

MONSANTO CO /NEW/

Form 424B2

April 10, 2008

FILED PURSUANT TO RULE 424(b)(2)

REGISTRATION NOS. 333-125193

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This prospectus supplement relates to an effective registration statement under the Securities Act of 1933, and is subject to completion or amendment.

SUBJECT TO COMPLETION, DATED APRIL 10, 2008

Preliminary Prospectus Supplement

(To Prospectus Dated July 7, 2005)

\$

Monsanto Company

\$ % Senior Notes due

\$ % Senior Notes due

The senior notes due (the notes due) will bear interest at the rate of % per year. The senior notes due (the notes due and together with the notes due , the notes) will bear interest at the rate of % per year. Interest on the notes is payable on April and October of each year, beginning on October , 2008. The notes due will mature on , and the notes due will mature on , . We may redeem some or all the notes at any time at the redemption prices described under Description of Notes Optional Redemption. The notes will be senior unsecured obligations of Monsanto and will rank equally with all of our other senior unsecured indebtedness. If we experience a change of control triggering event, we may be required to offer to purchase the notes from holders. See Description of Notes Offer to Redeem Upon Change of Control Triggering Event.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the notes, or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

Before investing in the notes, you should consider the risks that are described under Risk Factors in our Annual Report on Form 10-K for the year ended August 31, 2007 and our quarterly report on Form 10-Q for the quarter ended February 29, 2008.

	Per note due	Total due	notes	Per note due	Total due	notes	Total	all notes
Public Offering Price (1)	%	\$		%	\$		\$	
Underwriting Discount	%	\$		%	\$		\$	
Proceeds to Monsanto (before expenses) (1)	%	\$		%	\$		\$	

(1) Plus accrued interest, if any, from , 2008 to the date of delivery.

The underwriters expect to deliver the notes in book-entry form only, through the facilities of The Depository Trust Company on or about , 2008.

Joint Book-Running Managers

Citi **Goldman, Sachs & Co.**
Passive Book-Running Manager

JPMorgan

Merrill Lynch & Co.

RBS Greenwich Capital

April , 2008

You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any jurisdiction where the offer is not permitted. You should not assume that the information contained in or incorporated by reference in this prospectus supplement or the accompanying prospectus is accurate as of any date other than their respective dates.

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As used in this prospectus supplement, unless otherwise indicated, Monsanto, the company, we, our and us are used interchangeably to refer to Monsanto Company or to Monsanto Company and its subsidiaries, as appropriate to the context.

Trademarks owned or licensed by Monsanto or its subsidiaries are shown in *italics*. Unless otherwise indicated, references to ROUNDUP herbicides mean ROUNDUP-branded herbicides, excluding all lawn-and-garden herbicides, and references to ROUNDUP and other glyphosate-based herbicides exclude all lawn-and-garden herbicides.

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

In this prospectus supplement and the accompanying prospectus, including the information incorporated by reference therein, we share our expectations for our company's future performance. These forward-looking statements include statements about: our business plans; the potential development, regulatory approval, and public acceptance of our products; our expected financial performance, including sales performance, and the anticipated effect of our strategic actions; the anticipated benefits of recent acquisitions; the outcome of contingencies, such as litigation; domestic or international economic, political and market conditions; and other factors that could affect our future results of operations or financial position. Any statements we make that are not matters of current reportage or historical fact should be considered forward-looking. Such statements often include words such as believe, expect, anticipate, intend, plan, estimate, will, and similar expressions. By their nature, these types of statements are uncertain and are not guarantees of our future performance.

Since these statements are based on factors that involve risks and uncertainties, our 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 described or referenced in (i) the accompanying prospectus, (ii) Part II Item 1A Risk Factors of our Report on Form 10-Q for the fiscal quarter ended February 29, 2008 and (iii) Part I Item 1A of our Report on Form 10-K for the fiscal year ended Aug. 31, 2007.

Our forward-looking statements represent our estimates and expectations and are based on currently available information at the time that we make those statements. However, circumstances change constantly, often unpredictably, and many events beyond our control will determine whether the expectations encompassed in our forward-looking statements will be realized. As a result, investors should not place undue reliance on these forward-looking statements. We disclaim any intention or obligation to revise or update any forward-looking statements, or the factors that may affect their realization, whether as a result of new information, future events or otherwise, and investors should not rely on us to do so.

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MONSANTO COMPANY

Monsanto Company is a leading global provider of agricultural products for farmers. Our seeds, biotechnology trait products, and herbicides provide farmers with solutions that improve productivity, reduce the costs of farming, and produce better foods for consumers and better feed for

animals.

We produce leading seed brands, including *DEKALB*, *Asgrow*, *D&PL*, *Deltapine* and *Seminis*, and we develop biotechnology traits that assist farmers in controlling insects and weeds. We provide other seed companies with genetic material and biotechnology traits for their seed brands. We also manufacture *Roundup* brand herbicides and other herbicides and provide lawn-and-garden herbicide products for the residential market and animal agricultural products focused on improving dairy cow productivity.

RECENT DEVELOPMENTS

In March 2008 we signed a definitive agreement to acquire De Ruiter Seeds Group B.V., a Dutch holding company that owns and operates De Ruiter Seeds, and a related company, for \$546 million, less net debt of approximately \$53 million. The acquisition is subject to certain conditions, including approvals under competition laws and regulations. Once completed, we expect this acquisition to build on the strength of our vegetable seed business as well as enhance our growth in the protected-culture segment, which we consider the fastest-growing space within the vegetable seeds industry.

On April 2, 2008, we announced financial results for the second quarter of the 2008 fiscal year. We reported record net sales of \$3.8 billion for the quarter, which were 45% higher than net sales for the same period in fiscal year 2007. We reported record net sales of \$5.9 billion in the first six months of the fiscal year. The year-to-date net sales were 42% higher than net sales during the same period in the prior fiscal year. Key contributors to our growth included increased sales of Roundup and other glyphosate-based herbicides globally as well as higher worldwide corn seed and traits revenues.

We reported net income of \$1.1 billion for the quarter, compared with \$543 million for the same period in fiscal year 2007. For the first six months of the fiscal year, we reported net income of \$1.4 billion, compared with net income of \$633 million for the first six months of fiscal year 2007.

USE OF PROCEEDS

We estimate that the net proceeds to us from the offering of the notes will be approximately \$, after deducting underwriting discounts and expenses. We intend to use the net proceeds we receive from the sale of the notes to repay at par \$236 million of our 4% Senior Notes that are due May 15, 2008, and to finance a portion of the expansion of our corn seed production facilities. Pending such uses, we may temporarily invest the net proceeds in interest-bearing investments.

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DESCRIPTION OF NOTES

The following description of the particular terms of the notes supplements and, to the extent inconsistent, replaces, the description in the accompanying prospectus of the general terms and provisions of the Debt Securities, to which description reference is hereby made. The following summary of certain provisions of the notes and the Indenture does not purport to be complete and is qualified in its entirety by reference to the actual provisions of the notes and the Indenture. Certain terms used but not defined herein shall have the meanings given to them in the accompanying prospectus, the Indenture, or the notes, as the case may be.

General

The notes due _____ will mature on _____, _____, and the notes due _____ will mature on _____, _____. Interest on the notes will accrue from April _____, 2008 at the rates per annum shown on the cover of this prospectus supplement and will be payable semi-annually, in arrears, on April _____ and October _____, beginning October _____, 2008, to the persons in whose names the notes are registered at the close of business on the _____ or _____ preceding the respective interest payment dates, except that interest payable at maturity shall be paid to the same persons to whom principal of the notes is payable. Interest will be computed on the notes on the basis of a 360-day year of twelve 30-day months.

Any payment otherwise required to be made in respect of the notes on a date that is not a business day may be made on the next succeeding business day with the same force and effect as if made on that date. No additional interest will accrue as a result of a delayed payment. A business day is defined in the Indenture as a day other than a Saturday, Sunday or other day on which banking institutions in New York City, or any other city in which the paying agent is being utilized, are authorized or required by law or executive order to close.

The notes will constitute a series of debt securities to be issued under an Indenture dated as of August 1, 2002, between Monsanto and Bank of New York Trust Company, N.A., as successor trustee, the terms of which are more fully described in the accompanying prospectus. The notes and any future debt securities issued under the Indenture will be unsecured obligations of Monsanto and will rank on a parity with all our other unsecured and unsubordinated indebtedness. The notes will be effectively subordinated to all liabilities of our subsidiaries, including trade payables. Since we conduct many of our operations through our subsidiaries, our right to participate in any distribution of the assets of a subsidiary when it winds up its business is subject to the prior claims of the creditors of the subsidiary. This means that your right as a holder of our notes will also be subject to the prior claims of these creditors if a subsidiary liquidates or reorganizes or otherwise winds up its business. Unless we are considered a creditor of the subsidiary, your claims will not be recognized ahead of these creditors. At February 29, 2008, we had approximately \$1.4 billion of indebtedness outstanding on a consolidated basis, of which approximately \$155.2 million was owed by our subsidiaries to outside parties.

The Indenture does not limit the aggregate principal amount of debt securities that may be issued thereunder and provides that debt securities may be issued thereunder from time to time in one or more additional series. The Indenture does not limit our ability to incur additional indebtedness. We may from time to time, without notice to or the consent of the holders of a series of notes, issue additional debt securities having the same ranking, interest rate, maturity and other terms as the notes of either series of notes (other than the issue date, issue price and initial interest payment date). Any additional debt securities would be consolidated with the notes of the applicable series offered by this prospectus supplement and would form a single series of debt securities under the Indenture.

The notes will be issued in fully registered form in denominations of \$1,000 and whole multiples of \$1,000. The notes will be represented by one or more global securities registered in the name of a nominee of The Depository Trust Company (DTC). Except as described in accompanying prospectus under Book-Entry Debt Securities, the notes will not be issuable in certificated form.

The notes will not be subject to any sinking fund.

Optional Redemption

The notes will be redeemable, in whole or in part, at our option at any time or from time to time at a redemption price equal to the greater of:

100% of the principal amount of the notes being redeemed, and

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the sum of the present values of the remaining scheduled payments of principal and interest on the notes being redeemed (not including any portion of any payments of interest accrued to the redemption date) discounted to the redemption date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate (as defined below) plus basis points with respect to the notes due and basis points with respect to the notes due , plus, in each case, accrued and unpaid interest on the notes being redeemed to the redemption date.

Comparable Treasury Issue means, with respect to each Reference Treasury Dealer, the United States Treasury security selected by such Reference Treasury Dealer as having a maturity comparable to the remaining term of the notes to be redeemed that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of those notes.

Comparable Treasury Price means, with respect to any redemption date, (i) the average of the Reference Treasury Dealer Quotations for the redemption date, after excluding the highest and lowest Reference Treasury Dealer Quotations, or (ii) if the trustee obtains fewer than three Reference Treasury Dealer Quotations, the average of all Reference Treasury Dealer Quotations.

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Reference Treasury Dealer means (i) Citigroup Global Markets Inc., Goldman, Sachs & Co., J.P. Morgan Securities Inc., and Merrill Lynch, Pierce, Fenner & Smith Incorporated (or their respective affiliates which are Primary Treasury Dealers (as defined below)) and their respective successors; provided, however, that if any of the foregoing shall cease to be a primary U.S. Government securities dealer in New York City (a Primary Treasury Dealer), Monsanto will substitute another Primary Treasury Dealer; and (ii) any other Primary Treasury Dealer selected by Monsanto.

Reference Treasury Dealer Quotations means, with respect to each Reference Treasury Dealer and any redemption date, the average, as determined by the trustee, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the trustee by that Reference Treasury Dealer at 3:30 p.m., New York City time, on the third business day preceding that redemption date.

Treasury Rate means, with respect to any redemption date, the rate per annum equal to the semi-annual equivalent yield to maturity of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for that redemption date. Notwithstanding the foregoing, installments of interest on notes that are due and payable on interest payment dates falling on or prior to a redemption date will be payable on the interest payment date to the registered holders as of the close of business on the relevant record date according to such notes and the Indenture.

Holders of notes to be redeemed will receive notice by first-class mail at least 30 days but not more than 60 days before the date of redemption.

If fewer than all of the notes of either series are to be redeemed, DTC, in the case of the notes represented by a global security, or the trustee will select, not more than 60 days prior to the redemption date, the particular notes or portions thereof for redemption from the outstanding notes of such series not previously called by such method as DTC or the trustee, as the case may be, deems fair and appropriate. Unless we default in payment of the redemption price, on and after the date of redemption, interest will cease to accrue on the notes or portions thereof called for redemption.

Offer to Redeem Upon Change of Control Triggering Event

Upon the occurrence of a Change of Control Triggering Event in respect of either series of notes, unless we have exercised our right to redeem the notes as described under Optional Redemption, each holder of the applicable notes will have the right to require us to purchase all or a portion of such holder's notes, at a purchase price equal to 101% of the principal amount thereof plus accrued and unpaid interest, if any, to the date of purchase, subject to the rights of holders to receive interest due on the scheduled interest payment dates.

Within 30 days following the date upon which the Change of Control Triggering Event occurs or, at our option, prior thereto but after the public announcement of the pending Change of Control, we will send, by first class mail, a notice to each holder of notes of the applicable series setting forth our offer to purchase the notes, specifying the

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purchase date, which will be no earlier than 30 days nor later than 60 days from the date the notice is mailed, unless otherwise required by law. If mailed prior to the date of the Change of Control, the notice will state that the offer is subject to completion of the change in control. Holders electing to sell their notes will be required to surrender their notes in accordance with the offer, to the paying agent at the address to be specified in the notice, or transfer their notes to the paying agent by book-entry transfer, prior to the close of business on the third business day prior to the payment date.

We will not be required to make a Change of Control offer in respect of a series of notes if a third party makes such an offer in the manner and at the times referred to above and otherwise in compliance with the requirements referred to above, and such third party purchases all notes of such series properly tendered and not withdrawn under its offer.

Change of Control means any of the following:

the direct or indirect sale, lease, transfer, conveyance or other disposition (other than by way of merger or consolidation), in one or a series of related transactions, of all or substantially all of the assets of Monsanto and its subsidiaries to any person (as that term is used in Section 13(d)(3) of the Exchange Act);

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any transaction (including any merger or consolidation) the result of which is that any person becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 under the Exchange Act), directly or indirectly, of more than 50% of the outstanding voting power of our outstanding shares;

we consolidate with, or merge with or into, any entity, or any entity consolidates with or merges with or into us, unless following the transaction our shareholders prior to the transaction own a majority of the voting power of the outstanding shares of the surviving entity;

the first day on which the majority of the members of our board of directors cease to be continuing directors, which are (i) persons who are directors at the date of issuance of the notes or (ii) persons nominated or elected with the approval of a majority of continuing directors; or

the adoption of a plan for our liquidation or dissolution.

Change of Control Triggering Event means, with respect to the notes of either series, such notes cease to be rated Investment Grade by at least two of the three Rating Agencies on any date during the period starting 60 days prior to our first public announcement of any Change of Control and ending 60 days following consummation of the Change of Control (subject to extension so long as any of the Rating Agencies has publicly announced that it is considering a possible ratings change, other than an announcement with positive implications), and the applicable Rating Agencies confirm that any reduction in ratings is attributable to the change in control. However, no Change of Control Triggering Event will be deemed to have occurred unless and until the Change of Control has been consummated.

Fitch means Fitch Inc., a subsidiary of Fimalac, S.A., and its successors.

Investment Grade means a rating of Baa3 or better by Moody's (or its equivalent under any successor rating category of Moody's); a rating of BBB- or better by S&P (or its equivalent under any successor rating category of S&P); and a rating of BBB- or better by Fitch (or its equivalent under any successor rating category of Fitch).

Moody's means Moody's Investors Service, Inc., a subsidiary of Moody's Corporation, and its successors.

S&P means Standard & Poor's Ratings Services, a division of The McGraw-Hill Companies, Inc., and its successors.

Rating Agency means each of Moody's, S&P and Fitch; provided, that if any of Moody's, S&P and Fitch ceases to provide rating services to issuers or investors for reasons outside of our control, the Company may appoint another nationally recognized statistical rating organization within the meaning of Rule 15c3-1(c)(2)(vi)(F) under the Exchange Act as a replacement for such Rating Agency.

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Concerning the Trustee

The Bank of New York Trust Company, N.A. is the trustee under the Indenture. Its affiliate, The Bank of New York, is a participant in revolving credit agreements with Monsanto, and may provide other banking and financial services to Monsanto.

UNDERWRITING

Subject to the terms and conditions stated in the underwriting agreement dated the date of this prospectus supplement, each underwriter named below has agreed to purchase, and we have agreed to sell to that underwriter, the principal amount of notes set forth opposite the underwriter's name.

Underwriter	Principal Amount of Notes due	Principal Amount of Notes due
Citigroup Global Markets Inc.		
Goldman, Sachs & Co.	\$	\$
J.P. Morgan Securities Inc.		
Merrill Lynch, Pierce, Fenner & Smith Incorporated		
Greenwich Capital Markets, Inc.		

Total \$ \$
 The underwriting agreement provides that the obligations of the underwriters to purchase the notes in this offering are subject to approval of legal matters by counsel and to other conditions. The underwriters are obligated to purchase all the notes if they purchase any of the notes.

The underwriters propose to offer some of the notes directly to the public at the public offering prices set forth on the cover page of this prospectus supplement and some of the notes to dealers at the public offering price less a concession not to exceed % of the principal amount of the notes due and % of the principal amount of the notes due . The underwriters may allow, and dealers may reallocate, a concession not to exceed % of the principal amount of the notes due and % of the principal amount of the notes due on sales to other dealers. After the initial offering of the notes to the public, the representatives may change the public offering prices and concessions.

The following table shows the underwriting discounts and commissions that we are to pay to the underwriters in connection with this offering of the notes (expressed as a percentage of the principal amount of such notes).

	Paid by Monsanto
Per note due	%
Per note due	%

In connection with the offering, the representatives of the underwriters may purchase and sell notes of the applicable series in the open market. These transactions may include over-allotment, syndicate covering transactions and stabilizing transactions. Over-allotment involves syndicate sales of notes in excess of the principal amount of notes to be purchased by the underwriters in the offering, which creates a syndicate short position. Syndicate covering transactions involve purchases of the notes in the open market after the distribution has been completed in order to cover syndicate short positions. Stabilizing transactions consist of certain bids or purchases of notes made for the purpose of preventing or retarding a decline in the market price of the notes while the offering is in progress.

The underwriters also may impose a penalty bid. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the representatives of the underwriters, in covering syndicate short positions or making stabilizing purchases, repurchases notes originally sold by that syndicate member. Any of these activities may have the effect of preventing or retarding a decline in the market price of the notes. They may also cause the price of the notes to be higher than the price that otherwise would exist in the open market in the absence

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of these transactions. The underwriters may conduct these transactions in the over-the-counter market or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

We estimate that our total expenses for the offering of the notes will be approximately \$830,000.

The underwriters and their affiliates have, directly and indirectly, provided various investment and commercial banking and other advisory services to us and our affiliates for which they have received customary fees and commissions. The underwriters and their affiliates may, from time to time, engage in transactions with and perform services for us in the ordinary course of their business.

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act of 1933, or to contribute to payments the underwriters may be required to make because of any of those liabilities.

LEGAL MATTERS

Bryan Cave LLP, St. Louis, Missouri, as our counsel, has issued an opinion as to the legality of the notes. Mayer Brown LLP, Chicago, Illinois, will pass upon certain legal matters for the underwriters in connection with this offering.

EXPERTS

The consolidated financial statements, incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended August 31, 2007, and the effectiveness of the Company's internal control over financial reporting, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports (which reports (1) express an unqualified opinion and include an explanatory paragraph regarding the Company's adoption of Statement of Financial Accounting Standards No. 158 *Employers Accounting for Defined Benefit Pension and Other Postretirement Plans - an amendment of FASB Statements No. 87, 88, 106 and 132 (R)*, Financial Accounting Standards Board Interpretation No. 47, *Accounting for Conditional Asset Retirement Obligations - an interpretation of FASB Statement No. 143*, and Statement of Financial Accounting Standards No. 123 (R), *Share-Based Payment*, effective August 31, 2007, August 31, 2006, and September 1, 2005, respectively, and (2) express an unqualified opinion on the effectiveness of internal control over financial reporting), which are incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

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\$2,000,000,000

Debt Securities

Preferred Stock

Common Stock

Warrants

Purchase Contracts

Units

Debt Securities of Monsanto Finance Canada Co.

Guarantees of Debt Securities of Monsanto Finance Canada Co.

This prospectus describes securities which we may offer and sell at various times. A more detailed description of the securities is contained in this prospectus under "Description of Debt Securities," "Description of Capital Stock," and "Description of Warrants and Warrant Units" and "Description Of Purchase Contracts and Purchase Units."

- The securities may be our senior or subordinated debt securities, shares of our preferred or common stock, warrants or warrant units, purchase contracts or purchase units, and may include securities convertible into or exchangeable for our preferred or common stock.
- The securities may be issued by our subsidiary, Monsanto Finance Canada Co. ("Monsanto Finance Canada"), which we would unconditionally guarantee.
- The securities to be issued under this prospectus may be offered as separate series or issuances at an aggregate initial public offering price not to exceed \$2,000,000,000 (or the equivalent amount in other currencies).

We will determine the terms of each series of securities (including, as applicable, the specific designation, aggregate principal amount, interest rates, dividend rates, maturity, redemption provisions, ranking and other terms) at the time of sale, and we will describe those terms in a prospectus supplement which we will deliver together with this prospectus at the time of the sale.

We may sell securities directly to investors or to or through underwriters, dealers or agents. More information about the way we will distribute the securities is under the heading "Plan of Distribution." Information about the underwriters or agents who will participate in any particular sale of securities will be in the prospectus supplement relating to those securities.

Unless we state otherwise in a prospectus supplement, we will not list any of the securities on any securities exchange.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is July 7, 2005.

We have not authorized anyone to give any information or to make any representations concerning the offering of the securities except those which are in this prospectus or in the prospectus supplement which is delivered with this prospectus, or which is referred to under "Where You Can Find More Information." If anyone gives any other information or representation, you should not rely on it. This prospectus is not an offer to sell or a solicitation of an offer to buy any securities other than the securities which are referred to in the prospectus supplement. This prospectus is not an offer to sell or a solicitation of an offer to buy securities in any circumstances in which the offer or solicitation is unlawful. You should not interpret the delivery of this prospectus, or any sale of securities, as an indication that there has been no change in our affairs since the date of this prospectus. You should also be aware that information in this prospectus may change after this date.

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WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any of these documents at the SEC's public reference room in Washington, D.C. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings are also available to the public at the SEC's Internet website at <http://www.sec.gov>. The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to those documents.

The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference:

- our Annual Report on Form 10-K for the fiscal year ended August 31, 2004 (portions of which have been recasted in our Current Report on Form 8-K filed on May 24, 2005),
- our Quarterly Reports on Form 10-Q for the quarterly periods ended November 30, 2004 and our Quarterly Report on Form 10-Q for the quarterly period ended February 28, 2005,
- our Current Reports on Form 8-K filed on November 4, 2004, December 20, 2004, January 26, 2005, January 27, 2005, February 22, 2005, March 17, 2005, March 29, 2005, April 25, 2005 and May 24, 2005, and
- the description of our common stock set forth in our registration statement on Form 8-A filed October 10, 2002 under the heading "Description of Registrant's Securities to be Registered" and on Form S-1 (File No. 333-36956) filed August 30, 2000, as amended, under the heading "Description of Capital Stock,"

and any filings made with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934 (except for information furnished on Form 8-K) after the date on which we filed the registration statement of which this prospectus is a part, including any filings made with the SEC prior to effectiveness of the registration statement, until we sell all of the securities shall be deemed to be incorporated by reference into the prospectus.

You may receive a copy of any of these filings, at no cost, by writing or telephoning our Corporate Secretary, at Monsanto Company, 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, telephone (314) 694-1000. We have filed with the SEC a registration statement to register the securities under the Securities Act of 1933. This prospectus omits certain information contained in the registration statement, as permitted by SEC rules. You may obtain copies of the registration statement, including exhibits, as noted in the first paragraph above.

INFORMATION ABOUT MONSANTO

We are a global provider of agricultural products and integrated solutions for farmers. We produce leading seed brands, including *DEKALB*, *Asgrow*, *Seminis Vegetable Seeds* and *Stoneville*, and we develop biotechnology traits that assist farmers in controlling insects and weeds. We provide other seed companies with genetic material and biotechnology traits for their seed brands. We also make *Roundup* herbicide and other herbicides. Our seeds, biotechnology trait products and herbicides provide growers with solutions that improve productivity and reduce the costs of farming. We also provide lawn-and-garden herbicide products for the residential market and animal agricultural products focused on improving dairy cow productivity and swine genetics.

Monsanto Company was incorporated in February 2000 as a subsidiary of Pharmacia Corporation (*Pharmacia*), which is now a subsidiary of Pfizer Inc., and we are comprised of the operations, assets and liabilities that were previously the agricultural division of Pharmacia. Unless otherwise indicated, Monsanto, the company, we, our and us, are used interchangeably in this prospectus to refer to Monsanto Company or to Monsanto Company and its consolidated subsidiaries, as appropriate to the context. With respect to the time period prior to September 1, 2000, these terms also refer to the agricultural business of Pharmacia. Unless otherwise indicated, trademarks owned or licensed by Monsanto or its subsidiaries are shown in italics; references to *Roundup* herbicides mean *Roundup* branded and other branded glyphosate-based herbicides, excluding all lawn-and-garden herbicides; and references to *Roundup* and other glyphosate-based herbicides mean both branded and other non-branded glyphosate-based herbicides, excluding all lawn-and-garden herbicide products.

Our principal office is at 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, and our telephone number is (314) 694-1000.

INFORMATION ABOUT MONSANTO FINANCE CANADA

Monsanto Finance Canada, incorporated on March 31, 2005 as a Nova Scotia unlimited company, is a direct, wholly-owned subsidiary of Monsanto. Monsanto Finance Canada has no independent operations other than acting as a finance company for Monsanto and its affiliates. Monsanto Finance Canada does not, and will not, file separate reports with the SEC.

Monsanto Finance Canada's registered office is at c/o Stewart McKelvey Stirling Scales, Suite 900, 1959 Upper Water Street, Halifax, Nova Scotia, Canada.

USE OF PROCEEDS

Unless we otherwise indicate in an accompanying prospectus supplement, we intend to use the net proceeds we receive from the sale of the securities to reduce or refinance borrowings and for other general corporate purposes, which may include meeting working capital needs, capital expenditures, and acquisitions. Pending such uses, we may temporarily invest the net proceeds in interest-bearing securities. All or a substantial portion of the proceeds from the sale of the debt securities of Monsanto Finance Canada will be loaned by Monsanto Finance Canada to Monsanto or its affiliates. The prospectus supplement relating to an offering may contain a more detailed description of the use of proceeds.

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DESCRIPTION OF DEBT SECURITIES

This section describes some of the general terms of the debt securities we may issue under this prospectus. The prospectus supplement will describe the particular terms of any debt securities we may offer. The prospectus supplement will also indicate the extent, if any, to which these general provisions may not apply to the debt securities being offered. If you would like more information on these provisions, you may review the indentures which are filed as exhibits to the registration statement which is filed with the SEC. See [Where You Can Find More Information](#).

The debt securities of Monsanto may be senior unsecured or subordinated securities. The Monsanto senior debt securities will be issued under the Indenture, dated as of August 1, 2002, between us and The Bank of New York, N.A., as successor trustee, and any subordinated securities will be issued under a Subordinated Indenture to be entered into between us and the Bank of New York Trust Company, N.A., as trustee. The debt securities of Monsanto Finance Canada will be senior unsecured obligations, and we will fully and unconditionally guarantee those debt securities on a senior unsecured basis. Monsanto Finance Canada's debt securities will be issued under an Indenture to be entered into among Monsanto Finance Canada, Monsanto, as guarantor, and the Bank of New York Trust Company, N.A., as trustee. We refer to the indentures under which the Monsanto debt securities will be issued as the Monsanto Senior Indenture and the Monsanto Subordinated Indenture, and together as the Monsanto Indentures; we refer to the indenture under which Monsanto Finance Canada's debt securities are issued as the Monsanto Finance Canada Indenture; and we refer to all of the indentures collectively as the Indentures.

We are summarizing certain important provisions of the debt securities and the Indentures. This is not a complete description of all of the important terms. You should refer to the specific terms of the Indentures for a complete statement of the terms of the Indentures and the debt securities. When we use capitalized terms which we do not define here, those terms have the meanings given in the applicable Indenture. When we use references to Sections, we mean Sections in the applicable Indenture(s).

General

The senior debt securities of Monsanto and Monsanto Finance Canada will be senior unsecured obligations of the issuer and will rank on a parity with all of its other unsecured and unsubordinated indebtedness of the issuer. The subordinated debt securities of Monsanto may be subordinated to other classes of our indebtedness as described below under [Subordination](#) and as described further in the applicable prospectus supplement.

The Indentures do not limit the amount of debt securities that Monsanto or Monsanto Finance Canada may issue thereunder, nor do they limit other debt that they may issue. The debt securities may be issued at various times in different series and issues, each of which may have different terms. Unless we indicate otherwise in the prospectus supplement for any series or issue, we may treat a subsequent offering of debt securities as a part of the same issue as that series or issue.

The prospectus supplement relating to a particular series of debt securities will include the following information concerning those debt securities:

- The issuer of the debt securities.

- The title of the debt securities of the series or issue.
- The total principal amount of the series or issue of debt securities.
- The date or dates on which the principal and premium, if any, will be paid, the rights the issuer or the holders may have to extend the maturity of the debt securities and any rights the holders may have to require payment of the debt securities at any time.

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- The interest rate on the debt securities. We may specify a fixed rate or a variable rate, or a rate to be determined under procedures we will describe in the prospectus supplement, and the interest rate may be subject to adjustment.
 - The dates on which the issuer will pay interest on the debt securities and the regular record dates for determining the holders who are entitled to receive the interest payments.
 - The terms of subordination of the debt securities, if they are subordinated debt securities of Monsanto.
 - The right of the issuer, if any, to defer payments of interest on the debt securities by extending the interest payment period, and the duration of such extensions.
 - Where payments on the debt securities will be made, if it is other than the office mentioned under "Payments on Debt Securities" below.
 - If applicable, the prices at which the issuer may redeem all or a part of the debt securities and the time periods during which it may make the redemptions. The redemptions may be made under a sinking fund or otherwise.
 - Any obligation the issuer may have to redeem, purchase or repay any of the debt securities under a sinking fund or otherwise or at the option of the holder, and the prices, time periods and other terms which would apply.
 - If applicable, the terms on which the securities may be converted into shares of common stock of Monsanto.
 - Any additional events of default or covenants that will apply to the debt securities.
 - The amounts the issuer would be required to pay if the maturity of the debt securities is accelerated, if it is less than the principal amount.
 - If payments on the debt securities will be made in any currency other than U.S. dollars, the currencies of the payments.
 - If applicable, the terms under which the issuer or a holder may elect that payments on the debt securities be made in a currency other than U.S. dollars.
 - If amounts payable on the debt securities may be determined by a currency index, information on how the payments will be determined.
 - Any applicable material Federal income tax consequences.
 - Any other special terms that may apply to the debt securities. (Section 301)

Guarantee

Monsanto will fully and unconditionally guarantee on a senior unsecured basis the due and punctual payment of the principal of and any premium and interest on the debt securities issued by Monsanto Finance Canada when and as it becomes due and payable, whether at maturity or otherwise. The guarantees will rank equally with all of Monsanto's other unsecured and unsubordinated debt. The guarantees will provide that in the event of a default in payment of principal of or any premium or interest on a debt security issued by Monsanto Finance Canada, the holder of the debt security may institute legal proceedings directly against Monsanto to enforce the guarantees without first proceeding against Monsanto Finance Canada. The Monsanto Finance Canada Indenture will provide that Monsanto may under certain circumstances assume all rights and obligations of Monsanto Finance Canada under the Monsanto Finance Canada Indenture with respect to a series of debt securities.

Subordination

The subordinated debt securities of Monsanto will be subordinate and junior in right of payment to all of its senior indebtedness, as defined below.

No payment of principal of (including redemption and sinking fund payments), premium, if any, or interest on, any subordinated debt securities may be made if any senior indebtedness is not paid when due, any applicable grace period with respect to such default has ended and

such default has not been cured or waived, or the maturity of any senior indebtedness has been accelerated because of a default and such acceleration has not been rescinded or annulled.

Upon any distribution of our assets to creditors upon any dissolution, winding-up, liquidation or reorganization, whether voluntary or involuntary, or in bankruptcy, insolvency, receivership or other proceedings, all principal of, and premium, if any, and interest due or to become due on, all senior indebtedness must be paid in full before the holders of the subordinated debt securities will be entitled to receive or retain any payment. The rights of the holders of the subordinated debt securities will be subrogated to the rights of the holders of senior indebtedness to receive payments or distributions applicable to Senior Indebtedness until all amounts owing on the subordinated debt securities are paid in full.

Senior indebtedness means all present and future (i) indebtedness of Monsanto for borrowed money, (ii) obligations of Monsanto evidenced by bonds, debentures, notes or similar instruments, (iii) indebtedness incurred, assumed or guaranteed by Monsanto in connection with the acquisition by it or a subsidiary of any business, properties or assets (except purchase-money indebtedness classified as accounts payable under generally accepted accounting principles), (iv) obligations of Monsanto as lessee under leases required to be capitalized on the balance sheet of the lessee under generally accepted accounting principles, (v) reimbursement obligations of Monsanto in respect of letters of credit, and (vi) obligations of Monsanto under direct or indirect guarantees in respect of, and obligations (contingent or otherwise) to purchase or otherwise acquire, or otherwise to assure a creditor against loss in respect of, indebtedness or obligations of others of the kinds referred to in clauses (i) through (v) above, in each case unless in the instrument creating or evidencing the indebtedness or obligation or pursuant to which the same is outstanding it is provided that such indebtedness or obligation is not superior in right of payment to the senior indebtedness.

The Monsanto Subordinated Indenture will not limit the aggregate amount of senior indebtedness that we may issue. As of April 30, 2005, we have recorded approximately \$2.6 billion in outstanding debt, all of which is senior indebtedness.

Payments on Debt Securities

The issuer will make payments on the debt securities at the office or agency we will maintain for that purpose, which will be the Corporate Trust Office of the Trustee in New York, New York unless we indicate otherwise in the prospectus supplement, or at such other places at the respective times and in the manner as we designate in the prospectus supplement. (Sections 307 and 1002) As explained under "Book-Entry Debt Securities" below, The Depository Trust Company, which we refer to as DTC, or its nominee will be the initial registered holder unless the prospectus supplement provides otherwise, and we will make payments to DTC or its nominee. Payments to you, as beneficial owner, will be the responsibility of your broker or other DTC participant.

Form, Denominations and Transfers

Unless otherwise indicated in the prospectus supplement:

- The debt securities will be in fully registered form, without coupons, in denominations of \$1,000 or any multiple thereof.

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- We will not charge any fee to register any transfer or exchange of the debt securities, except for taxes or other governmental charges, if any. (Sections 302 and 305)

Original Issue Discount Securities

If debt securities are original issue discount securities, the issuer will offer and sell them at a substantial discount below their stated principal amount. We will describe Federal income tax consequences and other special considerations applicable to any original issue discount securities in the prospectus supplement. Original issue discount security means any security which provides that less than the full principal amount will be due if the maturity is accelerated or if the security is redeemed before its maturity. (Section 101)

Indexed Debt Securities

Debt securities may provide that the principal amount payable at maturity or the amount of interest payable will be determined by reference to currency exchange rates, commodity prices, equity indices or other factors. In that case, the amount the issuer will pay to the holders will

depend on the value of the applicable currency, commodity, equity index or other factor at the time the payment obligation is calculated. We will include information in the prospectus supplement for those debt securities about how we will calculate the principal or interest payable, and will specify the currencies, commodities, equity indices or other factors to which the principal amount payable at maturity or interest is linked. We will also provide information about certain additional tax considerations which would apply to the holders of those debt securities.

Certain Restrictions in the Indentures

Unless we otherwise specify in the prospectus supplement, there will not be any covenants in the Indentures or the debt securities that would protect you against a highly leveraged or other transaction involving Monsanto that may adversely affect you as a holder of debt securities. If there are provisions that offer such protection, they will be described in the prospectus supplement.

Restriction on Liens. Under the Monsanto Senior Indenture and the Monsanto Finance Canada Indenture, neither we nor any of our restricted subsidiaries (defined below) may issue any notes, bonds, debentures or other indebtedness for money borrowed secured by a pledge of, or mortgage or lien on, any operating property (defined below) owned or leased by us or any restricted subsidiary, or on any shares of stock or indebtedness of any restricted subsidiary, unless we also provide equal and ratable security on the debt securities. A restricted subsidiary is any direct or indirect subsidiary of Monsanto that owns any operating property. (Section 101) Operating property is any real property or equipment located within the U.S. and used primarily for manufacturing or research and development by us or any of our direct or indirect subsidiaries that has a net book value, after deduction of accumulated depreciation, in excess of 2.0% of our consolidated net assets (defined below), other than any property or equipment:

- which is financed by obligations issued by a state, commonwealth, territory or possession of the U.S., or any political subdivision or governmental authority of any of the foregoing; or
- which, in the opinion of our Board of Directors, is not of material importance to the total business conducted by us and our Restricted Subsidiaries taken as a whole. (Section 101)

This restriction will not apply to the following permitted liens, which will also be excluded in computing secured indebtedness for purposes of this restriction:

- liens existing as of the date of the Indenture;
- liens existing at the time any corporation becomes a restricted subsidiary;

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- liens on property existing at the time of acquisition and certain purchase money or similar liens;
 - liens to secure certain development, operation, construction, alteration, repair or improvement costs;
 - liens securing indebtedness owing to us or another restricted subsidiary by a restricted subsidiary;
 - liens in connection with either government contracts, including the assignment of moneys due or to become due thereon or obligations issued by a state or a commonwealth or certain other governmental entities;
 - certain liens relating to security for the performance of a bid or contract, in connection with legal proceedings or arising in the ordinary course of business and not in connection with the borrowing of money; and
 - extensions, substitutions, replacements or renewals of the liens described above. (Section 1005)

There is an additional exception as described below under 10% Basket Amount.

Consolidated net assets is the aggregate amount of assets, less applicable reserves and other properly deductible items, after deducting from such amount all current liabilities, excluding certain renewable or extendible indebtedness, as shown on our latest statement of consolidated financial position and computed in accordance with generally accepted accounting principles. (Section 101)

Restriction on Sale and Leaseback Transactions. Under the Monsanto Senior Indenture and the Monsanto Finance Canada Indenture, neither we nor our restricted subsidiaries may enter into any sale and leaseback transactions involving any operating property, except for leases not exceeding three years by the end of which we intend to discontinue use of the property, unless an amount equal to the fair value of the operating property leased is applied within 120 days to:

- the purchase of any asset or any interest in an asset which would qualify, after purchase, as an operating property, or

- the retirement of indebtedness maturing more than one year after the date of determination, which may include debt securities to the extent they mature more than one year after such date. (Section 1006)

There is an additional exception as described below under 10% Basket Amount.

10% Basket Amount. In addition to the exceptions described above under Restriction on Liens and Restriction on Sale and Leaseback Transactions, the Monsanto Indenture and the Monsanto Finance Canada Indenture allow additional secured indebtedness and additional sale and leaseback transactions as long as the total of the secured indebtedness plus the attributable debt (defined below) in respect of sale and leaseback transactions, other than sale and leaseback transactions the proceeds of which are applied as described under Restriction on Sale and Leaseback Transactions above, does not exceed 10% of our consolidated net assets. Attributable debt means, as of the time of determination, the total obligation, discounted to present value at the rate per annum equal to the discount rate which would be applicable to a capital lease obligation with a similar term in accordance with generally accepted accounting principles, of the lessee for rental payments (other than amounts required to be paid on account of property taxes, maintenance, repairs, insurance, water rates and other items which do not constitute payments for property rights) during the remaining portion of the initial term of the lease included in such sale and leaseback transactions. (Section 101)

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Redemption

If and to the extent set forth in the applicable prospectus supplement, the issuer will have the right to redeem the debt securities, in whole or from time to time in part, after the date and at the redemption prices set forth in the applicable prospectus supplement. (Section 1101)

Events of Default

An event of default in respect of any series of debt securities means:

- default in payment of principal of or premium, if any, on any debt security of that series;
- default for 30 days in payment of interest on any debt security of that series;
- default for 30 days in the deposit of any sinking fund payment when due in respect of that series;
- failure by the issuer in the performance of any other of the covenants or warranties in the Indenture which continues for 90 days after notice to the issuer by the Trustee or by holders of 25% in principal amount of the outstanding debt securities of that series;
- certain events of bankruptcy, insolvency or reorganization of the issuer; and
- any other event of default provided with respect to debt securities of that series. (Section 501)

If an event of default (other than with respect to certain events of bankruptcy, insolvency or reorganization) with respect to any series of debt securities occurs and is continuing, either the Trustee or the holders of 25% in principal amount of the outstanding debt securities of that series may declare the principal amount (or, if the debt securities of that series are original issue discount securities or indexed securities, such portion of the principal amount of such debt securities as may be specified in the terms of those securities) of all debt securities of that series to be due and payable immediately, but upon certain conditions such declaration may be annulled and past defaults may be waived by the holders of a majority in principal amount of the outstanding debt securities of that series on behalf of the holders of all debt securities of that series. An event of default relating to a bankruptcy, insolvency or reorganization will cause the outstanding securities to become immediately due and payable without any declaration or other act by the Trustee or the holders. The annulment and waiver may not be made with respect to a default in payment of principal of or premium, if any, or interest, if any, on the debt securities of that series and certain other specified defaults, unless those defaults have been cured. (Section 502 and 513)

The prospectus supplement relating to each series of debt securities which are original issue discount securities will describe the particular provisions relating to acceleration of the maturity of a portion of the principal amount of such original issue discount securities upon the occurrence and continuation of an event of default.

Within 90 days after the occurrence of a default with respect to any series of debt securities then outstanding, the Trustee must give to the holders of the outstanding debt securities of that series notice of any default known to the Trustee if incurred and not waived. However, except in the case of default in the payment of principal of or premium, if any, or interest on any debt security of that series, or in the deposit of any sinking fund payment which is provided for, the Trustee may withhold the notice if it in good faith determines that it is in the best interest of the holders, and such notice will not be given until 30 days after the occurrence of a default with respect to outstanding debt securities of such series.

(Section 602)

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Before the Trustee is required to exercise rights under the Indenture at the request of holders, it is entitled to be indemnified by such holders, subject to its duty, during an event of default, to act with the required standard of care. (Section 603)

Monsanto and Monsanto Finance Canada must file annual certificates with the Trustee that they are in compliance with conditions and covenants under the Indentures. (Section 1008)

The Indentures provide that the holders of a majority in principal amount of outstanding debt securities of any series may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or other power conferred on the Trustee, in respect of such series, provided that the Trustee may decline to act if such direction is contrary to law or the Indenture or would expose it to personal liability. (Section 512)

Defeasance

The Indentures include provisions allowing defeasance of the debt securities of any series issued thereunder. In order to defease debt securities, the issuer would deposit with the Trustee or another trustee money or U.S. government obligations sufficient to make all payments on those debt securities. If the issuer makes a defeasance deposit with respect to your debt securities, it may elect either:

- to be discharged from all of its obligations on your debt securities, except for its obligations to register transfers and exchanges, to replace temporary or mutilated, destroyed, lost or stolen debt securities, to maintain an office or agency in respect of the debt securities and to hold moneys for payment in trust; or
- in the case of the Monsanto Indentures, to be released from our restrictions described above relating to liens and sale and leaseback transactions.

To establish the trust, the issuer must deliver to the Trustee an opinion of its counsel that the holders of the debt securities will not recognize gain or loss for Federal income tax purposes as a result of the defeasance and will be subject to Federal income tax on the same amount, in the same manner and at the same times as would have been the case if the defeasance had not occurred. (Article Thirteen of the Monsanto Senior Indenture and the Monsanto Finance Canada Indenture; Article Fifteen of the Monsanto Subordinated Indenture)

The prospectus supplement will state if any defeasance provision will apply to debt securities offered in connection with that prospectus supplement.

Modification of the Indenture and Waiver of Covenants

We or Monsanto Finance Canada may execute supplemental indentures adding any provisions to or changing or eliminating any of the provisions of the Indentures modifying the rights of the holders of a series of debt securities outstanding thereunder if it obtains the consent of the holders of a majority in principal amount of the outstanding debt securities affected by the addition, change or elimination, except that no supplemental indenture may, without the consent of the holder of each outstanding debt security affected by the supplemental indenture:

- change the stated maturity, or reduce the principal amount, the premium, if any, thereon or the rate of payment of interest thereon, of any debt security of any series;
- reduce the aforesaid percentage of outstanding debt securities of any series, the consent of the holders of which is required for any supplemental indenture or for waiver of compliance with certain provisions of the Indenture or certain defaults thereunder; or
- effect certain other specified changes. (Section 902)

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The issuer may also omit compliance with specified covenants in the Indentures upon waiver by holders of a majority in principal amount of outstanding debt securities affected by such covenants.

Consolidation, Merger and Sale of Assets

Under the Monsanto Indentures we may, without the consent of the holders of any of the outstanding debt securities, consolidate with or merge into any other corporation or transfer or lease our assets substantially as an entirety to any person provided that:

- the successor is a corporation organized under the laws of any domestic jurisdiction;
- the successor corporation assumes our obligations on the debt securities and under the applicable Indenture;
- after giving effect to the transaction no event of default, and no event which, after notice or lapse of time, would become an event of default, shall have happened and be continuing; and
- other specified conditions are met. (Section 801)

Monsanto Finance Canada may assign all its rights and obligations under the Monsanto Finance Canada Indenture and its debt securities to:

- another entity with which Monsanto Finance Canada enters into a consolidation, merger or amalgamation, or which acquires by conveyance or transfer any of its properties or assets;
- Monsanto; or
- another subsidiary of Monsanto.

Any successor to Monsanto Finance Canada must be organized and existing under the laws of a United States or Canadian jurisdiction. In connection with any assignment other than to Monsanto, Monsanto will continue to guarantee the debt securities as described above. If Monsanto Finance Canada assigns all of its rights and obligations under the Monsanto Finance Canada Indenture and its debt securities to Monsanto, Monsanto's covenants regarding consolidations, mergers and sales of assets, its covenants described above under Certain Restrictions in the Monsanto Senior Indenture and any other covenants for the benefit of any series of debt securities issued under the Monsanto Finance Canada Indenture will remain in effect.

Concerning the Trustee

The Bank of New York Trust Company, N.A. is the successor to the Bank of New York as Trustee under the Senior Indenture, and will be the Trustee under each other Indenture. We have previously issued, under the Monsanto Senior Indenture, \$250,000,000 principal amount of our 4% Notes due May 15, 2008 and \$800,000,000 principal amount of our 7% Senior Notes due August 15, 2012. The Bank of New York, an affiliate of the Trustee, is a participant in revolving credit agreements with us, and provides other commercial banking services to us. An affiliate of the Trustee was an underwriter in connection with the offering of our 7% Senior Notes due August 15, 2012 referred to above.

The issuer can remove the Trustee of any series as long as there is no event of default and no event that, upon notice or lapse of time or both, would become an event of default in respect of that series. The holders of a majority of the principal amount of the series may also remove the Trustee under the applicable Indenture at any time. The Indentures prescribe procedures by which the Trustee will be replaced, in the event of its removal. (Section 610)

Governing Law

Unless otherwise specified in the applicable prospectus supplement, the Indentures and the debt securities will be governed by New York law, without regard to conflicts of laws principles thereof. (Section 112)

BOOK-ENTRY DEBT SECURITIES

Unless otherwise indicated in the prospectus supplement, the related debt securities will be issued as book-entry securities. Book-entry securities of a series will be issued in the form of one or more global notes that will be deposited with DTC, and will evidence all of the debt securities of that series. This means that certificates will not be issued to each holder. One or more global securities will be issued to DTC, which will keep a computerized record of its participants (for example, your broker) whose clients have purchased the debt securities. The broker or other participant will then keep a record of its clients who own the debt securities. Unless it is exchanged in whole or in part for a security evidenced by individual certificates, a global security may not be transferred, except that DTC, its nominees and their successors may transfer a global security as a whole to one another. Beneficial interests in global securities will be shown on, and transfers of beneficial interests in global notes will be accomplished by, entries made on the books maintained by DTC and its participants. Each person owning a beneficial interest in a global security must rely on the procedures of DTC and, if the person is not a participant, on the procedures of the participant through which the person owns its interest to exercise any rights of a holder of debt securities under the Indenture.

The laws of some jurisdictions require that certain purchasers of securities such as the debt securities take physical delivery of the securities in definitive form. These limits and laws may impair your ability to acquire or transfer beneficial interests in the global security.

The issuer will make payments on each series of book-entry debt securities to DTC or its nominee, as the sole registered owner and holder of the global security. Neither Monsanto, Monsanto Finance Canada, the Trustee nor any of their agents will be responsible or liable for any aspect of DTC's records relating to, or payments made on account of, beneficial ownership interests in a global security, or for maintaining, supervising or reviewing any of DTC's records relating to the beneficial ownership interests.

We have been advised that DTC's practice is to credit the accounts of participants upon receipt of funds and corresponding information on payable dates to their beneficial interests in the global security as shown on DTC's records. Payments by participants to you, as an owner of a beneficial interest in the global security, will be governed by standing instructions and customary practices (as is now the case with securities held for customer accounts registered in street name) and will be the sole responsibility of the participants, subject to statutory and regulatory requirements.

A global security representing a series of debt securities will be exchanged for certificated debt securities of that series if:

- DTC notifies the issuer that it will discontinue as depository or if DTC ceases to be a clearing agency registered under the Securities Exchange Act of 1934 and the issuer does not appoint a successor within 90 days; or
- the issuer decides to discontinue use of the system of book-entry transfers through DTC.

If that occurs, the issuer will issue debt securities of that series in certificated form in exchange for the global security. An owner of a beneficial interest in the global security then will be entitled to physical delivery of a certificate for debt securities of the series equal in principal amount to that beneficial interest and to have those debt securities registered in its name. The certificates for the debt securities

would be issued in denominations of \$1,000 or any larger amount that is an integral multiple thereof, and would be issued in registered form only, without coupons.

DTC has informed us that it is a limited-purpose trust company organized under the New York Banking Law, a banking organization within the meaning of the New York Banking Law, a member of the Federal Reserve System, a clearing corporation within the meaning of the New York Uniform Commercial Code, and a clearing agency registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC was created to hold the securities of its participants and to facilitate the post-trade settlement of securities transactions among its participants through electronic book-entry transfers and pledges between accounts of the participants, thereby eliminating the need for physical movement of securities certificates. DTC's participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust and Clearing Corporation which, in turn, is owned by a number of participants in DTC. Access to DTC's book-entry system is also available to others, such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a participant, either directly or indirectly. The rules applicable to DTC and its participants are on file with the SEC. No fees or costs of DTC will be charged to you.

DESCRIPTION OF CAPITAL STOCK

The following is a description of the material terms of our capital and the provisions of our certificate of incorporation and bylaws. The following also summarizes some relevant provisions of the General Corporation Law of the State of Delaware, which we refer to as Delaware law. Since the terms of our certificate of incorporation and bylaws and Delaware law are more detailed than the general information provided below, you should only rely on the actual provisions of those documents and Delaware law. If you would like to read those documents, they are on file with the SEC, as described under [Where You Can Find More Information](#).

General

We are authorized to issue 1,500,000,000 shares of our common stock, \$0.01 par value, and 20,000,000 shares of undesignated preferred stock, \$0.01 par value.

Common Stock

All of our outstanding shares of common stock are fully paid and nonassessable. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of our preferred stock, if any, then outstanding. The holders of our common stock are entitled to one vote per share on all matters to be voted upon by our shareowners, including the election of directors. The holders of our common stock have no cumulative voting rights or preemptive rights to purchase or subscribe for any stock or other securities, and there are no conversion rights or redemption or sinking fund provisions applicable to our common stock.

Mellon Investor Services LLC is the registrar and transfer agent for our common stock. Our common stock is listed on the New York Stock Exchange under the symbol [MON](#).

Preferred Stock

Our board of directors has the authority, without action by the shareowners, to designate and issue our preferred stock from time to time in one or more series, with such voting powers, designations,

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powers, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, as may be stated in the resolution or resolutions providing for the designation and issuance of such stock adopted from time to time by the board of directors. It is not possible to state the actual effect of the issuance of any shares of our preferred stock upon the rights of holders of our common stock until the board of directors determines the specific rights of the holders of our preferred stock. However, the effects might include, among other things:

- restricting dividends on our common stock;
- diluting the voting power of our common stock;
- impairing the liquidation rights of our common stock; or
- delaying or preventing a change of control of us without further action by our shareowners.

The shares of different series may differ, including as to rank, as may be provided in our certificate of incorporation or as may be fixed by our board of directors as described above. Subject to shareowner approval, we may from time to time amend our certificate of incorporation to increase or decrease the number of authorized shares of preferred stock.

The material terms of any series of preferred stock being offered by us will be described in the prospectus supplement relating to that series of preferred stock. That prospectus supplement may not restate the amendment to our certificate of incorporation or the board resolution that

establishes a particular series of preferred stock in its entirety. We urge you to read that amendment or board resolution because it, and not the description in the prospectus supplement, will define your rights as a holder of preferred stock. The certificate of amendment to our certificate of incorporation or board resolution will be filed with the Secretary of State of the State of Delaware and with the SEC.

No shares of our preferred stock are currently outstanding, and we have no present plans to issue any shares of our preferred stock.

Certain Effects of Authorized but Unissued Stock

We may issue additional shares of common stock or preferred stock without shareholder approval, subject to applicable rules of the New York Stock Exchange, for a variety of corporate purposes, including raising additional capital, corporate acquisitions and employee benefit plans. The existence of unissued and unreserved common and preferred stock may enable us to issue shares to persons who are friendly to current management, which could discourage an attempt to obtain control of us through a merger, tender offer, proxy contest, or otherwise, and protect the continuity of management and possibly deprive you of opportunities to sell your shares at prices higher than the prevailing market prices.

Certain Provisions of our Certificate of Incorporation and Bylaws

Our certificate of incorporation and bylaws:

- provide for a classified board of directors;
- limit the right of shareowners to remove directors;
- do not allow shareowners to change the size of the board of directors;
- do not allow shareowners to fill vacancies on the board of directors; and
- require a higher percentage of shareowners than would otherwise be required under Delaware law to amend, alter or repeal certain provisions of our certificate of incorporation and bylaws.

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These provisions may discourage certain types of transactions that involve an actual or threatened change of control of us. Since the terms of our certificate of incorporation and bylaws may differ from the general information we are providing, you should only rely on the actual provisions of our certificate of incorporation and bylaws. If you would like to read our certificate of incorporation or bylaws, they are on file with the SEC or you may request a copy from us.

Size of Board

Our certificate of incorporation provides that the number of directors to constitute the board of directors will be fixed from time to time by resolution of our board of directors, subject to any rights of holders of any outstanding series of preferred stock or any other series or class of stock to elect additional directors under specified circumstances. Our bylaws provide for a board of directors of at least five but not more than twenty directors. In accordance with our bylaws, our board of directors has fixed the number of directors at ten. There is one vacancy on the board of directors, and we are searching for a qualified individual to fill this vacancy.

Election of Directors

In order for one of our shareowners to nominate a candidate for director, our bylaws require that such shareowner give timely notice to us in advance of the meeting. Ordinarily, the shareowner must give notice not less than 90 days nor more than 120 days before the first anniversary of the preceding year's annual meeting. The notice must describe various matters regarding the nominee, including the nominee's name, address, occupation and shares held. Our certificate of incorporation does not permit cumulative voting in the election of directors. Accordingly, the holders of a majority of the then outstanding shares of common stock can elect all the directors of the class then being elected at that meeting of shareowners.

Classified Board

Our certificate of incorporation and bylaws provide that our board of directors will be divided into three classes, with the classes to be as nearly equal in number as possible, and that one class shall be elected each year and serve for a three-year term.

Removal of Directors

Delaware law provides that, unless a corporation's certificate of incorporation provides otherwise, the holders of a majority of the corporation's voting stock may remove any director from office only for cause. Our certificate of incorporation provides that shareowners may remove a director only for cause and with the approval of the holders of 70% of our voting stock, subject to any rights of holders of any outstanding series of preferred stock or any other series or class of stock to elect additional directors under specified circumstances.

Filling Vacancies

Our certificate of incorporation provides that, subject to the rights, if any, of the holders of any class of preferred stock then outstanding, only the vote of a majority of the remaining directors may fill vacancies (although less than a quorum).

Limitations on Shareowner Action by Written Consent

Our certificate of incorporation eliminates the right of shareowners to act by written consent without a meeting.

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Limitations on Calling Shareowner Meetings

Under our bylaws, shareowners may not call special meetings of shareowners or require our board of directors to call special meetings of shareowners, and only our board of directors may call special meetings of our shareowners, unless otherwise provided by Delaware law.

Limitations on Proposals of Other Business

In order for a shareowner to bring a proposal before an annual meeting, our bylaws require that the shareowner give timely notice to us in advance of the meeting. Ordinarily, the shareowner must give notice at least 90 days but not more than 120 days before the first anniversary of the preceding year's annual meeting. The notice must include a description of the proposal, the reasons for the proposal and other specified matters.

Our board of directors may reject any proposals that have not followed these procedures or that are not a proper subject for shareowner action in accordance with the provisions of applicable law.

Anti-Takeover Effects of Provisions

The classification of directors, the inability to vote shares cumulatively, the advance notice requirements for nominations and provisions of our certificate of incorporation and bylaws that limit the ability of shareowners to increase the size of our board or to remove directors and that permit the remaining directors to fill any vacancies on our board of directors make it more difficult for shareowners to change the composition of our board of directors. As a result, at least two annual shareowner meetings may be required for the shareowners to change a majority of the directors, whether or not a change in our board of directors would benefit us and our shareowners and whether or not a majority of our shareowners believes that the change would be desirable.

The provisions of our bylaws that require advance notice of other provisions may make it more difficult for shareowners to take action opposed by the board of directors. Moreover, a shareowner cannot force a shareowner consideration of a proposal over the opposition of our board of directors by calling a special meeting of shareowners.

These provisions make it more difficult and time-consuming to obtain majority control of our board of directors or otherwise bring a matter before shareowners without our board's consent, and thus reduce our vulnerability to an unsolicited takeover proposal. These provisions enable us to develop our business in a manner which will foster long-term growth by reducing to the extent practicable the threat of a takeover not in the best interests of us or our shareowners and the potential disruption entailed by that threat. On the other hand, these provisions may adversely affect the ability of shareowners to influence our governance and the possibility that shareowners would receive a premium above market price for their securities from a potential acquirer who is unfriendly to management.

Delaware Statutory Provisions

Delaware law also contains certain provisions which may have an anti-takeover effect and otherwise discourage third parties from effecting transactions with us.

In general, Delaware law prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder, unless the business combination or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. Generally, an interested stockholder is a person who, together with affiliates and associates, owns or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. The existence of this provision

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may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by shareowners.

DESCRIPTION OF WARRANTS AND WARRANT UNITS

We may issue warrants, including warrants to purchase debt securities, common stock or preferred stock or any combination of the foregoing. Warrants may be issued independently or as part of a unit with any other securities and may be attached to or separate from the underlying securities. The warrants will be issued under warrant agreements to be entered into between us and a bank or trust company, as warrant agent, as detailed in the prospectus supplement relating to the warrants being offered.

A prospectus supplement relating to any warrants being offered will include specific terms relating to the offering, including a description of any other securities sold together with the warrants. Such terms will include:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued;
- the currencies in which the price or prices of the warrants may be payable;
- the designation, amount and terms of the debt securities, common stock or preferred stock purchasable upon exercise of the warrants and procedures by which those numbers may be adjusted;
- the designation and terms of the other offered securities, if any, with which the warrants are issued and the number of the warrants issued with each security;
- if applicable, the date on and after which the warrants and the offered securities purchasable upon exercise of the warrants will be separately transferable;
- the price or prices at which the offered securities purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants shall commence and the date on which the right shall expire;
- the minimum or maximum amount of the warrants that may be exercised at any one time;
- any terms relating to the modification of the warrants, including adjustments in the exercise price;
- information with respect to book-entry procedures, if any;

- a discussion of any material Federal income tax considerations; and
- any other material terms of the warrants, including terms, procedures, and limitations relating to the transferability, exchange, exercise or redemption of the warrants.

The applicable prospectus supplement will describe the specific terms of any warrant units.

The descriptions of the warrant agreements in this prospectus and in any prospectus supplement are summaries of the applicable provisions of the applicable agreements. These descriptions do not restate those agreements in their entirety and do not contain all of the information that you may find useful. We urge you to read the applicable agreements because they, and not the summaries, define your rights as holders of the warrants or any warrant units. For more information, please review the form of the relevant agreements, which will be filed with the SEC promptly after the commencement of the offering of the warrants or warrant units and will be available as described under the heading "Where You Can Find More Information" above.

DESCRIPTION OF PURCHASE CONTRACTS AND PURCHASE UNITS

We may issue purchase contracts obligating holders to purchase from us, and us to sell to the holders, our securities at a future date or dates. The purchase contracts may require us to make periodic payments to the holders of purchase contracts. These payments may be unsecured or prefunded on a basis to be specified in the prospectus supplement relating to the purchase contracts. The purchase contracts may be issued separately or as part of purchase units consisting of a purchase contract and an underlying security that is pledged by the holder of a purchase contract to secure its obligations under the purchase contract.

The prospectus supplement relating to any purchase contracts or purchase units we are offering will specify the material terms of the purchase contracts, the purchase units and any applicable pledge or depository arrangements, including one or more of the following:

- the amount that a holder will be obligated to pay under the purchase contract, or the formula by which such amount shall be determined;
- the settlement date or dates on which the holder will be obligated to purchase the securities, and the conditions, if any, under which the settlement date may occur on an earlier date;
- the events, if any, that will cause our obligations and the obligations of the holder under the purchase contract to terminate;
- the settlement rate, which will determine the number of shares or other securities to be purchased, which may be determined by a formula, which may be based on the market price of our common stock or preferred stock over a specified period or determined by reference to other factors;
- whether the purchase contracts will be issued separately or as part of units consisting of a purchase contract and an underlying security, which would be pledged by the holder to secure its obligations under a purchase contract;
- the type of underlying security, if any, that is pledged by the holder to secure its obligations under a purchase contract, which may be our debt securities, preferred securities or debt obligations;
- the terms of any pledge arrangement relating to any underlying securities, including the terms on which distributions or payments of interest and principal on any underlying securities will be retained by a collateral agent, delivered to us or distributed to the holder; and
- the amount of the contract fee, if any, that may be payable by us to the holder or by the holder to us, the terms of payment and any provisions for deferral of payment; the contract fee may be a percentage of the stated amount of the purchase contract or determined by other factors.

The descriptions of the purchase contracts, purchase units and any applicable underlying security or pledge or depository arrangements in this prospectus and in any prospectus supplement are summaries of the material provisions of the applicable agreements. These descriptions do not restate those documents in their entirety and do not contain all of the information that you may find useful. We urge you to read the applicable documents because they, and not the summaries, define your rights as holders of the purchase contracts or purchase units. For more information, please review the form of the relevant agreements, which will be filed with the SEC promptly after the commencement of the offering of the purchase contracts or purchase units and will be available as described under the heading "Where You Can Find More Information" above.

PLAN OF DISTRIBUTION

We may sell securities to or through one or more underwriters or dealers, and also may sell securities directly to other purchasers or through agents. These firms may also act as our agents in the sale of securities. Only underwriters named in the prospectus supplement will be considered as underwriters of the securities offered by the prospectus supplement.

We may distribute securities at different times in one or more transactions. We may sell securities at fixed prices, which may change, at market prices prevailing at the time of sale, at prices related to the prevailing market prices or at negotiated prices.

In connection with the sale of securities, underwriters may receive compensation from us or from purchasers of securities in the form of discounts, concessions or commissions. Underwriters, dealers and agents that participate in the distribution of securities may be deemed to be underwriters for purposes of the Securities Act of 1933. Discounts or commissions they receive and any profit on their resale of securities may be considered underwriting discounts and commissions under the Securities Act of 1933. We will identify any underwriter or agent, and we will describe any compensation, in the prospectus supplement.

We may agree to indemnify underwriters, dealers and agents who participate in the distribution of securities against certain liabilities, including liabilities under the Securities Act of 1933.

We may authorize dealers or other persons who act as our agents to solicit offers by certain institutions to purchase securities from us under contracts which provide for payment and delivery on a future date. We may enter into these contracts with commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and others. If we enter into these agreements concerning any offering of securities hereunder, we will indicate that in the prospectus supplement.

In connection with an offering of securities, underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. Specifically, underwriters may over-allot in connection with the offering, creating a syndicate short position in the securities for their own account. In addition, underwriters may bid for, and purchase, securities in the open market to cover short positions or to stabilize the price of the securities. Finally, underwriters may reclaim selling concessions allowed for distributing the securities in the offering if the underwriters repurchase previously distributed securities in transactions to cover short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Underwriters are not required to engage in any of these activities and may end any of these activities at any time.

Unless otherwise indicated in the prospectus supplement, each series of securities offered will be a new issue of securities and will have no established trading market, and will not be listed on a national securities exchange. We cannot give you any assurance as to the liquidity of or the existence of trading markets for any securities.

LEGAL MATTERS

Bryan Cave LLP, St. Louis, Missouri, as our counsel, has issued an opinion as to the legality of the securities. Bryan Cave LLP will rely on Stewart McKelvey Stirling Scales, Nova Scotia, Canada, as to matters of Nova Scotia law.

EXPERTS

The consolidated financial statements as of Aug. 31, 2004, Aug. 31, 2003, and Dec. 31, 2002, and for the year ended Aug. 31, 2004, for the eight months ended Aug. 31, 2003, and each of the two years in the period ended Dec. 31, 2002, incorporated in this prospectus by reference from Exhibit 99.1 of the Company's Current Report on Form 8-K dated May 23, 2005, have been audited by Deloitte & Touche LLP, an

independent registered public accounting firm, as stated in their report (which report expresses an unqualified opinion and includes explanatory paragraphs relating to the adoption of Statement of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations*, in 2003 and Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*, in 2002), which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

\$

Monsanto Company

\$ % Senior Notes due

\$ % Senior Notes due

PROSPECTUS SUPPLEMENT

, 2008

EXPERTS

Citi

Goldman, Sachs & Co.

JPMorgan

Merrill Lynch & Co.

RBS Greenwich Capital