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.

The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.
Bayer Industry Leader in the Development of Plant Biotech Traits

>65 Trait Products in 27 Years, Broadly Licensed and Widely Adopted

**Bayer Plant Biotech traits reach ~300m acres annually, focused in the Americas**

Offered in four main row crops

- **Corn**
- **Soybean**
- **Cotton**
- **Canola**

Elite germplasm with integrated biotech and native traits deliver €10.5bn annual seed & trait sales; €2.6bn from licensing

**Delivering Exceptional Insect & Weed Control Solutions**

- **Herbicide Tolerance**
  - Offering glyphosate, glufosinate tolerance in soybeans, cotton, corn and canola; +dicamba tolerance in soybeans and cotton
  - Key enabler of conservation and no-tillage systems to improve carbon sequestration in Ag

- **Insect Control**
  - Providing resistance to insects that feed on the roots, stalks, leaves and grain
  - Has reduced insecticide use and allows for more targeted control through the expression of Bt proteins; plus RNAi technology in CRW3

- **Next Generation Innovations**
  - ThryvOn cotton first-ever trait to target a piercing, sucking pest using engineered protein technology
  - Reducing height of corn plant using RNA biotechnology in Phase 3 short-stature corn; an industry-first with potential to transform corn production
Leading Positions in Global Seed & Traits Fueled by Innovation

2022 Total S&T Sales¹

<table>
<thead>
<tr>
<th></th>
<th>In €bn</th>
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<tbody>
<tr>
<td>Bayer</td>
<td>10.5</td>
</tr>
<tr>
<td>Corteva</td>
<td>8.5</td>
</tr>
<tr>
<td>Syngenta AG</td>
<td>3.8</td>
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</table>

2022 Corn S&T Sales¹

<table>
<thead>
<tr>
<th></th>
<th>In €bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayer</td>
<td>6.1</td>
</tr>
<tr>
<td>Corteva</td>
<td>5.7</td>
</tr>
<tr>
<td>Syngenta AG</td>
<td>1.6</td>
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</tbody>
</table>

2022 Soy S&T Sales¹

<table>
<thead>
<tr>
<th></th>
<th>In €bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayer</td>
<td>2.5</td>
</tr>
<tr>
<td>Corteva</td>
<td>1.7</td>
</tr>
<tr>
<td>Syngenta AG</td>
<td>0.6</td>
</tr>
</tbody>
</table>

#1 Market Position² Corn Seed & Traits
#2 Market Position² Vegetable Seed

Trait Share³

<table>
<thead>
<tr>
<th>Location</th>
<th>U.S.</th>
<th>Brazil</th>
<th>South Africa</th>
<th>Argentina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trait Share³</td>
<td>~85%</td>
<td>~30%</td>
<td>~60%</td>
<td>~50%</td>
</tr>
</tbody>
</table>

³ Represents the percentage of acres planted in the country that contain at least one Bayer biotech trait

¹ Source: As reported in FY 2022, exchange rate FY2022: ~1.05 USD/EUR; ² Market Position determined annually, as of Q1-2022; 

/// Bayer Crop Science Innovation Summit /// June 20, 2023 ///

4
Decades of Investment and Expertise Unlocks Biotech Advantage

Biotech Trait Development Process (12-15 years)

Phase 0: Trait Discovery
- High-Throughput Screening Identifies Desired Characteristics

Phase 1: Proof of Concept
- State-of-the-Art Gene and Protein optimization capabilities
- Drive Product Concept Demonstrations In-Crop

Phase 2: Early Development
- Large-Scale Transformation, Commercial Candidate Selection, Pre-Regulatory Data Generation

Phase 3: Advanced Development
- Trait Integration, Regulatory Data Generation

Phase 4: Pre-Launch
- Regulatory Submissions & Approvals, Seed Bulk-Up, System Testing and Pre-Marketing

Competitive Advantages

Industry-leading microbial gene libraries enable new trait areas and novel MOAs
- Application of cutting-edge RNA technologies to develop targeted innovative products
- Industry leading genome editing toolkits drives novel trait discovery

Best-in-class synthetic biology gene expression toolkits drive precision in gene to phenotype optimization
- High throughput, AI-driven protein design drives rapid iteration to optimize new MOAs

Development of multi-gene stacks that enable a multitude of solutions for growers
- CRISPR technology for targeted insertion to enable product development flexibility
- Largest global field-testing footprint diversifies geographic data insights

New traits are introgressed into the most elite germplasm, and stacked with the industry’s leading traits

Experience successfully launching traits globally
- Identification of optimal agronomic systems (trait, germplasm, chemistry) for product deployment & customer recommendations
Widening Leadership in Plant Biotech with Key Technology Pillars

Four Key Technology Pillars in Plant Biotechnology

- **Gene**
  - Leading Library: >300M unique protein encoding genes in metagenomic database to facilitate rapid trait discovery
  - Expression: Synthetic Biology gene expression toolkits drive precision in gene to phenotype optimization
  - Gene Stacking: Delivering largest multi-gene stack to enable broader options for pest management

- **Protein**
  - Protein structure, design and engineering expertise
  - >300 protein structures solved and AI-Driven structural design to deliver unique modes of action for pest control
  - Ex: Advances in protein technology enabled first piercing and sucking pest trait above

- **RNA**
  - RNA pathways successfully used to control insects; “Billion-Dollar Bug” in our CRW3 trait
  - First to use micro-RNA-based suppression technology for agronomic trait improvement
  - Industry leading Sensor Technology for next generation targeted trait efficacy

- **Genome Mapping & Editing**
  - >2.7bn data points generated annually to deliver biotech traits and provide genomic insights
  - Development and access to multiple genome-editing capabilities
  - CRISPR gene-editing technology to target insertion for commercial product development

Delivering sustainability, yield improvements, difficult to manage insect solutions, and flexibility in weed management
Bayer Acquires Majority Share (65%) in CoverCress Inc. (CCI)

Developing Novel Cash Cover Crop with Potential for Low-Carbon Renewable Feedstock in Growing Biodiesel Market

- Low carbon intensity rotational cash crop that can deliver many ecosystem benefits of a cover crop and attractive economics of an oilseed crop
- Carbon sequestration potential
- Developed through gene editing and advanced breeding tools; improved the oil profile, protein content and yield of field pennycress
- Niche market in U.S. Midwest initially; within draw area in proximity to crushing and refining facilities
- Expect to launch crush-ready CoverCress product mid-2020’s

The Need

- Aviation and industrial transportation sector emissions reductions to come from sustainable low carbon intensity biofuels, due to lack of electrification options
- Expect demand for 6bn gallons of Renewable Diesel/Sustainable Aviation Fuel by 2030

The Business Model

- Closed Loop Production Contract (i.e. Farmers will be paid a premium to produce CoverCress; Bunge delivers oil to Chevron to convert to Renewable Diesel/Sustainable Aviation Fuel; CoverCress receives value from crusher (i.e. Bunge))
- CoverCress ownership: Bayer 65%; Chevron and Bunge 35%
Biotech Pipeline to Deliver €7bn in Peak Sales Potential

12 Biotech Traits in Development; Offering up to Six MOA’s and Potential for 10 Traits in a Stack

Other Traits: ~€1bn
- Cotton Bollgard 4
- Cotton HT3/4
- Cotton Lygus
- Canola Dicamba Tolerance
- Sugarbeet HT2

Soybean Traits: ~€3bn
- 4th & 5th Gen Herbicide Tolerance >€1bn
- 3rd & 4th Gen Insect Traits >€800m

Corn Traits: ~€3bn
- Short Stature Corn- Biotech Trait
- Next Gen Corn Insect Traits (LEP4, 5 CRW4) >€1bn
- 5th Gen Herbicide Tolerance in Corn

Expansion of existing and future trait portfolio into new markets in Asia and Africa creates upside value

1 Represents non-risk adjusted estimated peak sales for the biotech pipeline. ~50% incremental sales value.
Note: Projects listed per crop are subset of the pipeline; selected top contributors to peak sale potential

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Leading Sustainable Cotton Production Advancements

Genetic Improvements and Trait Technologies Key to Measurable Improvements in Sustainability of Cotton Production

Genetic Gain Improved from 3.2 to 8.6 lbs/year

Bayer Deltapine Long Term Yield Trend
(without Dry-Tough)

Linear Yield Trend
Post-Biotech

Linear Yield Trend
Pre-Biotech

Sustainability Improvements in U.S. Cotton Production

% Reduction 1980 vs. 2020

- Land Use: -30%
- Soil Erosion: -45%
- Irrigation: -31%
- Water Use: -58%
- Energy Use: -25%
- Greenhouse Gas Emissions: -25%

1 Source: Field to Market 2021 National Indicators Report
Next-Generation Traits Further Enhance Cotton Productivity
Driving Sustainability and Profitability in our >€600m Cotton S&T Business

Global Leader in Cotton Seeds and Traits

Trait Share of Market:

- U.S. Germplasm Share of Market: ~65%
- Trait Share of Market:
  - U.S. ~70%
  - Brazil ~50%
  - Australia 100%

Next Generation Cotton Trait Technologies

- Building on Bollgard 3 XtendFlex Technology with 2023 commercial launch of ThryvOn Technology
- Phase 3:
  - 4th gen herbicide tolerance, adding HPPD and PPO tolerance to XtendFlex
  - 4th gen Bollgard 4 cotton also in Phase 3, offering multiple modes of action to control lepidopteran insects

1 2022 cotton seed & trait sales for Bayer Crop Science. ThryvOn™ Technology has received full approval for planting in the United States but, as of the date this material was published, is pending approval in certain export markets. Specific plans for commercialization depend upon regulatory approvals and other factors.
Next-Gen Intacta Traits to Expand Leading Soybean Franchise

Intacta 2 Xtend Successfully Launched; IP3 and IP4 in Pipeline to Deliver >€800m peak sales potential

1st Generation

- South America soybean system¹
  - Excellent control of soybean loopers, velvetbean caterpillar and axil borer
  - Glyphosate tolerance provides proven weed control and enables conservation tillage
  - On ~85m acres in Brazil in 2021/22

2nd Generation

- Industry-first with three proteins for insect control and resistance management, plus adds dicamba tolerance for tough-to-control weeds
- LAUNCHED on >800k acres in Brazil in 2021/22 season. Targeting ~6m acres for the 2022/23 season
- Performance advantage of 2.89 bu/acre

3rd and 4th Generation

- IP3 in Phase 3; Delivering multiple modes-of-action for insect control
- IP4 ADVANCED to Phase 2; focused on Brazil
- >€800m peak sales potential

Velvetbean Caterpillar Infested
- Control
- IP3

Soybean Looper Infested
- Control
- IP3

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¹ Bayer Crop Science Innovation Summit /// June 20, 2023

IP3 = 3rd generation insect protection trait in soybeans // IP4 = 4th generation insect protection trait in soybeans // 1 Data based on number of traited acres per Bayer internal estimates
Next Gen Soybean Herbicide Tolerance Traits to Provide Industry Leading Flexibility

Drives ~€1bn Peak Sales Potential by Addressing Farmers’ Herbicide Resistance Challenges

4th Gen Herbicide Tolerance (HT4) In Phase 3

- Expected 2027 launch
- Adds 2 additional herbicide tolerances: HPPD (Mesotrione) + 2,4-D

5th Gen Herbicide Tolerance (HT5) Advanced to Phase 3

- Adds 1 additional herbicide tolerance: PPO

Control HT4 Soybeans

>180m Soybean Acres

Potential Opportunity Across

July 2022 | Jerseyville, Illinois

PPO Tolerance Control

July 2022 | Monmouth, Illinois

Always read and follow label instructions. Products not registered in all jurisdictions.
Rollout of Most Advanced Corn Rootworm Control Trait Continues

CRW3: Industry’s Only RNAi-Based Corn Rootworm Trait Launched in Brazil in VTPRO4 and in the U.S. in SmartStax PRO; Expected 2024 Launch in VT4PRO in U.S. as Additional Offering

**Most advanced technology** for control of insects in Brazil corn

**Two modes below-ground insect control, including CRW3, plus three modes above-ground insect control and glyphosate tolerance**

2021/2022: >4m acres

**Corteva Qrome product (P1366Q)**

<table>
<thead>
<tr>
<th>Average Root Rating</th>
<th>Location: Ireton, Iowa July 20, 2021</th>
<th>Average Root Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.30</td>
<td></td>
<td>1.20</td>
</tr>
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</table>

For each root node damaged by CRW larvae, a yield loss of ~15% can be expected.³ Root injury score of 0.97 nodes in a 200 bu/acre yield environment could result in 29 bu/acre yield loss.

~30m acres infested with CRW in the U.S.

VT4PRO with CRW3 expected 2024 launch in the U.S; additional offering with 5+ bu/ac advantage over Corteva Qrome products³

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1 Head-to-head comparisons across 34 Bayer trials in medium to very high corn rootworm pressure environments;


3 Based on 2022 Bayer breeding data generated over 253 locations, 2838 comparisons of 2024 launch class of VT4PRO with RNAi technology vs. key commercial Qrome products within +/- 2 RM maturity range
Next Gen of Corn Insect Control Drive >€1bn Peak Sales Potential

Delivering 4th Generation Corn Rootworm and 4th/5th Generation of Lepidoptera Protection

- **4th Generation Corn Rootworm**
  - Expected mid decade
  - Two new MOAs plus improved RNAi technology provides excellent efficacy against CRW populations under high pressure

- **4th Generation Lepidoptera Protection**
  - Expected late this decade
  - Multiple modes of action to improve efficacy against Fall Armyworm

- **5th Generation Lepidoptera Protection**
  - Expected early 2030s
  - Targeted control of pest species
New era in corn production to help farmers manage risk and protect yields

- Short stature corn hybrids
- FieldView digital insights
- Tailored support

300 on-farm trials
>30,000 acres

<7ft
Short stature corn hybrid plant height

9-12ft
Traditional corn hybrid plant height

1 Source: Online farmer survey Feb./Mar. 2020 (n=900)
Offers Transformational Shift in Production
Powered by Short Stature Corn Hybrids and FIELDVIEW

Key Features and Benefits Enhance Profitability and Environmental Sustainability of Corn Production

**Protection**
- Production stability with improved standability in high winds and challenging weather conditions
- Annual yield losses due to stalk lodging in the U.S. range from 5% to 25%\(^1\)

**Access**
- Improved in-season crop access due to reduced height
- Supports tailored solutions with precise in-season crop protection

**Yield potential**
- Shows promise in unlocking yield potential through increased opportunity to optimize crop inputs, planting densities, and field placement
- Potential to optimize use of key nutrients like nitrogen, as well as reducing land and water requirements

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1. Purdue University (http://www.extension.purdue.edu/ay/ay-262.html)

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Iowa 2020 Trials Following Derecho Windstorm
Spray Rig in Short-Stature Corn Plot Jerseyville, IL August 2019
Poseyville, Indiana July 2021
Nitrogen Y-Drops for Precise In-Season Application
Planning Regional Tailored Approaches

Holistic Smart Corn System Powered by Short Stature Corn
Developed via Three Technology Approaches

Planned Technology Approach for Launch of Preceon Smart Corn System

Breeding Approach – Phase IV
2023 Ground Breaker Trials in the U.S.
Native Trait: advanced breeding used to introgress naturally occurring short stature characteristics into elite germplasm

Biotech Approach1 – Phase III
Uses transgene to shorten internodes; enables applicability across wide array of germplasm

Gene Editing Approach - Discovery
Location of launch will be dependent upon regulatory environments

>220m
Corn Acres Global Potential

Americas Alone Account for 140m Acres

>€1.5bn
Global Peak Sales Potential

1 in collaboration with BASF
Key Takeaways – Transformative Trait Technologies

01 Bayer biotech traits reach ~300mn acres globally and contribute €10.5bn S&T annual sales with #1 share position

02 Robust pipeline with 12 biotech traits, offering up to 6 modes of action and up to 10 stacked genes, with an estimated peak sales potential of ~ €7bn

03 Widening our leadership position through gene technology, protein structure design, RNA technology and genome mapping and editing technologies

04 Leading blockbuster technologies like PRECEON Smart Corn System and the next generation of Herbicide Tolerant Soybeans

05 Driving regenerative ag with higher farm productivity, reduced pesticide usage and optimized resources
Transformative Trait Technologies
Crop Science Innovation Summit
June 20, 2023

Kelly Gillespie // VP of Digital Ecosystems, Bayer Crop Science
# Crop Science: Seed & Traits and Digital R&D Pipeline

## (Annual Update Feb 2023)

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
<th>Phase IV</th>
<th>PSP</th>
</tr>
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<tbody>
<tr>
<td><strong>CORN SEED &amp; TRAIT</strong>&lt;br&gt;5th Generation Lepidoptera Protection&lt;br&gt;5th Generation Herbicide Tolerance w/ (RHS2)&lt;br&gt;Digital Disease Mgmt. – NA&lt;br&gt;Seed Placement Digital Tool - NA</td>
<td>4th Generation Coleoptera Protection&lt;br&gt;Annual Germplasm Upgrades</td>
<td>4th Generation Lepidoptera Protection&lt;br&gt;Seed Density Digital Tool – EMEA&lt;br&gt;Seed Density Digital Tool – LATAM</td>
<td>~€21bn</td>
<td></td>
</tr>
<tr>
<td><strong>SOYBEAN SEED &amp; TRAIT</strong>&lt;br&gt;2nd Generation Seed Density&lt;br&gt;Digital Tool - NA&lt;br&gt;Annual Germplasm Upgrades</td>
<td>3rd Generation Insect Protection&lt;br&gt;2nd Generation Soy Cyst Nematode resistance&lt;br&gt;4th Generation Herbicide Tolerance (HT4) (5 Tolerances – Adds 2, 4-D and PPPO)&lt;br&gt;5th Generation Herbicide Tolerance (6 Tolerances – Adds PPPO)</td>
<td>Annual Germplasm Upgrades&lt;br&gt;Soybean Native Resistance</td>
<td>~£4bn</td>
<td></td>
</tr>
<tr>
<td><strong>VEGETABLES and OTHER</strong>&lt;br&gt;Canola/OSR Digital Disease Mgmt. - NA&lt;br&gt;Wheat Digital Disease Mgmt. - EMEA&lt;br&gt;Wheat Annual Germplasm Upgrades&lt;br&gt;Wheat Disease Package Upgrades&lt;br&gt;Canola/OSR Annual Germplasm Upgrades&lt;br&gt;Veg- Annual Germplasm Upgrades&lt;br&gt;Rice Annual Germplasm Upgrades</td>
<td>Canola Dicamba Tolerance&lt;br&gt;Sugarbeets 2nd Generation Herbicide Tolerance&lt;br&gt;Cotton 4th Generation Herbicide Tolerance (HT4) (5 tolerances – Adds 2, PPPO and PPO)&lt;br&gt;Cotton 4th Generation Insect Protection</td>
<td>Annual Germplasm Upgrades&lt;br&gt;Soybean Native Resistance</td>
<td>~€6bn</td>
<td></td>
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Projects listed here and included in the peak sales potential by segment do not include projects funded by our LEAPS investments; includes all advancements made in FY’22, updated Feb’23. 

PSP = Peak Sales Potential; 50% incremental; Expected to reach 30% of PSP by 2022, 80% of PSP by 2037 and remainder in 2038+. *Note that products are excluded from the pipeline PSP typically the year following launch.*

2 In collaboration with KWS; 3 In collaboration with BASF; 4 “Other” category includes seeds and traits, such as cotton, canola, wheat, OSR, rice, vegetable seeds and sugarbeets, plus carbon and digital Models.

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