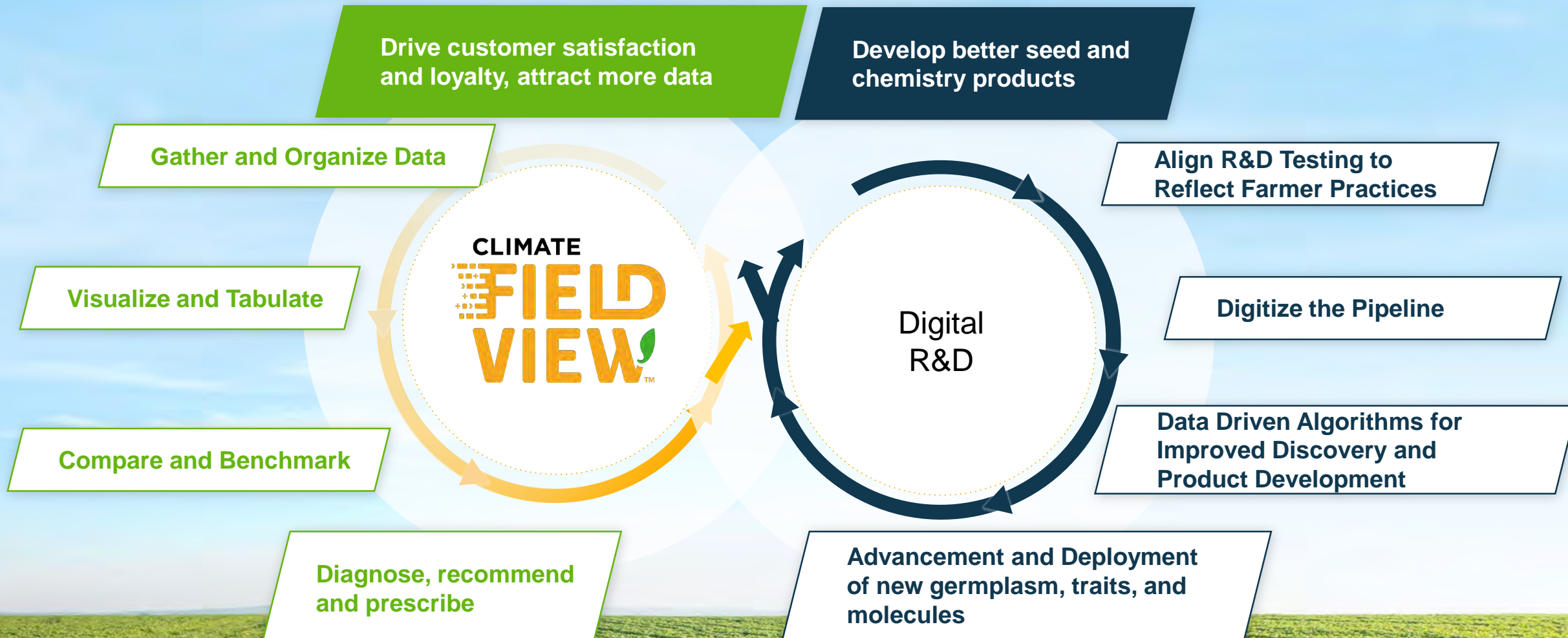
powered by
data
science





Data is Digital Currency to Build a Global Integrated Platform

Continuous Circle of Value Creation from Richer Data Sets, Leading to Smarter Digital Tools



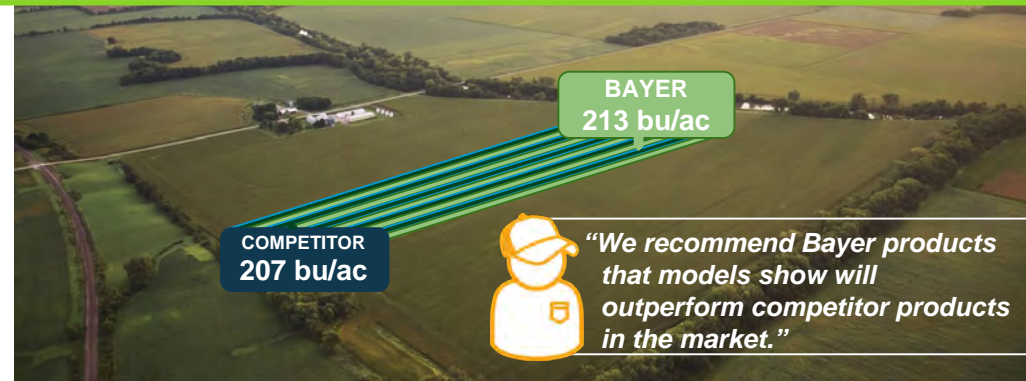


Digital Insights Unlock Opportunity to Farm in New & Different Ways

Quantitative Comparisons and Analysis Can Further Optimize Performance, Improve Ag Practices

EXAMPLE 1: Seed Advisor Models Improve Productivity Per Acre With Better Seed Placement Recommendations

- Models powered by **>6.9m data points from >8,600 hybrids and >70,000 fields**
- 2017-2020 testing demonstrates **6 bu/ac yield lift** using recommendations
- Product enhancements using **FieldView data improve placement accuracy**



EXAMPLE 2: Showing Growers the Value of Fungicide Applications Through Their Own Data

- Delaro Performance Showcase highlighted benefits of timely fungicide application with an **untreated strip between two Delaro fungicide treated strips**
- Planting and Delaro application data captured in FieldView
- Bayer data demonstrate that 74% of the time, farmers see a positive response from fungicide application





Key Takeaways

Delivering World Class Innovation

1

Pursuing sustainable innovation to shape the future of agriculture

2

Delivering the leading R&D pipeline in scale, productivity and value

3

Leading the development of next-generation biotech traits

4

Optimizing large and diverse germplasm library with advanced breeding technologies

5

Advancing new approaches in small molecules and biologicals

6

Unlocking opportunities for new business models, powered by data science



March 2021 Pipeline

Strategic Business Entity R&D Pipeline





Corn R&D Pipeline – Peak Sales Potential: €10-11bn

R&D Target	Technology			Phase*				Enhancement**		
	Dig	Br	PBt	1	2	3	4	Dev.	Subm.	
YIELD & ABIOTIC STRESS										
// Annual germplasm upgrades		✓								
// Short Stature Corn		✓								
// Short Stature Corn ¹			✓							
// Seed Placement										
// North America	✓							NEW		
// Seed Density										
// North America ²	✓									
// EMEA	✓									
// LATAM	✓									
PEST MANAGEMENT										
Chewing Pests										
// Above Ground (Lepidoptera)										
// 4 th generation Lepidoptera protection			✓							
// 5 th generation Lepidoptera protection			✓							
// Below Ground (Coleoptera)										
// Corn Rootworm ³ (i.e. SmartStax PRO and VTPRO4)			✓					adv. to launch		
// 4 th generation Coleoptera protection			✓							
DISEASE MANAGEMENT										
Plant Health Systems										
// Corn Disease Shield - Annual upgrades		✓								
// Digital Disease Management										
// North America	✓									
WEED MANAGEMENT										
// Herbicide tolerance										
// 4 th generation weed management system with RHS2			✓							
// 5 th generation weed management system			✓							

RHS2 = Second Generation Roundup Hybridization System ¹ In collaboration with BASF ² Ongoing upgrades to both commercialized and next-generation capabilities

*R&D Phases:

1 – Research, 2 – Early Development, 3 – Late Development, 4 – Registrations Filed

**Product enhancement: (Life Cycle Management activities)

Dev. – Under development; Subm. – Submitted for Registration

Br Breeding – incl. native traits and molecular breeding

PBt Plant Biotech – biotechnology traits

Dig Digital –models and algorithms that enable digital agricultural tools

Progress achieved Phases 1 through 4

Status indication for Life Cycle Management Items

Strategic collaborations

Represents annual advancements and upgrades

Pipeline status highlighting significant development, progress or advancement in R&D Pipeline (pink) and Key Life Cycle Management (blue) work.



Soybean R&D Pipeline – Peak Sales Potential: €4-5bn

R&D Target	Technology			Phase*				Enhancement**	
	Dig	Br	PBt	1	2	3	4	Dev.	Subm.
YIELD & ABIOTIC STRESS									
// Annual germplasm upgrades		✓							
// High Yielding Soy ¹			✓						
// Seed Placement									
// North America	✓								
PEST MANAGEMENT									
Chewing Pests									
// Insect Protection									
// 2 nd generation insect protection			✓						
// 3 rd generation insect protection			✓						
Nematodes									
// Plant health systems									
// 2 nd generation Soy Cyst Nematode resistance		✓							
DISEASE MANAGEMENT									
// Soy Native Resistance – Annual Upgrades		✓							
// Digital Disease Management									
// North America	✓								
WEED MANAGEMENT									
// Herbicide tolerance									
// 4 th generation weed management system			✓						
// 5 th generation weed management system			✓						

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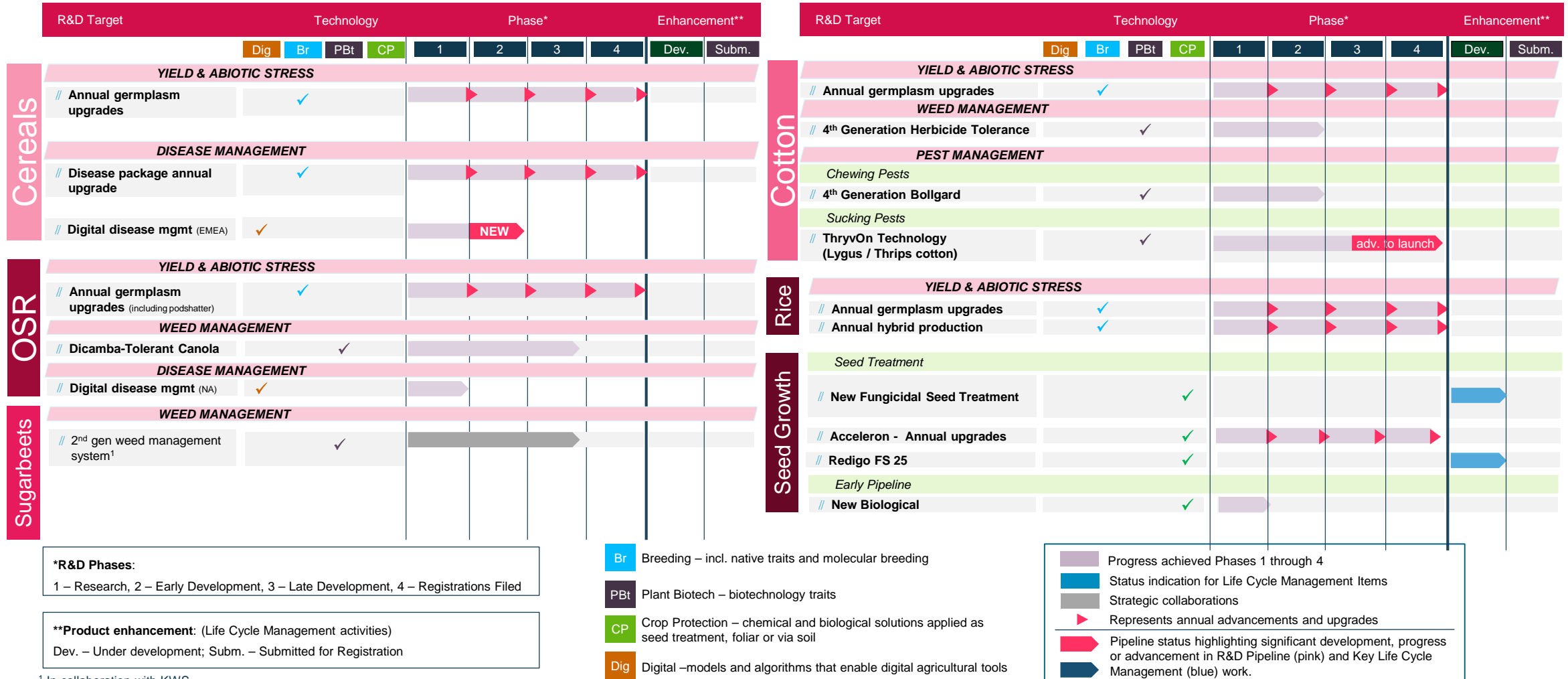
Strategic collaborations

Represents annual advancements and upgrades

Pipeline status highlighting significant development, progress or advancement in R&D Pipeline (pink) and Key Life Cycle Management (blue) work.

¹ In collaboration with BASF

Other R&D Pipeline – Peak Sales Potential: ~€5-6bn





Herbicides R&D Pipeline – Peak Sales Potential: ~€3bn

R&D Target	Crop				Phase*				Enhancement**	
	Corn	Soy	Other	F/V	1	2	3	4	Dev.	Subm.
<i>New AI Development</i>										
// Novel PPO Herbicide ¹	✓	✓	✓							
// New Herbicide MOA	✓	✓		✓			NEW			
// New Herbicide MOA			✓		NEW					
// New Herbicide MOA	✓				NEW					
<i>LCM Non-Selective</i>										
// Improved Dicamba formulations	✓	✓	✓							
// Improved Dicamba & Glyphosate Premix	✓	✓	✓						adv. to launch	
// Alion LCM				✓						
<i>LCM Selective</i>										
// Balance Flexx LCM	✓									NEW
// Merlin Flexx / Adengo LCM	✓									NEW
// New Soybean selective herbicide 3-way mixture		✓								
// New Soybean selective herbicide 2-way mixture		✓								
// Warrant LCM		✓							adv. to launch	
// Mateno Complete			✓							
// Pyrasulfotole LCM			✓							
// Council Star			✓							
// Incelo			✓						adv. to launch	
// Betanal LCM			✓						NEW	
// Herbicide Formulation for UAV			✓						NEW	

*R&D Phases:

1 – Research, 2 – Early Development, 3 – Late Development, 4 – Registrations Filed

**Product enhancement: (Life Cycle Management activities)

Dev. – Under development; Subm. – Submitted for Registration

¹ In collaboration with Sumitomo

Corn

Soy

Other Crops including cereals, oilseed rape, sugarbeets, cotton and rice

F/V Fruits and vegetables

- Progress achieved Phases 1 through 4
- Status indication for Life Cycle Management Items
- Strategic collaborations
- Represents annual advancements and upgrades
- Pipeline status highlighting significant development, progress or advancement in R&D Pipeline (pink) and Key Life Cycle Management (blue) work.



Insecticides R&D Pipeline – Peak Sales Potential: ~€2bn

R&D Target	Technology				Phase*				Enhancement**	
	Corn	Soy	Other	F/V	1	2	3	4	Dev.	Subm.
<i>Chewing Pests</i>										
// Belt Smart	✓	✓								
<i>Sucking Pests</i>										
// Rice Planthopper Insecticide			✓						NEW	
// New Biological Insecticide				✓						
// Plenexos		✓	✓	✓						
// Novel Mite Solution	✓	✓	✓	✓			NEW			
<i>Chewing & Sucking Pests</i>										
// Decis Phoenix	✓		✓	✓					NEW	

*R&D Phases:

1 – Research, 2 – Early Development, 3 – Late Development, 4 – Registrations Filed

**Product enhancement: (Life Cycle Management activities)

Dev. – Under development; Subm. – Submitted for Registration

Corn Corn

Soy Soybeans

Other Crops including cereals, oilseed rape, sugarbeets, cotton or rice

F/V Fruits and vegetables

	Progress achieved Phases 1 through 4
	Status indication for Life Cycle Management Items
	Strategic collaborations
	Represents annual advancements and upgrades
	Pipeline status highlighting significant development, progress or advancement in R&D Pipeline (pink) and Key Life Cycle Management (blue) work.



Fungicides R&D Pipeline – Peak Sales Potential: ~€3bn

R&D Target	Technology				Phase*				Enhancement**	
	Corn	Soy	Other	F/V	1	2	3	4	Dev.	Subm.
// Delaro Complete	✓	✓							adv. to launch	
// Minuet / Serenade Soil Activ				✓			NEW			
<i>Early Pipeline</i>										
// New Biological Fungicide				✓						
// New Fungicide				✓	NEW					
<i>Asian Soybean Rust</i>										
// Fox Supra (Indiflin®)		✓								
// New Fungicide		✓								
<i>New AI Development</i>										
// iblon			✓					adv. to launch		
// Xivana		✓		✓				NEW		
<i>LCM</i>										
// Cayunis			✓						adv. to launch	
// Delaro forte			✓						adv. to launch	
// Prosaro Pro			✓						adv. to launch	
// Super Nativo			✓							

***R&D Phases:**

1 – Research, 2 – Early Development, 3 – Late Development, 4 – Registrations Filed

****Product enhancement:** (Life Cycle Management activities)

Dev. – Under development; Subm. – Submitted for Registration

Corn Corn

Soy Soybeans

Other Crops including cereals, oilseed rape, sugarbeets, cotton or rice

F/V Fruits and vegetables

Progress achieved Phases 1 through 4

Status indication for Life Cycle Management Items

Strategic collaborations

Represents annual advancements and upgrades

Pipeline status highlighting significant development, progress or advancement in R&D Pipeline (pink) and Key Life Cycle Management (blue) work.