



# Bayer CropScience



## CropScience Analyst & Investor Days

September 5 - 6, 2005  
Lyon, France



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**“Bayer CropScience –  
Creating Value through Innovation”**

September 5 - 6, 2005  
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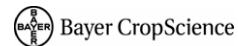
Prof. Dr. Dr. h.c. Friedrich Berschauer  
Chairman of the Board of Management  
Bayer CropScience

## Forward Looking Statements

This presentation contains forward-looking statements based on current assumptions and forecasts made by Bayer AG and Bayer CropScience AG 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 Bayer CropScience AG or our parent company, Bayer AG, and the estimates given here. These factors include those discussed in Bayer AG's public reports filed with the Frankfurt Stock Exchange and with the U.S. Securities and Exchange Commission (including Bayer AG's Form 20-F). Neither Bayer AG nor Bayer CropScience AG assume any liability whatsoever to update these forward-looking statements or to conform them to future events or developments.

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## Food Supply: A Global Challenge

	World Population (billion)	Arable Land & permanent Crops (billion hectares)	Farmland per Person (hectares)
1950	2.5	1.3	0.5
1975	4.0	1.4	0.4
2000	6.0	1.5	0.3
2020	7.5	1.5	0.2

Source: United Nations  
1 ha = 2.47 acres

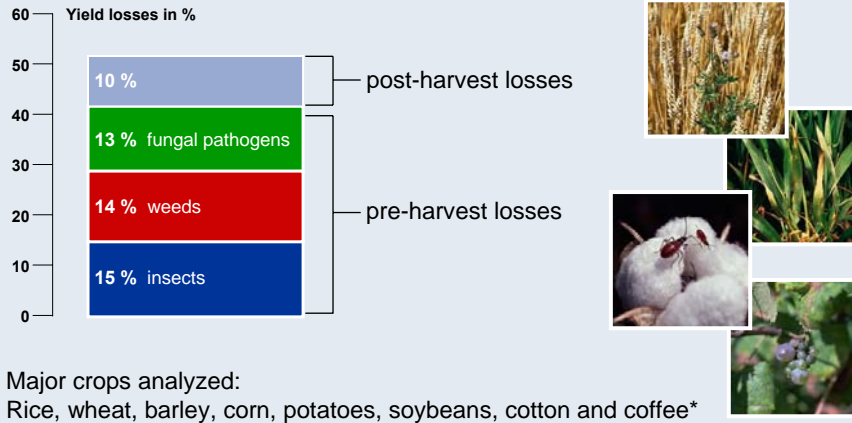
➔ The amount of food needed in the next 20 - 25 years is twice the amount produced over the past 10,000 years !

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## Without Modern Crop Protection More than 50 % of Harvests Would Be Lost

### Average Destruction of non-treated Crops out of total attainable Production

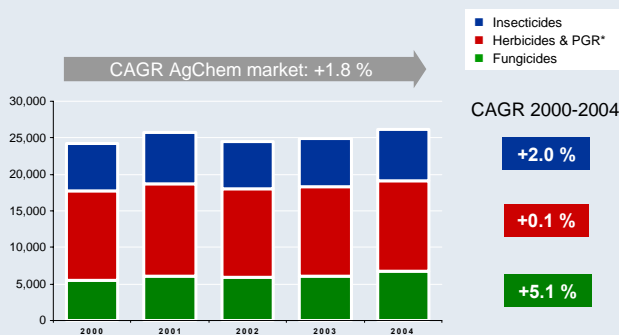


\* approx. 50 % of crop area worldwide  
Source: Oerke et al., 1995 / Yudelman et al., 1998  
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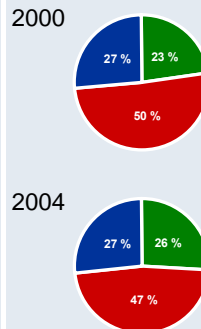


## Market Dynamics: Increasing Importance of Fungicides

### Crop Protection Market Development (in € million, adjusted for currency & inflation effects)



### Split by Applications (in % of overall market)



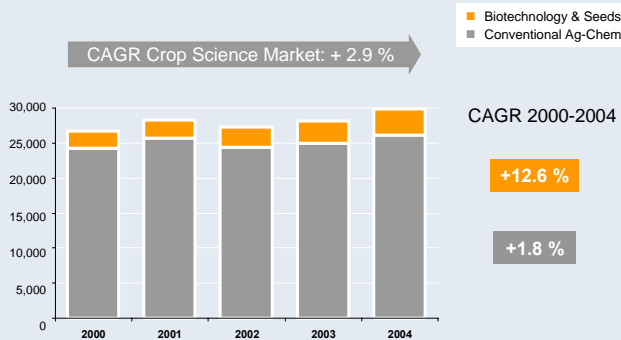
- Value generation is essential in a flat to slow growing market environment
- Innovation plays a key role in delivering superior solutions for crop protection

\* PGR... plant growth regulators  
Crop Protection market excluding non-ag business  
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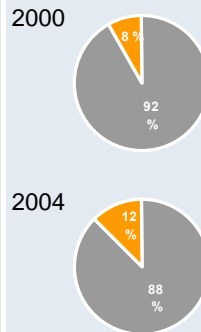


## Market Dynamics: Additional Business Potential in Biotechnology

### Overall Crop Science Market Development (in € million, adjusted for currency & inflation effects)

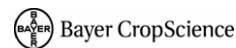


### Split by Applications (in % of overall market)



- Plant Biotechnology offers additional market potential
- Bayer CropScience well positioned to capture opportunities in crop protection & biotech

Conventional Ag-Chem market excluding non-ag business  
Biotechnology & seeds based on input traits  
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## Different Regional Conditions Require Specific Regional Strategies

### North America

- Increased planting of herbicide-tolerant and insect-resistant GM crops
- Strong growth in conventional seed treatment business
- Development of an Asian Rust market in the US

### Europe/TAMECIS\*

- Increasing demand for high-quality fresh produce in Western Europe
- Important role of cereal fungicides
- Growth opportunities in Eastern Europe

### Latin America

- Driven by long-term growth trends of Brazilian agro-economy
- Export of soybeans in order to meet Asian food demand
- Crop protection business benefits from spread of Asian Rust

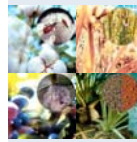
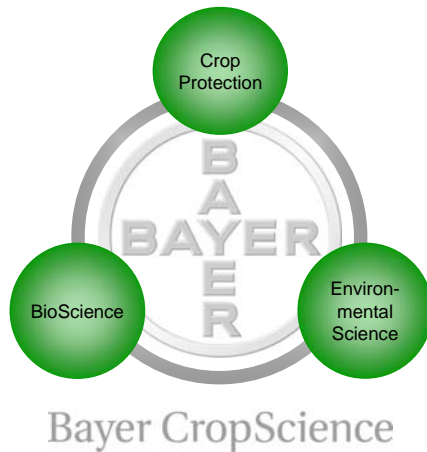
### Asia / Pacific

- Largest segment: Insecticides
- China – growing population and increasing food, feed & fiber demand
- Strong generic competition
- India & Australia emerging in plant biotechnology

\* TAMECIS: Turkey, Africa, Middle East, Commonwealth of Independent States  
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## Three Business Groups for Specific Market Needs



### Crop Protection

- Insecticides
- Fungicides
- Herbicides
- Seed Treatment



### Environmental Science

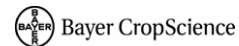
- Professional
- Consumer



### BioScience

- Vegetables
- Agricultural Crops
- New Business Ventures

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## Excellent Portfolio Position 2004

Sales 2004: € 5.95 billion

Market Share: approx. 20 %

**Insecticides** € 1.38 bn

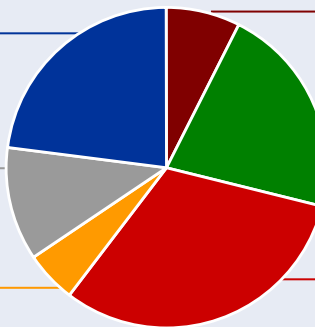
Market position: ①

**Environmental Science** € 0.68 bn

Market position: ①

**BioScience** € 0.31 bn

Market position: -



**Seed Treatment** € 0.45 bn

Market position: ①

**Fungicides** € 1.28 bn

Market position: ②

**Herbicides** € 1.86 bn

Market position: ③

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## Priorities Going Forward

### Enhance Profitability towards Mid-term Targets

- Financial discipline
- Operational excellence



### Leverage on Active Portfolio Management

- Capitalize on successful life cycle management
- Exploit synergies between Crop Protection and Environmental Science as well as BioScience

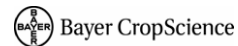


### Foster Industry Leadership in Innovation

- Deliver best-in-class agrochemicals pipeline
- Open up new markets through plant biotechnology



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## Shift of Company Focus to Provide a Solid Base for Future Success

### 2002 – 2004 Focus: Structural Integration

- ✓ Organization in its 3rd full year of operation
- ✓ Successful management of integration activities
- ✓ Synergies achievements on track
- ✓ New organizational structure implemented
- ✓ Maintained business momentum & gained market share

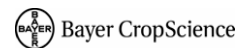


### 2005 – 2007 Focus: Business Excellence & Profitability

- Fine-tuning of operative and administrative processes to improve efficiency
- “Challenge 2007” initiative
- Active portfolio management to maximize profitability
- Continue to deliver best-in-class pipeline & innovative solutions

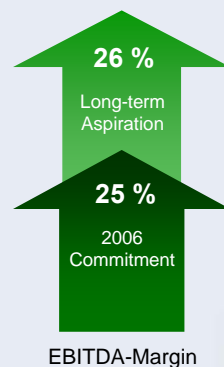


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## Commitment to our Profitability Targets

Based on:



- Further portfolio streamlining and migration to new and higher margin products
- Realization of our synergy program
- Strict cost containment
- “Challenge 2007” initiative started in early 2005 to further enhance efficiency in the organization



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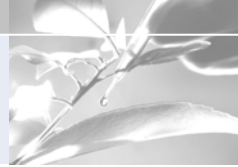
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## Active Portfolio Management Safeguards Success

- Focus on innovative, higher-margin active ingredients
- Active life cycle management for our top-performing products
- At the same time: ongoing portfolio streamlining with a view to reducing the number of older, lower-margin active ingredients
- Innovative formulation technology and mixtures contribute to successful portfolio management



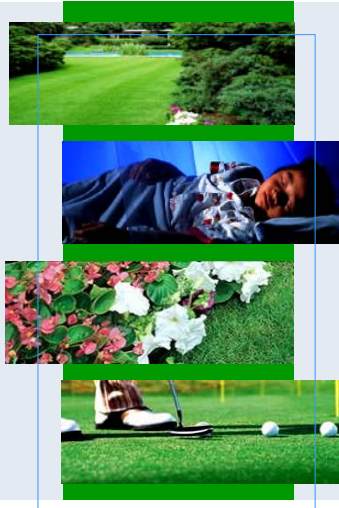
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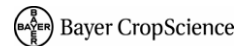


## Reinforce Our Leading Position in Environmental Science

- Capitalize on the backward integration with Crop Protection and powerful pipeline of new active ingredients
- Focus on 'Proximity Innovation' to meet user and consumer requirements
- Build on strong brands *Bayer Advanced* and *Bayer Garden*
- Concentrate on higher margin products and markets by streamlining product portfolio
- Maintain and expand high profitability of Environmental Science business



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## Maximize Attractive Business Opportunities in BioScience

- Leverage complementary offerings between Crop Protection and BioScience Agricultural Crop business in canola, cotton and rice
- Capitalize on global leadership position in seed treatment to further enhance vegetable seeds business
- Investigate possible perspectives in output traits, renewable resources and plant-made pharmaceuticals



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## Priorities Going Forward

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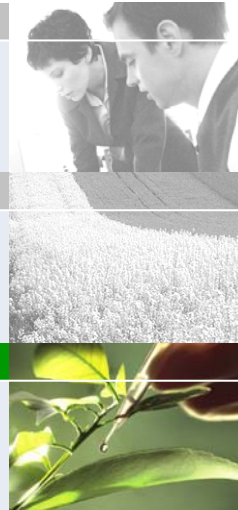
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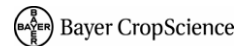
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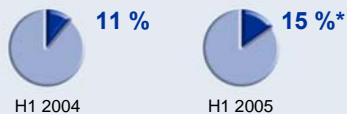


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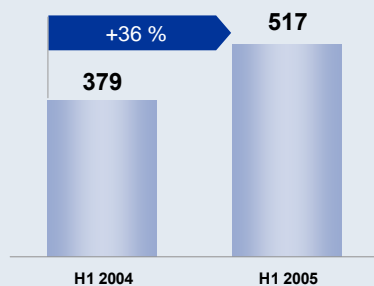


## New Active Ingredients Lead Way into the Future

### Share of New A.I.s in Total Sales



### Sales of New A.I.s (in € million)



- 16 new active ingredients launched since 2000
- Continued strong growth from these novel molecules
- Migration to new, higher margin active ingredients is a cornerstone of our active portfolio management
- 10 phase III development projects scheduled for launch between 2006 and 2011 to fuel further growth
- Excellent IP position forms base for future success

\* Crop Protection only: 18 % in H1 2005

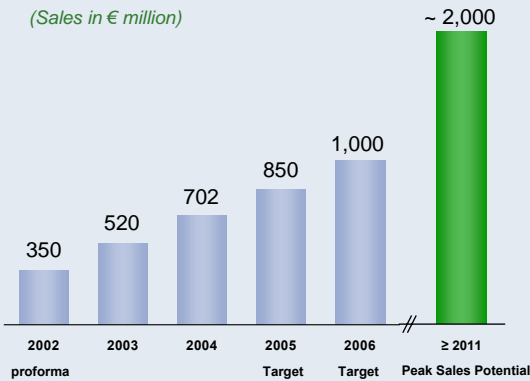
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## Best-in-Class Pipeline Drives Future Growth

### New Active Ingredients

(Sales in € million)



2000 - 2005

FLINT

hussar

calypso

ATLANTIS

Maister

PONCHO

PROLINE

...

2006 - 2011

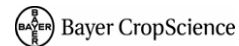
4 Fungicides

4 Herbicides  
(incl. Safener)

2 Insecticides  
(incl. Ketoenol #3)

- ➔ 26 new active ingredients to be launched between 2000 and 2011
- ➔ Combined peak sales potential of about € 2 billion

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## BioScience Research & Development Pipeline: Aiming beyond the Farm Gate

### "In the making"

#### Agronomic Traits

2<sup>nd</sup> generation  
insect control  
Herbicide  
tolerance



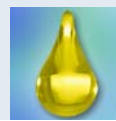
#### Modified Starch

Specifically  
adapted for  
industrial use



#### Modified Canola Oil

From commodity  
to specialty



### Opportunities

#### Plant-made Pharmaceuticals

Competencies  
to create  
new business



#### Future Agronomic Traits

Abiotic stress  
tolerance



#### BioMaterials & Nutrition

Exploring future  
opportunities



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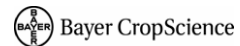
## Value Creation Through Innovation

- Focus on providing superior product solutions through innovation
- Continue to deliver best-in-class pipeline of new active ingredients
- Reinforce our leading role in Crop Protection & Environmental Science
- Further develop strongly growing plant biotechnology business
- Encourage a result-driven organization
- Maximize value through active portfolio management



➔ Foster industry leadership in innovation and value generation

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# Bayer CropScience



Your partner for growth