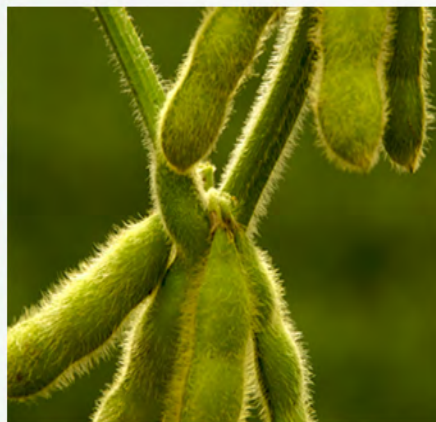
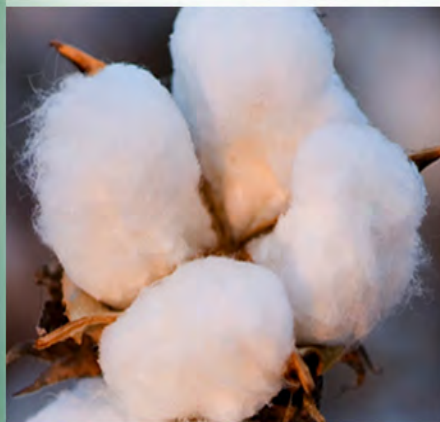


January 6, 2011



FIRST-QUARTER 2011 FINANCIAL RESULTS

MONSANTO



Forward-Looking Statements

Certain statements contained in this presentation are "forward-looking statements," such as statements concerning the company's anticipated financial results, current and future product performance, regulatory approvals, business and financial plans and other non-historical facts. These statements are based on current expectations and currently available information. However, since these statements are based on factors that involve risks and uncertainties, the company's actual performance and results may differ materially from those described or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, among others: continued competition in seeds, traits and agricultural chemicals; the company's exposure to various contingencies, including those related to intellectual property protection, regulatory compliance and the speed with which approvals are received, and public acceptance of biotechnology products; the success of the company's research and development activities; the outcomes of major lawsuits; developments related to foreign currencies and economies; successful operation of recent acquisitions; fluctuations in commodity prices; compliance with regulations affecting our manufacturing; the accuracy of the company's estimates related to distribution inventory levels; the company's ability to fund its short-term financing needs and to obtain payment for the products that it sells; the effect of weather conditions, natural disasters and accidents on the agriculture business or the company's facilities; and other risks and factors detailed in the company's most recent periodic report to the SEC. Undue reliance should not be placed on these forward-looking statements, which are current only as of the date of this presentation. The company disclaims any current intention or obligation to update any forward-looking statements or any of the factors that may affect actual results.

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Non-GAAP Financial Information

This presentation may use the non-GAAP financial measures of “free cash flow,” earnings per share (EPS) on an ongoing basis, EBIT and EBITDA. We define free cash flow as the total of cash flows from operating activities and investing activities. A non-GAAP EPS financial measure, which we refer to as ongoing EPS, excludes certain after-tax items that we do not consider part of ongoing operations, which are identified in the reconciliation. EBIT is defined as earnings (loss) before interest and taxes and EBITDA is defined as earnings (loss) before interest, taxes, depreciation and amortization, as defined in the reconciliation. Earnings (loss) is intended to mean net income (loss) attributable to Monsanto Company as presented in the Statements of Consolidated Operations under GAAP. Our presentation of non-GAAP financial measures is intended to supplement investors’ understanding of our operating performance, not replace net income (loss) attributable to Monsanto Company, cash flows, financial position, or comprehensive income (loss), as determined in accordance with GAAP. Furthermore, these non-GAAP financial measures may not be comparable to similar measures used by other companies. The non-GAAP financial measures used in this presentation are reconciled to the most directly comparable financial measures calculated and presented in accordance with GAAP.

FISCAL YEAR:

References to year, or to fiscal year, are on a fiscal year basis and refer to the 12-month period ending August 31.

Fiscal 2011 First-Quarter Financial Summary

| | FIRST QUARTER | | |
|-----------------------------------------------------------------------------|---------------|------------|-----------|
| | 2011 | 2010 | Change |
| NET SALES | \$1,830M | \$1,697M | +8% |
| GROSS PROFIT | \$818M | \$739M | +11% |
| Seeds & Genomics | \$679M | \$597M | +14% |
| Ag Productivity | \$139M | \$142M | (2)% |
| SG&A EXPENSE | \$450M | \$496M | (9)% |
| R&D EXPENSE | \$303M | \$267M | +13% |
| NET INCOME (LOSS) <small>ATTRIBUTABLE TO MONSANTO COMPANY</small> | \$6M | \$(19)M | +\$25M |
| DILUTED EPS AS-REPORTED | \$0.01 | \$(0.03) | +\$0.04 |
| DILUTED EPS ONGOING BASIS | \$0.02 | \$(0.02) | +\$0.04 |
| FREE CASH FLOW | \$500M | \$(1,600)M | +\$2,100M |

First-Quarter Results Indicate Monsanto On-Track to Achieve Earnings Growth and Free-Cash Objectives in Fiscal 2011

2011 GUIDANCE

| P&L CATEGORIES | |
|----------------------------------|----------------------|
| SEEDS AND GENOMICS GROSS PROFIT: | \$5.1B-\$5.2B |
| AG PRODUCTIVITY GROSS PROFIT: | \$550M-\$600M |
| SG&A: | \$2.06B-\$2.16B |
| R&D: | \$1.25B-\$1.3B |
| TAX RATE: | 30% to 32% |
| FISCAL 2011 ONGOING EPS: | \$2.72-\$2.82 |

| FREE CASH FLOW CATEGORIES | |
|--------------------------------|---------------|
| CAPITAL EXPENDITURES: | \$600M-\$700M |
| DEPRECIATION AND AMORTIZATION: | ~\$650M |
| FREE CASH FLOW: | \$800M-\$900M |

SEEDS AND GENOMICS GROSS PROFIT

| DRIVER | OUTLOOK |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CORN | <ul style="list-style-type: none"> U.S. branded corn margin and GP/acre lift on mix and improved cost <i>Genuity SmartStax</i> pricing reflects trial-use pricing strategy Reduced-Refuge Family of products grows to mid-teens million acres Steady growth in corn ex-U.S. with Latin America growing on volume, mix, and penetration |
| SOYBEANS | <ul style="list-style-type: none"> U.S. soy gross profit grows on <i>Roundup Ready 2 Yield</i> mix and mid-teens million acres Seed treatment now sold independently of seed and trait |
| COTTON | <ul style="list-style-type: none"> Steady growth driven by germplasm mix improvement from classes of 2009, 2010 and 2011 and 2nd-generation traits penetration |
| VEGGIES | <ul style="list-style-type: none"> Steady growth and improving margins year-over-year |

AG PRODUCTIVITY GROSS PROFIT

| DRIVER | OUTLOOK |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ROUNDUP | <ul style="list-style-type: none"> <i>Roundup</i> and Other Glyphosate-Based Herbicides Volume: 250M-300M gallons Branded NSP: \$8-\$10/gal <i>Roundup</i> and Other Glyphosate-Based Herbicides Volume GP: \$250M-\$300M Other Ag Productivity GP: ~\$300M |

Expectations for Normalized Earnings Pattern Where Effectively All Earnings to be Realized in Second and Third Quarters

| Q4 | |
|-----------------------|----------------------------------------------------------------------------------------|
| EARNINGS: | Historical loss reflecting full SG&A and R&D spend against smallest sales base of year |
| FREE CASH: | Primary period of cash collections, reflecting U.S. season |
| CROP SALES: | Brazil, Argentina and Mexico corn; vegetables; India cotton |
| ROUNDUP SALES: | Start of Latin America |

| Q1 | |
|-----------------------|------------------------------------------------------------------------------------------------|
| EARNINGS: | Historical break-even to a small gain |
| FREE CASH: | Use/source of cash depending on timing of Latin America sales and U.S. pre-pays |
| CROP SALES: | Completion of Brazil summer and Argentina corn; beginning of U.S. corn and soybean; vegetables |
| ROUNDUP SALES: | Latin America; U.S. pre-fill season |

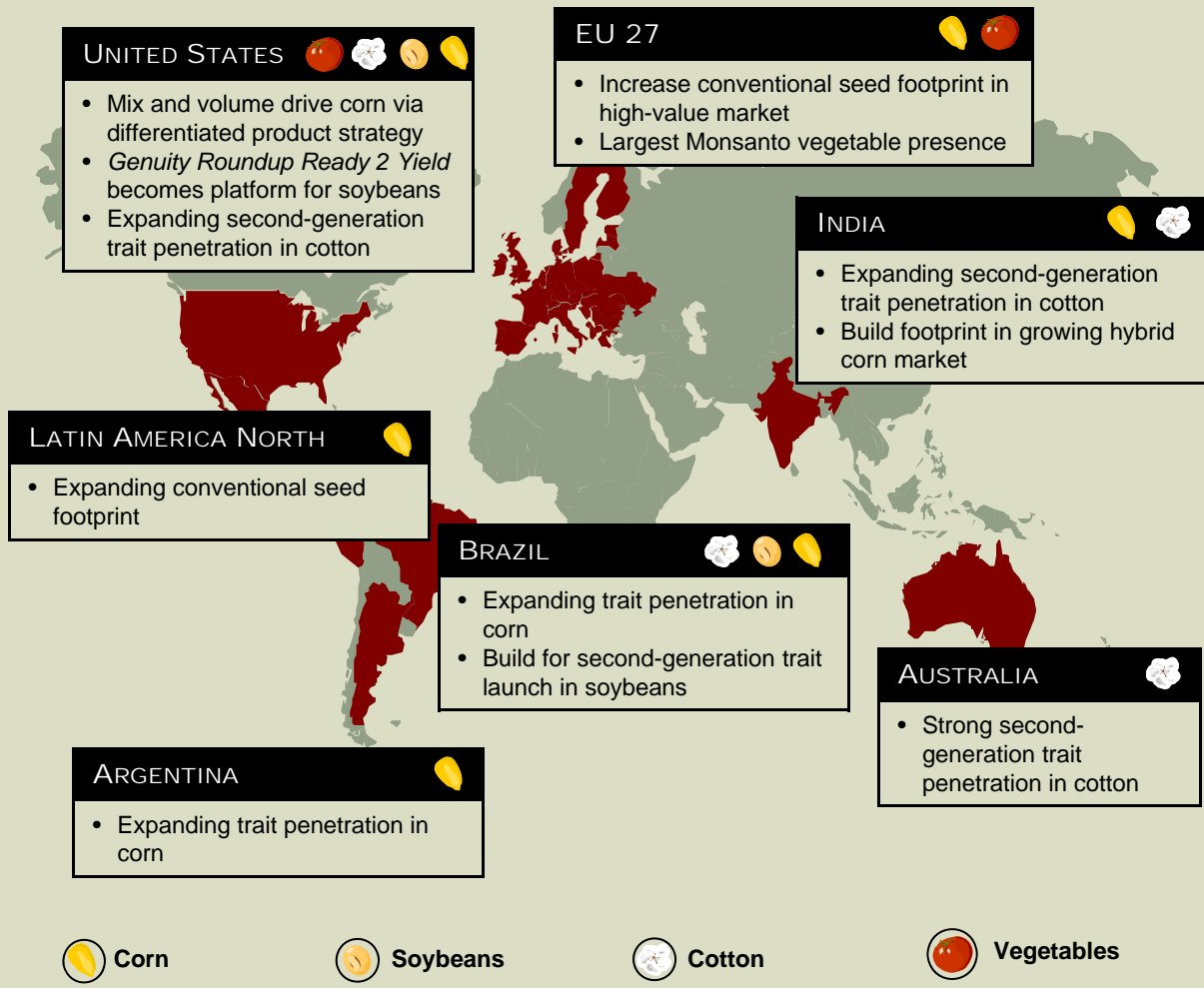
| Q3 | |
|-----------------------|------------------------------------------------------------------------------------------------|
| EARNINGS: | Historically second strongest quarter Q2 |
| FREE CASH: | Use of cash to fund working capital needs of business offset some by Latin America collections |
| CROP SALES: | Completion of U.S. and European corn and U.S. soybean; vegetables; peak cotton |
| ROUNDUP SALES: | Peak U.S. and European |

| Q2 | |
|-----------------------|------------------------------------------------------------------------------|
| EARNINGS: | Historically largest quarter |
| FREE CASH: | Source of cash through pre-payments associated with U.S. orders |
| CROP SALES: | Peak U.S. corn and soybeans; Europe corn; Brazil Safrinha season; vegetables |
| ROUNDUP SALES: | Completion of U.S. pre-fill season; Brazil Safrinha; Latin America North |



Monsanto's Seeds-and-Traits Platform Is Balanced – Across Crops, Across Geographies and Across Product Offerings

MONSANTO'S GLOBAL PORTFOLIO: BUSINESS DRIVERS BY CROP IN KEY REGIONS



2011 OPERATIONAL DRIVERS

SEEDS & TRAITS

- Growth is balanced U.S. and internationally and across crop areas
- Monsanto's products and technology line up to the geographies driving global production

FY 2011 GP TARGET: \$5.1 - \$5.2 BILLION

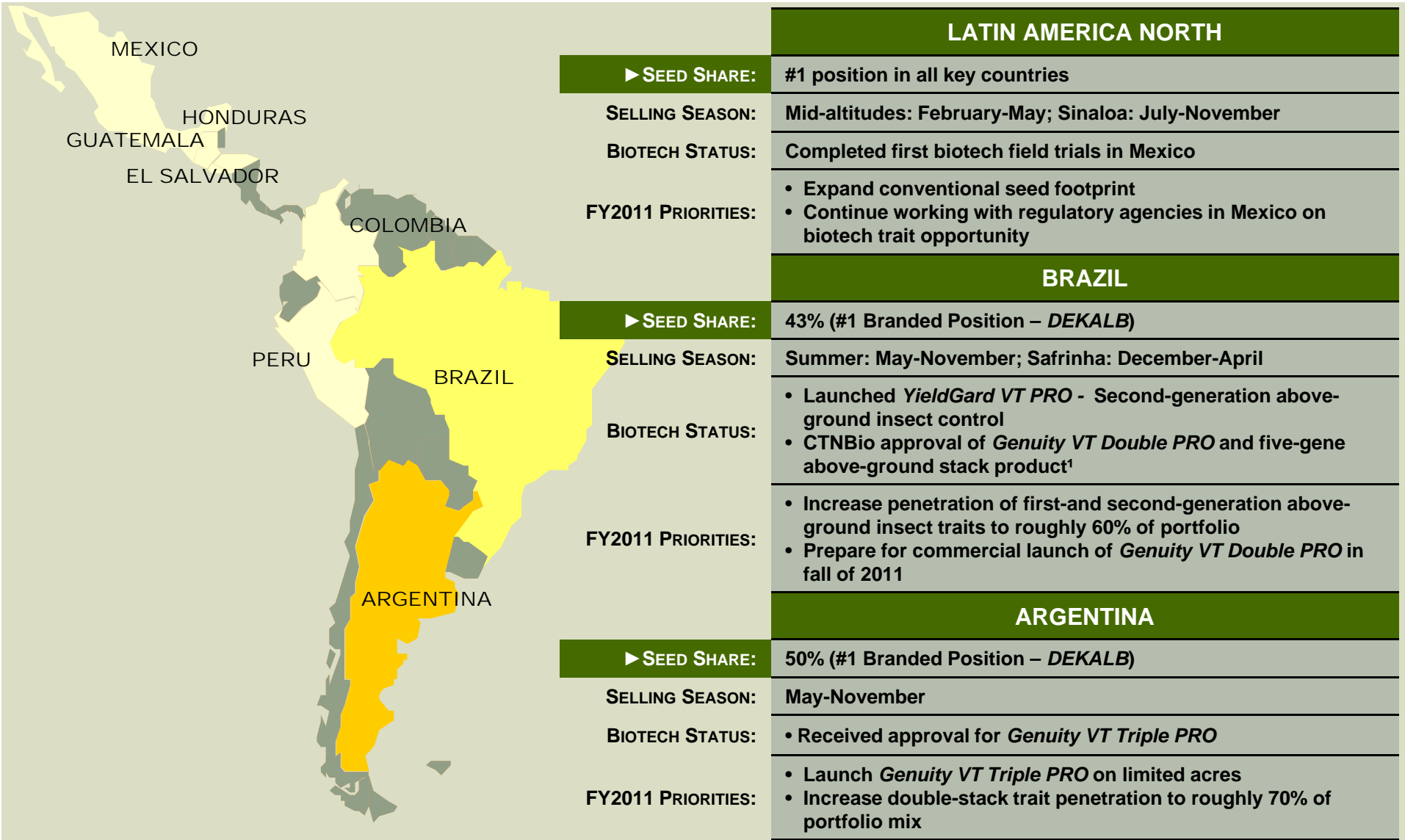
U.S. DRIVERS

- Mix lift from seed and trait – broad launch of Reduced-Refuge Family
- Genuity Roundup Ready 2 Yield* becomes broader soybean platform
- Steady contribution from increasing trait penetration and germplasm improvement

INTERNATIONAL DRIVERS

- Expanded trait penetration in Argentina and Brazil
- Growth of global germplasm footprint
- Planning for introduction of Bt/*Roundup Ready 2 Yield* soybeans in Brazil
- Steady contribution from increasing trait penetration in India and Australia
- Continued step-up as vegetables improve mix and product offerings globally

Expanding Market Footprint and Rapid Adoption of Latest Biotech Traits Define Growth Opportunity in Latin America



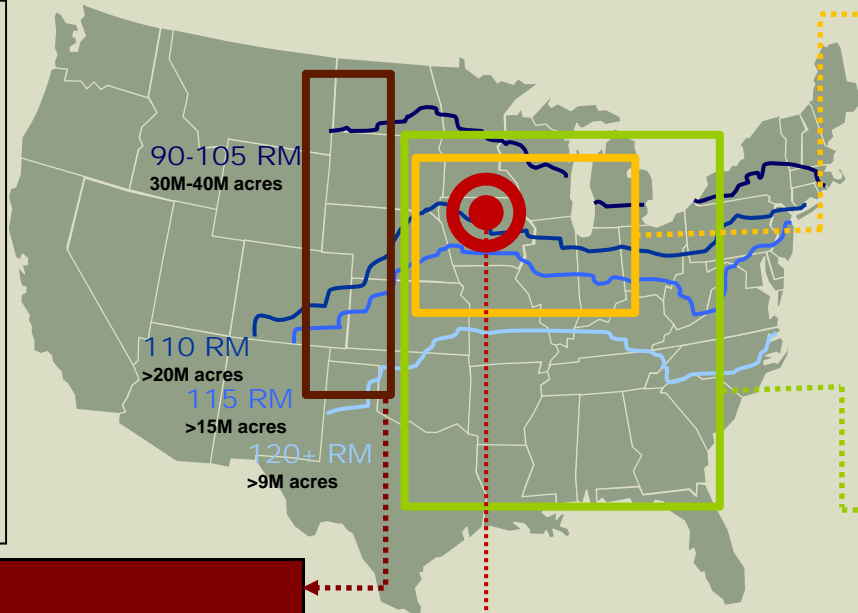
1. Five-gene above-ground stack product is in collaboration with Dow AgroSciences

In 2011, Monsanto Deploys Broadest Portfolio Ever; Enabling Mix and Volume Gains Across Portfolio

2011 DEPLOYMENT STRATEGY: U.S. CORN PORTFOLIO BY MARKET SEGMENT

2011 Deployment:

- *Genuity Reduced-Refuge Family* deployed regionally – lead product in each segment, but all products available in each area to meet farmer interest
- *Genuity Reduced-Refuge Family* target: range of mid-teens millions acres
- *Genuity SmartStax* creates the upgrade opportunity relative to triple stacks
- *Genuity VT Double PRO* and *Genuity VT Triple PRO* are new offerings and new opportunities



2011: *SmartStax* deployment focused on 90-105 Relative Maturity, building in area of strongest performance

WESTERN CORN BELT

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|
| LEAD PRODUCT: | <i>Genuity VT Double PRO</i> | NEW OFFERING |
| <ul style="list-style-type: none"> • <i>VT Double PRO</i> targets double-stack acres where Monsanto hasn't traditionally had a strong presence | | |
| WESTERN CORN BELT PORTFOLIO: | | |
| <i>YieldGard VT Triple</i> | PROVEN PRODUCT | |
| <i>Genuity SmartStax</i> | UPGRADE | |
| <i>Genuity VT Triple PRO</i> | NEW OFFERING | |

CENTRAL CORN BELT

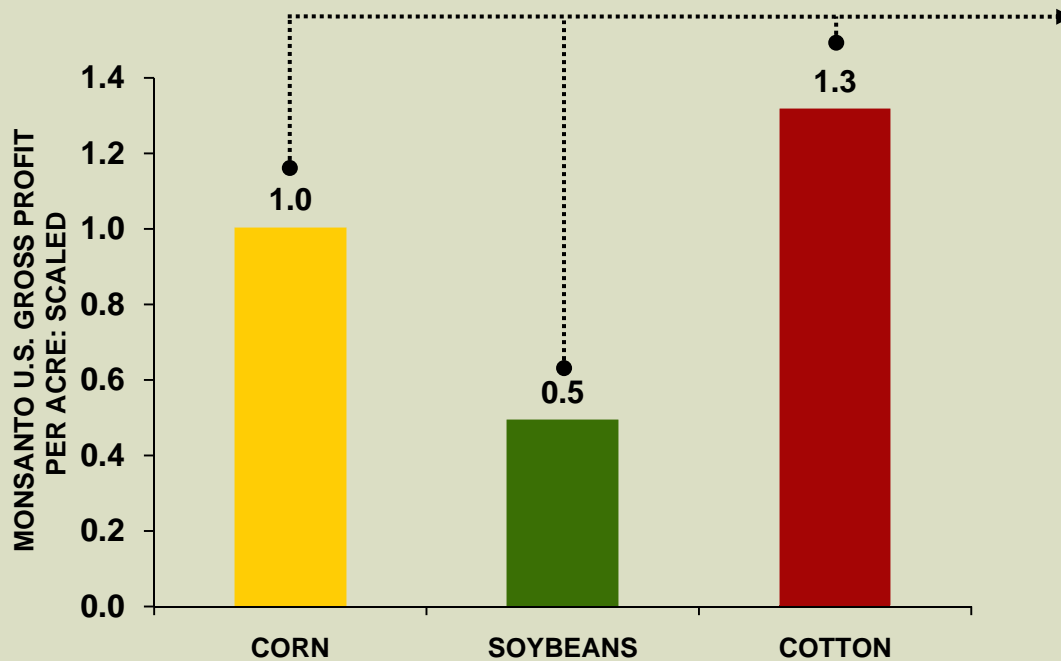
| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------|
| LEAD PRODUCT: | <i>Genuity SmartStax</i> | UPGRADE |
| <ul style="list-style-type: none"> • <i>SmartStax</i> provides upgrade over triples as industry-best insect package • 2011 deployment focuses on 90-105RM; <i>SmartStax</i> portfolio builds in longer maturities over time | | |
| CENTRAL CORN BELT PORTFOLIO: | | |
| <i>YieldGard VT Triple</i> | PROVEN PRODUCT | |
| <i>Genuity VT Triple PRO</i> | NEW OFFERING | |
| <i>Genuity VT Double PRO</i> | NEW OFFERING | |

SURROUNDING CORN BELT & SOUTH

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|
| LEAD PRODUCT: | <i>Genuity VT Triple PRO</i> | NEW OFFERING |
| <ul style="list-style-type: none"> • <i>VT Triple PRO</i> is a new tool in longest-maturities: industry's only reduced-refuge product in cotton-growing regions | | |
| SOUTHERN CORN BELT PORTFOLIO: | | |
| <i>YieldGard VT Triple</i> | PROVEN PRODUCT | |
| <i>Genuity SmartStax</i> | NEW OFFERING | |
| <i>Genuity VT Double PRO</i> | NEW OFFERING | |

Portfolio Balance Positions Monsanto Well Among Crops; Set Up For Growth in 2011 U.S. Season

PORTFOLIO BALANCE: INDEXED GROSS PROFIT PER ACRE FOR MONSANTO BRANDED CROP OFFERINGS



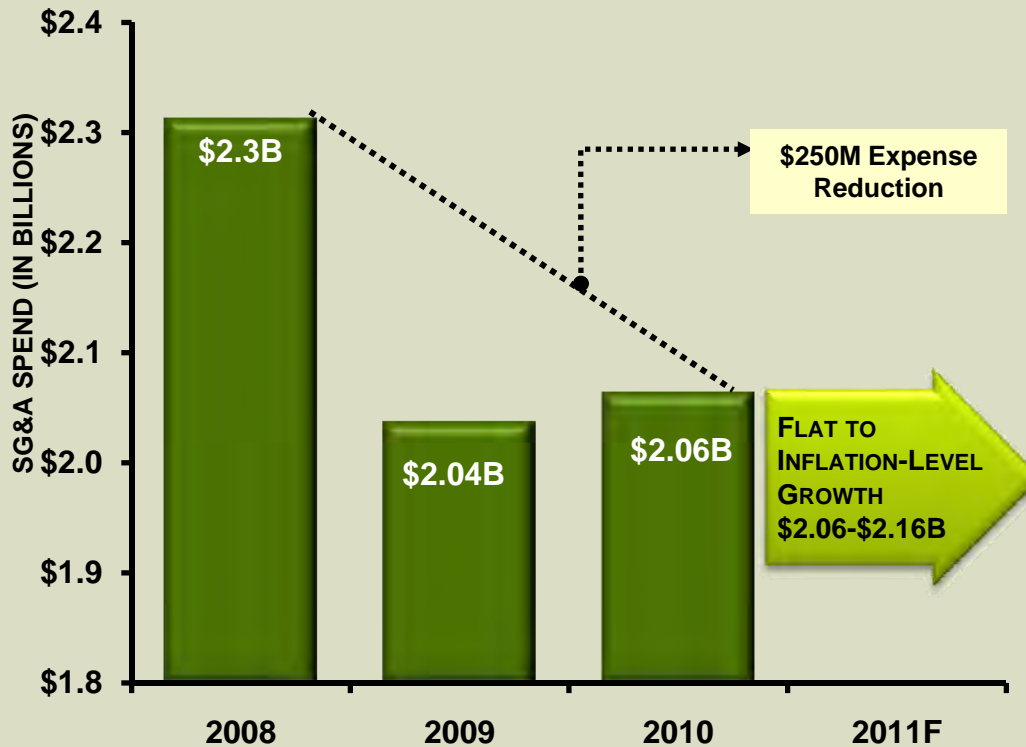
2011 OPERATIONAL DRIVERS

PORTFOLIO BALANCE

- *In 2011, for every 1 million acres that shift from soybeans into corn or into cotton, we would expect only an estimated \$0.02 to \$0.03 EPS increase on average for Monsanto*
- *With brands in corn, cotton and soybeans, Monsanto is positioned to meet demand regardless of normal fluctuations in crop planting patterns in any given year*

Complementing Operational Plan, Restructuring Provides Full Operational Leverage Beginning in Fiscal 2011

TOTAL COMPANY SG&A SPEND¹ 2008-2011F



OPERATIONAL LEVERAGE

SG&A:

- ▶ **FY10 SG&A:**
 - \$2.06 billion reflecting institutionalized initial SG&A savings from restructuring actions
- ▶ **FY11 SG&A Forecast:**
 - Maintain flat to inflation-level growth

RESTRUCTURING ACTIONS:

- ▶ **\$737M Program Across Seeds & Traits and Ag Productivity:**
 - Includes \$180M extension announced in 2010 to streamline *Roundup* and other glyphosate-based herbicides business for steady-state gross profit contribution

ANNUAL COST SAVINGS: \$300-to-\$340 Million

2010: Roughly \$80 Million

- Roughly 75% in SG&A skewed towards seeds and traits

2011F: \$300-to-\$340 Million

- Roughly 60% in seeds and traits
- Greater than 55% of savings in SG&A with remainder in cost of goods

1. SG&A does not include restructuring charges

Reconciliation of Non-GAAP Financial Measures

RECONCILIATION OF FREE CASH FLOW

| \$ Millions | Fiscal Year | | Fiscal First Quarter | |
|-----------------------------------------------------------------------|----------------------------|---------------------|-----------------------|-----------------------|
| | Fiscal Year 2011 Target | Fiscal Year 2010 | First Quarter 2011 | First Quarter 2010 |
| Net Cash Provided (Required) by Operating Activities | \$1,700-\$1,900 | \$1,398 | \$624 | \$(1,403) |
| Net Cash (Required) Provided by Investing Activities | \$(900-1,000) | \$(834) | \$(124) | \$(197) |
| Free Cash Flow | \$800-\$900 | \$564 | \$500 | \$(1,600) |
| Net Cash (Required) Provided by Financing Activities | N/A | \$(1,038) | \$(340) | \$102 |
| Cash Assumed from Initial Consolidation of Variable Interest Entities | N/A | -- | \$77 | -- |
| Effect of Exchange Rate Changes on Cash and Cash Equivalents | N/A | \$3 | \$10 | \$13 |
| Net Increase (Decrease) in Cash and Cash Equivalents | N/A | \$(471) | \$247 | \$(1,485) |

RECONCILIATION OF ONGOING EPS

| \$ Per Share | Fiscal Year | | Fiscal First Quarter | |
|--------------------------------------------------------------------|----------------------|---------------|----------------------|-----------------|
| | 2011 Guidance | 2010 | 2011 | 2010 |
| Diluted Earnings (Loss) per Share | \$2.69-\$2.79 | \$2.01 | \$0.01 | \$(0.03) |
| Restructuring Charges, Net | \$0.03 | \$0.41 | \$0.01 | \$0.02 |
| Income on Discontinued Operations | -- | \$(0.01) | -- | \$(0.01) |
| Diluted Earnings (Loss) per Share from Ongoing Business | \$2.72-\$2.82 | \$2.41 | \$0.02 | \$(0.02) |