

MONSANTO COMPANY

800 NORTH LINDBERGH BOULEVARD ST. LOUIS, MISSOURI 63167 PHONE (314) 694-1000 http://www.monsanto.com

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS APRIL 18, 2001

The Annual Meeting of Stockholders of Monsanto Company will be held in K Building at the Company's Creve Coeur Campus, 800 North Lindbergh Boulevard, St. Louis County, Missouri, on Tuesday, April 18, 2001, at 1:30 p.m. for the following purposes:

- 1. to elect nine directors for terms expiring at the Annual Meeting of Stockholders to be held in 2002;
- 2. to approve Phantom Share Agreements, including the material terms, conditions and performance goals of such agreements, for purposes of exempting payments under those agreements from the deduction limitation of Section 162(m) of the Internal Revenue Code;
- 3. to approve the material terms of the performance goal used for determining awards to certain executive officers under the Annual Incentive Program for purposes of exempting payment of those awards from the deduction limitation of Section 162(m) of the Internal Revenue Code;
- 4. to ratify the appointment of Deloitte & Touche LLP as principal independent auditors for the year 2001; and
- 5. to transact such other business as may properly come before the meeting.

By Order of the Board of Directors, MONSANTO COMPANY

R. William Ile De

R. WILLIAM IDE III

Secretary

St. Louis, Missouri March 16, 2001

YOUR VOTE IS IMPORTANT

WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING, PLEASE SIGN AND DATE THE ENCLOSED PROXY CARD AND MAIL IT PROMPTLY IN THE POSTAGE PAID ENVELOPE PROVIDED. ALTERNATIVELY, YOU MAY VOTE OVER THE INTERNET OR BY TELEPHONE.

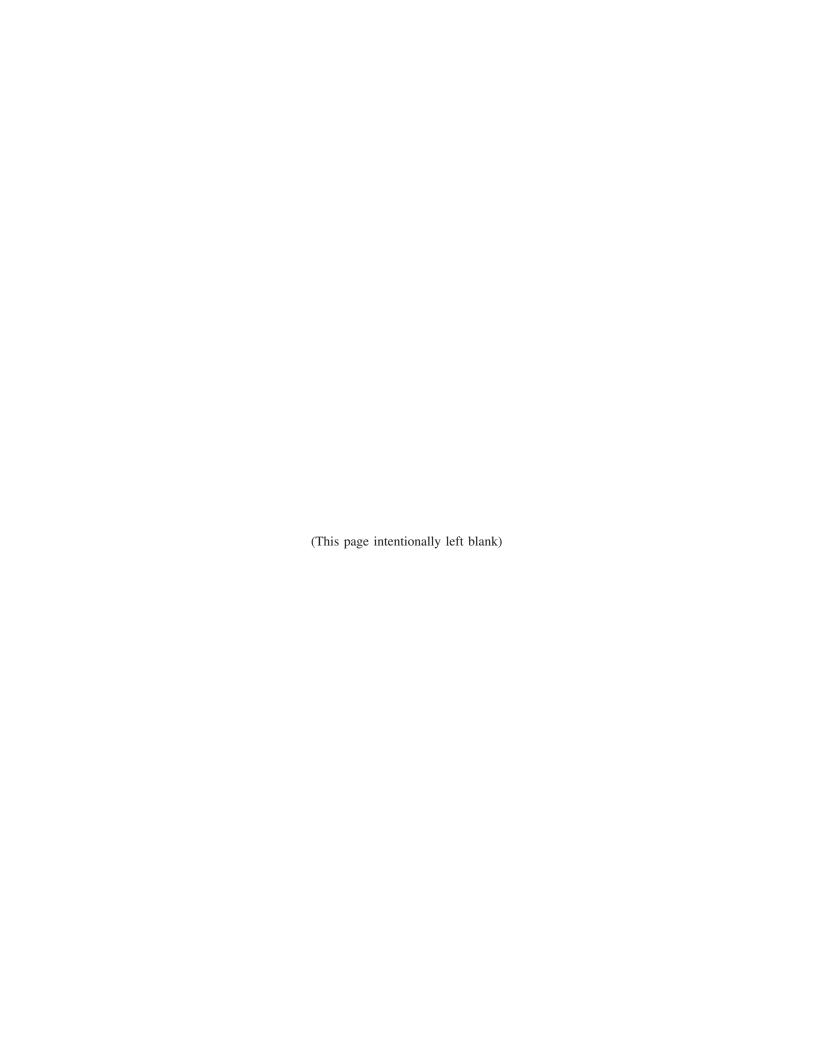


TABLE OF CONTENTS TO THE PROXY STATEMENT

	Page No
Questions and Answers	
Proxy Statement	1
Information Regarding Board of Directors and Committees	4
Election of Directors (Proxy Item No. 1)	9
Approval of the Phantom Share Agreements (Proxy Item No. 2)	9
Approval of Annual Incentive Program Performance Goal (Proxy Item No. 3)	10
Ratification of Independent Auditors (Proxy Item No. 4)	11
Stock Ownership of Management and Certain Beneficial Owners	12
Executive Compensation	14
Committee Reports	19
Stock Price Performance Graph	23
Certain Agreements	24
Arrangements Between Monsanto And Pharmacia	25
Certain Other Information Regarding Management	25
General Information	26
Appendices	
Summary Description of Agreements Between Monsanto and Pharmacia	A
Audit and Finance Committee Charter	В

Q. When and where is the annual meeting?

We will hold the annual meeting of stockholders on Tuesday, April 18, 2001 at 1:30 p.m., local time, at K Building at the Company's Creve Coeur Campus, 800 North Lindbergh Boulevard, St. Louis, Missouri 63167. A map with directions to the meeting can be found near the back of the proxy statement. We began mailing the proxy statement and annual report on March 16, 2001.

Q. What am I being asked to vote on at the meeting?

We are asking our stockholders to elect directors, approve Phantom Share Agreements entered into by the Company and several of our officers, approve the Annual Incentive Program performance goal for certain executive officers and to ratify the appointment of our independent auditors.

Q. How does the board of directors of Monsanto recommend I vote on these proposals?

The board of directors recommends that you vote "FOR" all of the nominees for director and "FOR" the other three specified proposals.

Q. Who is entitled to vote at the meeting?

You are entitled to vote at the meeting if you owned shares as of the closing of business on March 5, 2001, the record date for the meeting.

Q. What vote of the stockholders is needed?

Each share of our common stock is entitled to one vote with respect to each matter on which it is entitled to vote. Our directors are elected by a plurality of votes, which means that the nominees who receive the greatest number of votes will be elected. A majority of the shares present at the meeting in person or by proxy is required for all other items.

O. Can I vote by telephone or over the Internet?

Most stockholders have a choice of voting by using the telephone, over the Internet or by completing a proxy card. Please read the instructions attached to the proxy card or the information sent by your broker or bank. In addition, please refer to your proxy card to see which options are available to

Q. What do I do if my shares of common stock are held in "street name" at a bank or brokerage firm?

If your shares of common stock are held in street name by a bank or brokerage firm as your nominee, your bank or broker will send you a separate package describing the procedure for voting your shares. You should follow the instructions provided by your bank or brokerage firm.

Q. What happens if I return my signed proxy card but forget to indicate how I want my shares of common stock voted?

If you sign, date and return your proxy and do not mark how you want to vote, your proxy will be counted as a vote "FOR" all of the nominees for directors, and "FOR" the other three

specified proposals. In addition, your proxy will be voted in the discretion of the proxies with respect to such other business as may properly come before the meeting.

Q. What happens if I do not instruct my broker how to vote or if I mark "abstain" on the proxy?

If you mark your proxy "abstain," your vote will have the same effect as a vote against the proposal or the election of the applicable director. If you do not instruct your broker how to vote, your broker will vote your shares for you at his or her discretion. Broker non-votes have the same effect as votes cast against a particular proposal.

Q. Can I change my voting instructions before the meeting?

Yes. You can revoke your proxy at any time before it is exercised by timely delivery of a properly executed, later-dated proxy (including an Internet or telephone vote), by a written revocation of your proxy sent to the Secretary of Monsanto or by voting at the meeting. The method by which you vote by a proxy will in no way limit your right to vote at the meeting if you later decide to attend in person. If your shares are held in the name of a bank or brokerage firm, you must obtain a proxy, executed in your favor, from the bank or broker, to be able to vote at the meeting.

Q. Will I have access to the proxy statement over the Internet?

No. However, most stockholders can elect to view future proxy statements and annual reports over the Internet instead of receiving paper copies in the mail. You can choose this option by marking the appropriate box on your proxy card or by following the instructions provided if you vote over the Internet or by telephone. Please read the instruction letter accompanying this proxy statement for detailed information regarding these procedures. If you hold your shares through a bank or broker, please refer to the information provided by that entity.

Q. What do I need to do if I plan on attending the meeting in person?

If you plan on attending the meeting in person, please provide advance notice to the Company either by checking the box on your proxy card or by following the telephone or Internet instructions. In addition, you may provide notice to the Company that you plan on attending in person by delivering written notice to the Company's Secretary. If you hold your shares in street name through a bank or broker, please bring identification and proof of ownership, such as an account statement or letter from your bank or broker, for admittance. An admission list containing the names of all of those planning to attend will be placed at the registration desk at the entrance to the meeting, where you must check-in to gain admittance to the meeting.

MONSANTO COMPANY
800 NORTH LINDBERGH BOULEVARD
ST. LOUIS, MISSOURI 63167
PHONE (314) 694-1000
http://www.monsanto.com

PROXY STATEMENT

The board of directors of Monsanto Company is soliciting proxies from its stockholders in connection with the Company's Annual Meeting of Stockholders on April 18, 2001, and at any and all adjournments thereof. If you plan on attending the meeting in person, please provide advance notice to the Company either by checking the box on your proxy card or by following the telephone or Internet instructions. In addition, you may provide notice to the Company that you plan on attending in person by delivering written notice to the Company's Secretary at 800 North Lindbergh Boulevard, St. Louis, Missouri 63167. If you hold your shares in street name through a bank or broker, please bring identification and proof of ownership, such as an account statement or letter from your bank or broker, for admittance. An admission list containing the names of all of those planning to attend will be placed at the registration desk at the entrance to the meeting, where you must check-in to gain admittance to the meeting.

Our predecessor was the agricultural products business of the former Monsanto Company (we refer to the former Monsanto Company as "former Monsanto"). The following table sets forth the chronological events occurring in 1999 and 2000 which resulted in our formation.

Date of Event	Description of Event
December 19, 1999	• Former Monsanto entered into a merger agreement with Pharmacia & Upjohn, Inc. ("Pharmacia & Upjohn").
February 9, 2000	• We were incorporated in Delaware as a wholly owned subsidiary of former Monsanto under the name "Monsanto Ag Company."
March 31, 2000	Effective date of merger of former Monsanto with Pharmacia & Upjohn.
	• In connection with the merger, (1) former Monsanto changed its name from "Monsanto Company" to "Pharmacia Corporation" (we refer to former Monsanto after its name change as "Pharmacia"); (2) we changed our name to "Monsanto Company;" and (3) Pharmacia & Upjohn became a wholly owned subsidiary of former Monsanto.
September 1, 2000	• We entered into agreements with Pharmacia related to the transfer of the assets and liabilities of the business operations of the former agricultural products division of former Monsanto from Pharmacia to us. A summary description of some of the agreements with Pharmacia is attached at Appendix A.
October 17-23, 2000	• We completed an initial public offering in which we sold 38,033,000 shares of our common stock. Pharmacia now owns 220,000,000 shares of our common stock, which represents approximately 85.3% of the issued and outstanding shares thereof.

The Company is authorized to issue 1,520,000,000 shares of capital stock, of which 1,500,000,000 shares are shares of common stock, \$0.01 par value per share, and 20,000,000 shares are shares of preferred stock, \$0.01 par value per share.

We first began mailing to all stockholders of record this proxy statement, the accompanying form of proxy and the Company's 2000 Annual Report to Shareowners on March 16, 2001.

Stockholders Entitled to Vote

You are entitled to vote (in person or by proxy) at the annual meeting if you were a stockholder of record at the close of business on March 5, 2001. On March 5, 2001, 258,043,000 shares of our common stock were outstanding and entitled to vote and no shares of our preferred stock were outstanding. There is no cumulative voting with respect to the election of directors. Stockholders of record are entitled to one vote per share on all matters.

Proxies and Voting Procedures

Most stockholders have a choice of voting by completing a proxy card and mailing it in the postage-paid envelope provided, by using a toll-free telephone number, or over the Internet. Please refer to your proxy card or the information sent by your broker or bank to see which options are available to you. Please be aware that if you vote over the Internet, you may incur costs such as telephone and Internet access charges for which you will be responsible. The Internet and telephone voting facilities for stockholders of record will close at 4:00 p.m. E.S.T. on April 17, 2001. The Internet and telephone voting procedures are designed to authenticate stockholders by use of a control number and to allow you to confirm that your instructions have been properly recorded.

You can revoke your proxy at any time before it is exercised by timely delivery of a properly executed, later-dated proxy (including an Internet or telephone vote), by delivering a written revocation of your proxy to our Secretary or by voting at the meeting. The method by which you vote will in no way limit your right to vote at the meeting if you later decide to attend in person. If your shares are held in the name of a bank or brokerage firm, you must obtain a proxy, executed in your favor, from the bank or broker, to be able to vote at the meeting.

Your properly completed proxy will appoint Hendrik A. Verfaillie, Hugh Grant and R. William Ide III as proxy holders, or your representatives, to vote your shares. Your proxy permits you to direct the proxy holders to: (i) withhold your votes from particular nominees for director; (ii) vote "for," "against," or "abstain" from approval of the Phantom Share Agreements; and (iii) vote "for," "against," or "abstain" from approval of the material terms of the performance goal used for determining awards to certain executive officers under the Annual Incentive Program; and (iv) vote "for," "against," or "abstain" from the ratification the appointment of Deloitte & Touche LLP as the Company's principal independent auditors for the year 2001.

All shares entitled to vote and represented by properly completed proxies received prior to the meeting and not revoked will be voted at the meeting in accordance with your instructions. If you do not indicate how your shares are to be voted on a matter, the shares represented by your properly completed proxy will be voted as the board of directors recommends with respect to such matter.

As far as the Company knows, the only matters to be brought before the annual meeting are those referred to in this proxy statement. As to any other matters presented at the annual meeting, the persons named as proxies may vote your shares in their discretion.

Required Vote

No business can be conducted at the annual meeting unless a majority of all outstanding shares entitled to vote are either present in person or represented by proxy at the meeting. A plurality of the shares present at the meeting in person or by proxy is required for the election of directors. The affirmative vote of a majority of the shares present at the meeting in person or by proxy is required for all other items. Abstentions and votes withheld by brokers in the absence of instructions from street-name holders (broker non-votes) have the same effect as votes cast against a particular proposal.

Pharmacia's Vote

Pharmacia is the beneficial owner of approximately 85.3% of our outstanding common stock. As a result, Pharmacia has the power to elect the nominees for director, to approve the Phantom Share Agreements, to approve the material terms of the performance goal used for determining awards to certain executive officers under the Annual Incentive Program and to ratify the appointment of the independent auditors. Pharmacia has agreed to vote in favor of the Phantom Share Agreements and has indicated that it will vote its shares in favor of the nominees, in favor of the material terms of the performance goal used for determining awards to certain executive officers under the Annual Incentive Program and in favor of the ratification of the independent auditors.

Electronic Access to Proxy Materials and Annual Report

Most stockholders can elect to receive future proxy statements and annual reports over the Internet instead of receiving paper copies in the mail. If you are a stockholder of record, you can choose this option and save the Company the cost of producing and mailing these documents by marking the appropriate box on your proxy card or by following the instructions provided if you vote over the Internet or by telephone. Please read the instruction letter accompanying this proxy statement for detailed information regarding these procedures. If you hold your shares through a bank or broker, please refer to the information provided by that entity for instructions on how to elect to receive future proxy statements and annual reports over the Internet.

Information Regarding Board of Directors and Committees

Composition of Board of Directors

Under the Company's Amended and Restated Certificate of Incorporation, generally the number of directors of the Company is fixed, and may be increased or decreased from time to time, by resolution of the board of directors. Currently, the board has fixed the number of directors at nine members. Each board member serves a one year term, each to hold office until the annual meeting to be held in 2002 or until a successor is elected and has qualified or until his or her earlier death, resignation or removal. Each nominee is currently a director of the Company.

The ages, principal occupations, directorships held and other information as of March 1, 2001, with respect to the nominees and directors of Monsanto are shown below.

To Be Elected for Terms Expiring in 2002:



Frank V. AtLee III Principal Occupation: Chairman of the Board and Director,

Monsanto Company

First Became Director: June 2000

Age: 60

Chairman of the board of directors, Monsanto Company, since June 2000; President of American Cyanamid Company, 1993-January 1995; chairman of Cyanamid International, 1993-January 1995. Director: Takeda Italia Farmaceutici S.p.A and Nereus Pharmaceuticals, Inc.



Hendrik A. Verfaillie Principal Occupation: President and Chief Executive Officer and

Director, Monsanto Company First Became Director: February 2000

Age: 55

President and Chief Executive Officer, Monsanto Company, since February 2000; President of former Monsanto Company (now Pharmacia Corporation), 1997-March 2000; Chief Operating Officer of former Monsanto Company (now Pharmacia Corporation), 1999-March 2000; Executive Vice President and Advisory Director of former Monsanto Company (now Pharmacia Corporation), 1995-1997.



Håkan Åström Principal Occupation: Senior Vice President, Strategy and

Corporate Affairs, Pharmacia Corporation

First Became Director: June 2000

Age: 53

Senior Vice President, Strategy and Corporate Affairs, Pharmacia Corporation since 2000; Chairman and Managing Director of Pharmacia & Upjohn AB, 1999-present; Senior Vice President of Pharmacia AB, 1994-1995; after the 1995 merger of Pharmacia and Upjohn, Mr. Åström was responsible for Corporate Strategy and Investor Relations.



Christopher J. Coughlin Principal Occupation: Executive Vice President and Chief

Financial Officer, Pharmacia Corporation

First Became Director: March 2000

Age: 48

Executive Vice President and Chief Financial Officer, Pharmacia Corporation, since March 2000; Executive Vice President and Chief Financial Officer, Pharmacia & Upjohn Inc., 1998-March 2000; President, Nabisco International, 1997-1998; Executive Vice President, Nabisco Holdings Corp., 1996 to 1998; Chief Financial Officer, Nabisco Holdings Corp., 1996 to 1997. Director: AP Biotech.



Michael Kantor Principal Occupation: Partner, Mayer, Brown & Platt

First Became Director: June 2000

Age: 61

Partner, Mayer, Brown & Platt, a law firm, since 1997; U.S. Secretary of Commerce, 1996-97; U.S. Trade Representative, 1993-96; National Chairman for the Clinton/Gore Presidential Campaign, 1992; Partner, Manatt, Phelps, Phillips and Kantor, a law firm, 1975-92. Director: former Monsanto Company (now Pharmacia Corporation), since 1997.



Gwendolyn S. King Principal Occupation: President, Podium Prose

First Became Director: February 2001

Age: 60

President, Podium Prose, a speaker's bureau and speechwriting service founded in 2000; Senior Vice President, Corporate and Public Affairs, PECO Energy Company (formerly Philadelphia Electric Company), a diversified utility company, 1992-98; Commissioner, Social Security Administration, 1989-92. Director: former Monsanto Company (now Pharmacia Corporation), since 1993; Lockheed Martin Corp.; Marsh & McLennan Companies, Inc.



C. Steven McMillan Principal Occupation: President and Chief Executive Officer,

Sara Lee Corporation

First Became Director: June 2000

Age: 55

President and Chief Executive Officer of Sara Lee Corporation, since July 2000; President of Sara Lee Corporation, March 1997-December 1997; Chief Operating Officer, Sara Lee Corporation, December 1997-June 2000; Executive Vice President, Sara Lee Corporation, 1993-1997. Director: Sara Lee Corporation, Pharmacia Corporation and Dynegy Inc.



William U. Parfet Principal Occupation: Chairman and Chief Executive Officer, MPI

Research, Inc.

First Became Director: June 2000

Age: 54

Chairman and Chief Executive Officer of MPI Research, Inc., since 1999; Co-Chairman of MPI Research, LLC, a pre-clinical toxicology and clinical pharmaceutical testing laboratory, 1995-1999; President and Chief Executive Officer, Richard Allan Medical Industries, 1993-1996. Director: CMS Energy Corporation; Stryker Corporation; Sybron International; and Pharmacia Corporation.



John S. Reed Principal Occupation: Retired Chairman, Citigroup, Inc.

First Became Director: June 2000

Age: 62

Retired Chairman, Citigroup Inc., a commercial bank and financial services company; Chairman and Co-Chief Executive Officer of Citigroup Inc., 1998-April 2000; Chairman and Chief Executive Officer of Citicorp and Citibank, N.A., 1984-1998; Director: Philip Morris Companies, Inc. Member: The Business Council.

Board Meetings and Committees

During 2000, the board of directors met four times and took five actions by unanimous written consent. All incumbent directors attended 75% or more of the aggregate meetings of the board and of the board committees on which they served during the period they held office in 2000.

Our board of directors has the following five committees: (1) executive, (2) people, (3) audit and finance, (4) public policy and (5) science and technology. The membership and function of each committee are described below. Our entire board of directors acts on nominations for directors, and therefore we do not have a nominating committee.

Executive Committee

Members: Messrs. AtLee, Coughlin and Verfaillie

Our executive committee has the powers of our board of directors in directing the management of our business and affairs in the intervals between meetings of our board of directors (except for certain matters otherwise delegated by our board of directors, or which by statute, our certificate of incorporation or our bylaws are reserved for our entire board of directors). Actions of the executive committee are reported at the next regular meeting of our board of directors. The executive committee did not meet or take action during 2000.

People Committee

Members: Messrs. McMillan and Parfet and Ms. King

Our people committee recommends to our board of directors the establishment and modification of our management incentive plans. Our people committee also administers and interprets our management incentive plans and approves the establishment, modification and termination of other compensation plans and agreements. Our people committee has delegated authority to a committee composed of senior management to make grants and awards under the incentive plans and to approve and administer other compensation plans for all employees except executive officers. Our people committee reviews plans for executive succession, determines the compensation of all our executive officers and monitors our performance as it affects employees, including issues such as diversity and morale. During 2000, all matters reviewed by the people committee were also considered and approved by the full board.

Audit and Finance Committee

Members: Messrs. McMillan, Parfet and Reed

The audit and finance committee assists the Company's board of directors in fulfilling its responsibility to oversee: (i) the Company's financial reporting processes and systems of internal accounting and financial controls, (ii) the selection of the Company's independent accountants, (iii) the independence and performance of the Company's independent accountants and internal audit staff, (iv) the scope and effectiveness of the annual independent audit of the Company's financial statements, (v) the integrity of the Company's financial statements and financial reports, and (vi) the compliance by the Company with applicable legal, regulatory and corporate requirements. The committee's oversight role is categorized in the committee's charter as covering (1) financial reporting; (2) compliance oversight; and (3) financial oversight. A complete description of the committee's responsibilities with respect to each such category is set forth in the audit and finance committee's charter, which was approved by our board of directors on September 20, 2000 and is attached as Appendix B. The audit and finance committee met two times during 2000 and did not take any actions by unanimous written consent.

One of the requirements contained in the audit and finance committee charter is that each committee member meet the standards set forth in the listing requirements of the New York Stock Exchange ("NYSE") relating to independence. Messrs. McMillan and Reed are independent as defined by the NYSE listing requirements, in the case of Mr. Reed, based upon a determination by our board that his business relationship with Citigroup, Inc. and its affiliates does not interfere with his independent judgment. See "Certain Other Information Regarding Management — Transactions and Relationships" on page 25. Mr. Parfet does not technically qualify as independent under the NYSE listing requirements. However, under the independence standards of the NYSE listing requirements, Mr. Parfet may be appointed to the audit and finance committee because our board of directors has determined that, under exceptional and limited circumstances, in its business judgment, membership of Mr. Parfet on the audit and finance committee is required by the best interests of the Company and its stockholders despite his brother, Donald R. Parfet, having been a senior vice president of Pharmacia until his retirement in July 2000. In determining to permit Mr. Parfet to serve on the audit and finance committee, the board of directors considered the limited number of directors who are eligible to serve on the audit and finance committee, Mr. Parfet's financial background and expertise, and his past experience serving on the audit committee of Pharmacia & Upjohn. The Company has certified, in writing, its determination regarding Mr. Parfet's independence to the NYSE.

Public Policy Committee

Members: Messrs. Åström and Kantor and Ms. King

Our public policy committee reviews and monitors our performance as it affects communities, customers and the environment. Our public policy committee also identifies and investigates emerging issues related to the impact of the Company's business on society, including issues relating to public acceptance of biotechnology. The public policy committee met two times during 2000 and did not take any actions by unanimous written consent in 2000.

Science and Technology Committee

Members: Messrs. Coughlin, Kantor and Reed

Our science and technology committee reviews and monitors our science and technology initiatives in areas such as information technology, technological programs, research and agricultural biotechnology. Our science and technology committee also identifies and investigates significant emerging science and technology issues. The science and technology committee did not meet during 2000.

Governance Provisions

On certain matters with significant financial or strategic consequences, a supermajority approval by at least 80% of our directors is required. These matters include:

- transactions, capital expenditures, additional debt or other non-ordinary course financial commitments, including litigation settlements, valued at \$100 million or more, other than matters already approved as part of our annual operating or capital budgets;
- any issuance or repurchase of equity securities or other equity interests, except pursuant to employee stock options or stock appreciation rights or under compensation plans approved by our board of directors, unless the aggregate amount of equity interests issued or repurchased since the initial public offering without supermajority approval would not exceed one percent of our common stock outstanding on the date of such proposed issuance or repurchase;
- · approval of our annual operating and capital budgets and annual strategic plan;
- selection, compensation and removal of our chief executive officer;
- any change in size of our board of directors; and
- · any bylaw amendments.

No supermajority approval will be required for the items listed above if Pharmacia were to own less than 50% of our common stock.

Compensation of Directors

Monsanto 2000 Management Incentive Plan

At the time of the initial public offering, we granted to each of our directors, other than Ms. King, a stock option under the Monsanto 2000 Management Incentive Plan to purchase 10,000 shares of our common stock at the initial public offering price that vest in 5,000 share increments during 2002 and 2003. Upon her appointment as a director in February 2001, we granted Ms. King a 10,000 share stock option at the fair market value of our stock on the date of the grant having the same terms and provisions as the grants to the other directors. The term of these options may not exceed 10 years and may be exercisable for a shorter period as a result of a director's death or termination of service. See footnote ① to the "Option Grants in 2000" table at page 15 for a description of the accelerated vesting of these options upon a "change of control" (as defined in the plan).

Non-Employee Director Equity Compensation Plan

In addition, each of our directors who is not an employee of Pharmacia or us receives an annual retainer pursuant to the Non-Employee Director Equity Incentive Compensation Plan having a value of \$110,000, with an additional \$10,000 paid to each committee chair and an additional \$40,000 paid to the chairman of our board of directors. Half of this compensation is payable in deferred common stock, and the remainder is payable, at the election of each director, in the form of non-qualified stock options, restricted common stock, deferred common stock, current cash and/or deferred cash.

Deferred Common Stock. Deferred common stock means shares of our common stock that are delivered at a specified time in the future. Under the plan, half of the annual retainer for each non-employee director will automatically be paid in the form of deferred common stock.

Non-Qualified Stock Options. Under the plan, the exercise price of any non-qualified stock option will be the fair market value, as defined in the plan, of our common stock on the grant date. The plan also provides that the term of any options granted may not exceed 10 years. Options may be exercisable for a shorter period as a result of a director's death or termination of service. Options granted under the plan are not transferable except by will, the laws of descent and distribution, or upon the holder's death pursuant to a beneficiary designation. Only the holder or the holder's guardian or legal representative may exercise all options during the holder's lifetime.

Restricted Stock. Restricted stock means shares of our common stock that vest in accordance with specified terms after they are granted. Dividends and other distributions with respect to restricted stock will be held in escrow to be delivered with the restricted stock as it vests.

Cash/Deferred Cash. Under the plan, any portion of a non employee director's annual retainer that is not paid in the form of deferred stock, options or restricted stock will be paid in cash, either monthly during the term or on a deferred basis, as elected by the director. Any deferred cash will be credited to a cash account that will accrue interest at the average Moody's Baa Bond Index Rate, as in effect from time to time.

Vesting of Options. Under the plan, the non-qualified options granted to a non-employee director for the term to which the director was elected will vest in installments on the last day of each plan year, but only if the director remains a member of the board of directors on that day, based on the percentage of the term that is included in the plan year. When a director's service terminates before the last day of a plan year, a pro rata portion of the director's options that otherwise would have vested on the last day of the plan year will vest on the termination date, based on the percentage of the plan year that elapsed before the termination date.

Vesting of Deferred Stock and Restricted Stock. Under the plan, the deferred stock and any restricted stock granted to a non-employee director for the term to which the director was elected will vest in installments on the last day of each plan month, but only if the director remains a member of the board of directors on that day, based on the percentage of the term that is included in the plan month.

Other Compensation Arrangements

We have entered into a consulting agreement with Mr. AtLee covering the period beginning on June 22, 2000 through the annual meeting of our stockholders occurring in 2003. Under this agreement, Mr. AtLee has agreed to provide us with consulting services as requested by our board or our chief executive officer, including advice regarding policies, long-term strategies and general business and industry issues.

Under this agreement, Mr. AtLee will earn a consulting fee of \$400,000 per year, less the amount of his retainer fees that he receives as a member of the board. We will pay this fee to him at the termination of the consulting term, with interest at the Moody's Baa Bond Index Rate, except as noted below. We will also reimburse Mr. AtLee for expenses he incurs in providing his consulting services.

If the consulting term is terminated before our 2003 annual meeting as a result of Mr. AtLee's death or permanent disability, or by us other than as a result of Mr. AtLee's breach of the agreement, we will pay Mr. AtLee the fee he would have earned through the date of our 2003 annual meeting of stockholders in a lump-sum payment.

Compensation Committee Interlocks and Insider Participation

None of the members of the people committee is or has been an officer or employee of the Company or any of its subsidiaries. In addition, none of the members of the people committee had any relationships with the Company or any other entity that require disclosure under the proxy rules and regulations promulgated by the Securities and Exchange Commission ("SEC"). Mr. McMillan and Ms. King, who serve on the Company's people committee, also serve as members of Pharmacia's compensation committee.

Election of Directors (Proxy Item No. 1)

The stockholders are asked to elect Messrs. AtLee, Verfaillie, Åström, Coughlin, Kantor, McMillan, Parfet and Reed, and Ms. King to one year terms as members of our board of directors ending with the annual meeting to be held in 2002 or until a successor is elected and has qualified or until his or her earlier death, resignation or removal. Each nominee is currently a director of the Company. For more information regarding the nominees for director, see "Information Regarding Board of Directors and Committees" beginning at page 4 above.

The board does not contemplate that any of the nominees will be unable to stand for election, but should any nominee become unavailable for election, all proxies (except proxies marked to the contrary) will be voted for the election of a substitute nominee nominated by the board.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" ALL OF THE NOMINEES FOR DIRECTOR.

Approval of the Phantom Share Agreements (Proxy Item No. 2)

The stockholders are asked to consider and approve the Phantom Share Agreements (including the performance goals) entered into by the Company and certain executive officers for purposes of exempting payments under those agreements from the deduction limitation of Section 162(m) of the Internal Revenue Code ("Code"). For a more detailed discussion regarding the terms and conditions of the Phantom Share Agreements, see "Executive Compensation — Long Term Incentive Plans — Awards in 2000" beginning at page 16.

Under Section 162(m) of the Code, stockholder approval is required to enable the Company to obtain a deduction for awards paid under the Phantom Share Agreements to any executive officer of the Company named in the Summary Compensation Table at page 14 whose compensation for the taxable year is in excess of \$1 million.

If stockholder approval is not obtained, no payments would be made, unless there was a change of control before the 2001 annual meeting. Pharmacia, by signing the Phantom Share Agreements, has approved their material terms and conditions and agreed to vote its shares in favor of the Phantom Share Agreements at the annual meeting. A vote in favor of this proposal will be treated as a vote to approve the material terms of the performance goal of the Phantom Share Agreements described above for purposes of the exemption from the limitations of Section 162(m) of the Code.

The following table sets forth, as of March 1, 2001, the number of Monsanto shares represented by the Phantom Share Agreements payable to the persons or groups listed.

Name and Position	Phantom Shares①
Hendrik A. Verfaillie President and CEO	362,599
Hugh Grant Executive Vice President and Chief Operating Officer	172,549
Robert T. Fraley, Ph.D. Executive Vice President and Chief Technology Officer	177,163
Executive Group	712,311
Non-Executive Director Group	0
Non-Executive Employee Group	91,966

① As of March 1, 2001, the closing price per share of Monsanto's shares was \$32.40. Based on this value, the value of the Phantom Share accounts was \$11,748,208, \$5,590,588 and \$5,740,081 for Messrs. Verfaillie and Grant and Dr. Fraley, respectively, \$23,078,877 for the Executive Group and \$2,979,698 for the Non-Executive Employee Group. The Phantom Share accounts have been adjusted to reflect a dividend in the amount of nine cents per share paid on February 1, 2001 for the fourth quarter of 2000.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE APPROVAL OF THE PHANTOM SHARE AGREEMENTS

Approval of Annual Incentive Program Performance Goal (Proxy Item No. 3)

The stockholders are asked to consider and approve the material terms of the performance goal used for determining awards to certain executive officers under the Annual Incentive Program established by the people committee.

Under Section 162(m) of the Code, stockholder approval of the material terms of the performance goal used for determining awards to certain executive officers under the Annual Incentive Program is required to enable the Company to obtain a deduction for awards paid under the Annual Incentive Program to any executive officer of the Company named in the Summary Compensation Table for a given year, whose compensation for the taxable year is in excess of \$1 million. If the material terms of the performance goal used for determining awards under the Annual Incentive Program for certain executive officers are approved by stockholders, they will go into effect for fiscal year 2001. If approved, and unless the material terms of the performance goal are subsequently changed, the material terms of the performance goal used for determining awards to certain executive officers under the Annual incentive Program established for Section 162(m) purposes will meet the stockholder requirements of Section 162(m) until 2006.

Annual Incentive Program

Eligible Participants. Certain executive officers, who will be chosen by the Company each year based upon a determination as to who may appear in the Summary Compensation Table and earn in excess of \$1 million for that year (approximately 5 people per year), will be eligible for awards only upon attainment of the objective performance goal referenced in the next paragraph.

Performance Goal. No later than the 90th day of each performance year, the people committee will establish for certain eligible executive officers the objective performance goal based on corporate net income for that performance year. If the performance goal established for the performance year is attained, the maximum proposed award amount for each such executive officer will equal three-quarters of one percent (.75%) of corporate net income for the applicable performance year (subject to reduction as described below). The committee must certify the attainment of the applicable performance goal before an award is paid.

Net Income. For purposes of determining attainment of the corporate performance goal and the maximum award amount, net income is defined to exclude unusual events, such as restructuring charges and the cumulative effect of accounting changes required under generally accepted accounting principles, as pre-determined by the committee.

Determination of Actual Awards. The committee may decrease the actual award amount paid to certain executive officers for any performance year based on such secondary goals and considerations as determined by the committee in its sole discretion. In no event shall the actual amount awarded to such executive officers with respect to any performance year exceed three-quarters of one percent (.75%) of corporate net income for the applicable performance year.

Amendments. The committee cannot change the material terms of the performance goal or the formula for computing the maximum award payable as described above, without first obtaining stockholder approval.

A vote in favor of this proposal will be treated as a vote to approve each of the material terms of the performance goal used for determining awards to certain executive officers under the Annual Incentive Program described above for purposes of the exemption from the limitations of Section 162(m) of the Code. The affirmative vote of the majority of the shares present in person or represented by proxy at the annual meeting is required for such approval.

The following table sets forth, as of March 1, 2001, the dollar value of the amounts that were received by each of the following persons or groups under the Annual Incentive Program relating to full fiscal year 2000.

Name and Position	Dollar Values 1
Hendrik A. Verfaillie President and CEO	\$025,000
	\$925,000
Hugh Grant Executive Vice President and Chief Operating Officer	\$635,000
Robert T. Fraley, Ph.D. Executive Vice President and Chief Technology Officer	\$460,000
Executive Group	\$2,020,000
Non-Executive Director Group	\$0
Non-Executive Employee Group	\$0

① Under the terms of the Annual Incentive Program, all awards are paid in cash. The exact amounts payable in March 2002 to each executive relating to 2001 performance are not currently determinable.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE APPROVAL OF THE MATERIAL TERMS OF THE PERFORMANCE GOAL USED FOR DETERMINING AWARDS TO CERTAIN EXECUTIVE OFFICERS UNDER THE ANNUAL INCENTIVE PROGRAM.

Ratification of Independent Auditors (Proxy Item No. 4)

The board of directors, upon the recommendation of the audit and finance committee, has appointed Deloitte & Touche LLP as the principal independent auditors to examine the consolidated financial statements of the Company and its subsidiaries for the year 2001. Deloitte & Touche LLP has acted in this capacity for former Monsanto and us since 1932, is knowledgeable about our operations and accounting practices, and is well qualified to act in the capacity of auditor.

Although we are not required to submit this appointment to a vote of the stockholders, the board continues to believe it appropriate as a matter of policy to request that the stockholders ratify the appointment of Deloitte & Touche LLP as principal independent auditors. If the stockholders do not ratify the appointment, the audit and finance committee will investigate the reasons for stockholder rejection and the board will reconsider the appointment. Even if the appointment is ratified, the board and the audit and finance committee in their discretion may direct the appointment of a different

independent accounting firm at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders and Pharmacia consents in writing to such appointment.

A formal statement by representatives of Deloitte & Touche LLP is not planned for the annual meeting. However, Deloitte & Touche LLP representatives are expected to be present at the meeting and available to respond to appropriate questions. For a detailed listing of the fees expected to be billed to us by Deloitte & Touche LLP for professional services in 2000, *see* "Committee Reports — Audit and Finance Committee Report" at page 22.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE RATIFICATION OF THE APPOINTMENT OF DELOITTE & TOUCHE LLP AS PRINCIPAL INDEPENDENT AUDITORS FOR THE YEAR 2001.

Stock Ownership of Management and Certain Beneficial Owners

Information is set forth below regarding beneficial ownership of our common stock and the common stock of Pharmacia, to the extent known to the Company, by (i) each beneficial owner of more than 5% of the outstanding shares of common stock of the Company; (ii) each person who is a director or nominee; (iii) each executive officer named in the Summary Compensation Table on page 14; and (iv) all directors and executive officers as a group. Except as otherwise noted, each person has sole voting and investment power as to his or her shares. All information is as of December 31, 2000, except as otherwise noted.

	Monsanto				Pharmacia	
Name	Shares of Common Stock Owned Directly or Indirectly①	Shares Underlying Options Exercisable Within 60 Days(3)	Total	Shares of Common Stock Owned Directly or Indirectly②④	Shares Underlying Options Exercisable Within 60 Days③	Total
Pharmacia Corporation (5)	220,000,000	_	220,000,000	_	_	_
Frank V. AtLee III	® 12,333	_	12,333	1,200	_	1,200
Hendrik A. Verfaillie 6	300,100	_	300,100	231,996	1,057,032	1,289,028
Håkan Åström	5,000	_	5,000	12,178	322,180	334,358
Christopher J. Coughlin	10,000	_	10,000	35,748	440,300	476,048
Michael Kantor	2,750	_	2,750	3,000	21,818	24,818
Gwendolyn S. King	1,000	_	1,000	3,868	14,018	17,886
C. Steven McMillan	10,250	_	10,250	6,000	_	6,000
William U. Parfet	22,521	_	22,521	⑦1,636,567	10,170	1,646,737
John S. Reed	105,500	_	105,500	91,947	29,630	121,577
Steven L. Engelberg 6	5,000	_	5,000	33,937	611,267	645,204
Robert T. Fraley, Ph.D.6	100,000	_	100,000	54,131	300,162	354,293
Hugh Grant 6	55,000	_	55,000	1,947	199,596	201,543
R. William Ide III6	2,500	_	2,500	51,709	282,208	333,917
All directors and executive officers as a group (22 persons)	681,454	_	681,454	2,202,778	3,965,416	6,168,194

Includes the following shares of deferred common stock each non-employee director of Monsanto is entitled to as compensation payable under our Non-Employee Director Equity Incentive Compensation Plan as described on page 8: Mr. AtLee, 7,333; Mr. Kantor, 2,750; Mr. McMillan, 2,750; Mr. Parfet, 2,521; Mr. Reed, 5,500; and directors and executive officers as a group, 20,854. As of December 31, 2000, the following shares of deferred common stock for each non-employee director were vested and each such director had sole voting and investment power over such vested shares: Mr. AtLee, 4,667; Mr. Kantor, 1,750; Mr. McMillan, 1,750; Mr. Parfet, 1,604; Mr. Reed, 3,500; and directors and executive officers as a group, 13,271.

② With respect to Pharmacia's equity incentive compensation plan for non-employee directors, includes: (1) 2,200 shares of deferred common stock Ms. King elected to receive as a stock fee; and (2) 1,325 stock equivalent units Mr. Reed elected to receive in lieu of a cash fee.

- 3 The SEC deems a person to have beneficial ownership of all shares which that person has the right to acquire within 60 days. For purposes of this table, the Company has used April 30, 2001 as the cut-off date, which is 60 days after March 1, 2001. The shares indicated represent shares underlying stock options granted under incentive plans. The shares underlying options cannot be voted.
- ④ For the following individuals, includes the indicated number of shares of Pharmacia common stock held under former Monsanto's Savings and Investment Plan: Mr. Verfaillie, 16,662; Mr. Engelberg, 1,137; Dr. Fraley, 9,176; Mr. Grant, 1,444; Mr. Ide, 3,261; and directors and executive officers as a group, 31,680. For the following individuals, includes the indicated number of shares of Pharmacia common stock held under the Pharmacia & Upjohn Savings Plan: Mr. Åström, 682; Mr. Coughlin, 14,901; Mr. Parfet, 8,498; and directors and executive officers as a group, 24,081. With respect to shares held under both of these savings plans, the participants have sole discretion as to voting and, within limitations provided by each respective plan, investment of shares.
- (3) Pharmacia exercises sole voting and investment power over the shares of Monsanto common stock held by it. The address of Pharmacia is 100 Route 206 North, Peapack, New Jersey 07977. Messrs. Aström and Coughlin are also executive officers of Pharmacia. Messrs. Kantor, Parfet and McMillan and Ms. King are directors of Pharmacia. These individuals disclaim beneficial ownership of the shares of Monsanto common stock beneficially owned by Pharmacia.
- (6) Includes shares underlying options granted under former Monsanto's 1999 Premium Option Purchase Program, which is currently administered by Pharmacia. Under this program, the officers were granted an opportunity to purchase premium stock options from former Monsanto at \$7.77 per share paid through base salary or bonus reductions over a four-year period. The stock options have a \$75 exercise price per share of Pharmacia common stock, became exercisable as of the effective date of the merger between former Monsanto and Pharmacia & Upjohn and will expire if Pharmacia's common stock does not reach a price of \$75 per share within five years. The total number of premium priced options under contract are: Mr. Verfaillie, 139,768; Mr. Engelberg, 56,860; Dr. Fraley, 51,161; Mr. Grant, 49,874; Mr. Ide, 44,003 and directors and executive officers as a group, 341,666. The shares of Pharmacia common stock underlying these options cannot be voted.
- ① Includes 1,071,850 shares of Pharmacia common stock held by various trusts of which Mr. Parfet acts as trustee. Mr. Parfet disclaims beneficial ownership of such shares.
- (8) Includes 1,000 shares of Monsanto common stock held by Mr. AtLee's sons. Mr. AtLee disclaims beneficial ownership of such shares.

The percentage of shares of outstanding common stock of each of the Company and Pharmacia, including options exercisable within 60 days after March 1, 2001, beneficially owned by any director or executive officer or by all directors and executive officers as a group does not exceed 1%. The percentage of such shares of Monsanto common stock beneficially owned by Pharmacia is approximately 85.3%.

Executive Compensation

Summary Compensation Table

As discussed at the beginning of this proxy statement, our predecessor was the agricultural products business of former Monsanto. We were incorporated in Delaware on February 9, 2000 under the name "Monsanto Ag Company." On March 31, 2000, in connection with the merger of former Monsanto with Pharmacia & Upjohn, we changed our name to "Monsanto Company." As of September 1, 2000, we entered into agreements with Pharmacia, the surviving corporation of that merger, providing, among other things, for the separation of our businesses from those of Pharmacia (*see* Appendix A for a summary description of the material terms of some of these agreements).

Accordingly, except as otherwise noted, the following table sets forth information with respect to the compensation for the four months beginning September 1, 2000 (the date of our separation from Pharmacia), received for services rendered to the Company by the chief executive officer and each of the other four most highly compensated executive officers of the Company as of the end of 2000 (we refer to these five individuals as the "Named Executive Officers").

		Annual Compensation			Long	Term Compensat	ion	
					Awa	ards	Payouts	
Name and Principal Position	Year	Salary(\$)①	Bonus(\$)②	Other Annual Compen- sation(\$)③	Restricted Stock Awards (\$)	Securities Under- lying Options (#)	LTIP Payouts (\$)	All Other Compen- sation (\$)(4)
Hendrik A. Verfaillie President and CEO	9/00-12/00	283,333	925,000	_	0	1,066,670	0	78,796
Steven L. Engelberg Senior V.P. Government Affairs	9/00-12/00	133,333	463,000	_	0	213,430	0	16,014
Robert T. Fraley, Ph.D. Executive V.P. and Chief Technology Officer	9/00-12/00	150,000	460,000	_	0	391,120	0	15,644
Hugh Grant Executive V.P. and Chief Operating Officer	9/00-12/00	183,333	635,000	_	0	480,000	0	8,518
R. William Ide III Senior V.P., Secretary and General Counsel	9/00-12/00	133,333	484,250	_	0	0	0	5,864

① Reflects salary earned for the four-month period beginning September 1, 2000.

② Reflects bonuses paid subsequent to our fiscal year 2000 for service rendered in fiscal 2000, including service as an employee of former Monsanto and Pharmacia. In the case of Messrs. Engelberg and Ide, the bonuses were paid pursuant to contractual arrangements.

³ Applicable regulations set reporting thresholds for certain non-cash compensation if the aggregate amount is in excess of the lesser of \$50,000 or 10% of the total annual salary and bonus reported for the Named Executive Officers. The dollar value of such non-cash compensation for each of the Named Executive Officers was less than the established reporting thresholds.

⁴ Amounts for the period from September 1, 2000 through December 31, 2000 include contributions to thrift/savings plans as follows: Mr. Verfaillie, \$13,812; Mr. Engelberg, \$5,800; Dr. Fraley, \$6,575; Mr. Grant, \$8,469; and Mr. Ide, \$5,815; split dollar life insurance premiums paid as follows: Mr. Verfaillie, \$5,303; Mr. Engelberg, \$7,676; and Dr. Fraley, \$2,955; the employee portion of cash surrender value of split dollar life insurance as follows: Mr. Verfaillie, \$59,632; Mr. Engelberg, \$2,489; and Dr. Fraley, \$6,065; and costs for travel accident plans for each of the Named Executive Officers of \$49.

Option Grants in 2000

The following table sets forth certain information regarding awards of Monsanto stock options to the Named Executive Officers in 2000. All of these awards were granted during the period from September 1, 2000 through December 31, 2000. No stock appreciation rights were granted to such persons during 2000.

	Potential Realizable					
	Number of Securities Underlying Options	% of Total Options Granted to Employees in	Exercise or Base Price	Expiration .	of Stoc Appreciation Ter	m③
Name/Date of Grant	Granted (#)	Fiscal Year	(\$/Share)②	Date	5% (\$)	10% (\$)
Hendrik A. Verfaillie October 17, 2000	1,066,670	4.7%	20.00	October 16, 2010	13,416,461	33,999,945
Steven L. Engelberg October 17, 2000 December 7, 2000	124,450 88,890	0.5% 0.4%	20.00 25.15	October 16, 2010 December 6, 2010	1,565,319 660,265	3,966,825 2,375,572
Robert T. Fraley, Ph.D. October 17, 2000	391,120	1.7%	20.00	October 16, 2010	4,919,465	12,466,891
Hugh Grant October 17, 2000	480,000	2.1%	20.00	October 16, 2010	6,037,388	15,299,928
R. William Ide III	_	_	_	_	_	_

- (1) The options were granted under the Monsanto 2000 Management Incentive Plan. Options were granted at 100% of the market price on the date of grant and generally vest in 50% increments on March 15th of 2002 and 2003. The term of these options may not exceed 10 years and may be exercisable for a shorter period as a result of a participant's death or termination of service. The options will vest in full if we undergo a change of control (as defined) immediately following which Pharmacia does not own more than 50% of our common stock. Similarly, such vesting will occur if a change of control of Pharmacia occurs immediately following which it still owns more than 50% of our common stock and one of the following occurs within one year thereafter: (i) the participant's employment is terminated without cause or by the participant for good reason, (ii) the employment of a majority of the members of our leadership team is terminated without cause or for good reason, (iii) our headquarters is relocated by more than 35 miles, or a decision to effect such a relocation is publicly announced, or (iv) a decision is announced that Pharmacia will dispose of its majority ownership of our stock or otherwise take steps that will result in a change of control of our company and such steps have not been approved by a majority of our leadership team. Such accelerated vesting could result in a participant being considered to receive "excess parachute payments" (as defined in Section 280G of the Code), which payments are subject to a 20% excise tax imposed on the participant. If so, the participant would generally be entitled to be made whole for such excise tax under our excess parachute tax indemnity plan, and we would not be able to deduct the excess parachute payments or any such indemnity payments.
- The participants are allowed to pay the exercise price in cash, by delivering shares of our common stock or by any other method designated by the people committee.
- 3 The dollar amounts under these columns are the result of calculations at the 5% and 10% rates set by the SEC and therefore are not intended to forecast possible future appreciation, if any, of our stock price. The dollar amounts reflect an assumed annualized growth rate, as indicated, in the market value of our common stock from the date of grant to the end of the option term. We did not use an alternative formula for a grant date valuation, as we are not aware of any formula that will determine with reasonable accuracy a present value based on future unknown or volatile factors.

Aggregated Option Exercises in 2000 and Option Values on December 31, 2000

The following table presents (i) the unexercised Monsanto stock options held by each Named Executive Officer and (ii) the value of such in-the-money options as of December 31, 2000, as if such in-the-money options were vested and exercisable as of December 31, 2000. None of these individuals exercised any Monsanto stock options held by such persons during 2000.

Name	Shares Acquired on Exercise (#)	Value Realized (\$)	Number of Unexercised Options at December 31, 2000 (#) Exercisable/Unexercisable	Value of Unexercised In-the-Money Options at December 31, 2000 (\$) Exercisable/Unexercisable①
Hendrik A. Verfaillie	0	\$0	0/1,066,670	\$0/\$7,200,023
Steven L. Engelberg	0	\$0	0/213,340	\$0/\$982,262
Robert T. Fraley, Ph.D.	0	\$0	0/391,120	\$0/\$2,640,060
Hugh Grant	0	\$0	0/480,000	\$0/\$3,240,000
R. William Ide III	0	\$0	0/0	\$0/\$0

① Calculated by (A) determining the difference between (1) the average of the high and low trading prices per share of the Company's common stock on December 29, 2000 and (2) the exercise price of the option and (B) multiplying such difference by the total number of shares under option, net of the aggregate value of all option exercise proceeds.

Long-Term Incentive Plans — Awards in 2000

We have entered into Phantom Share Agreements with Pharmacia and each of Messrs. Verfaillie and Grant, Dr. Fraley and one other executive, pursuant to which each of these executives agreed to the termination of his change-of-control employment agreement with Pharmacia as of the closing of our initial public offering. Under the change-of-control employment agreements, which were triggered upon former Monsanto's merger with Pharmacia & Upjohn, each of these executives would have been entitled to substantial severance benefits from Pharmacia if his employment were terminated by his employer without cause or by him for "good reason" during the three years following the merger. A termination for "good reason" would have included a termination by the executive as a result of adverse changes in the terms and conditions of his employment or for any reason during the 30-day period beginning on the first anniversary of the merger. In connection with the initial public offering, we replaced these change-of-control employment agreements with the Phantom Share Agreements to provide these key executives with a more powerful incentive to remain with us for the long term and to build the value of our stock after the initial public offering. The Phantom Share Agreements were designed to achieve these goals by providing incentive pay tied to the performance of our common stock, generally conditioned upon the executives' remaining employed by us or our affiliates through October 1, 2002.

Each of the new Phantom Share Agreements became effective upon the close of the initial public offering, at which time the executive's then current change-of-control employment agreement was superseded.

At the time of the initial public offering, we credited to a phantom share account for each executive a number of phantom shares of our common stock equal to the cash severance and value of benefits continuation he would have received as a result of the termination of his employment under his change-of-control employment agreement, divided by the offering price.

The following table sets forth the number of shares of our common stock represented by the Phantom Share Agreements as of October 23, 2000, payable to the persons listed.

Name	Number of Phantom Shares (#)①	Performance or Other Period Until Maturation or Payout ②③④
Hendrik A. Verfaillie	361,550	October 1, 2002
Steven L. Engelberg	_	_
Robert T. Fraley, Ph.D.	176,650	October 1, 2002
Hugh Grant	172,050	October 1, 2002
R. William Ide III	_	_

- ① This amount was determined based on the initial public offering price of \$20 per share of Monsanto common stock. At that time, the dollar values allocated to such phantom share accounts was \$7,231,000 and \$3,441,000 for each of Messrs. Verfaillie and Grant, respectively, and \$3,533,000 for Dr. Fraley. The phantom share accounts will also be credited periodically with deemed dividends, which will be treated as reinvested in additional phantom shares, and will be adjusted as appropriate for stock splits, mergers, and other corporate transactions affecting our common stock.
- ② The phantom share accounts will generally vest on October 1, 2002, generally subject to: (i) achievement of the performance goal specified in the Phantom Share Agreements that we have positive net income for 2001; and (ii) the executive remaining employed by us or our affiliates through October 1, 2002. The phantom share accounts will also vest if: (i) the executive's employment is terminated before December 31, 2001, without cause, for good reason, or because of death or disability, whether or not the performance goal has been met; or (ii) the executive's employment is terminated on or after December 31, 2001 without cause, by the executive for good reason, or because of death or disability and the performance goal has been met. In addition, the phantom shares will vest if we undergo a change of control before December 31, 2001 and the executive is still employed by us or our affiliates as of that date. Similarly, such vesting will occur if a change of control of Pharmacia occurs before December 31, 2001 and the executive is still employed by us or our affiliates as of that date, and one of the following occurs within one year thereafter: (i) the employment of a majority of the members of our leadership team is terminated without cause or by a majority of such members for good reason; (ii) our headquarters is relocated by more than 35 miles, or a decision to effect such a relocation is publicly announced; or (iii) a decision is announced that Pharmacia will dispose of its majority ownership of our stock or otherwise take steps that will result in a change of control of our company and such steps have not been approved by a majority of our leadership team.
- 3 Payment of the value of the phantom shares held in the account will be made to the executive within 30 days after the last to occur of: (i) vesting of the account; (ii) the date our people committee certifies achievement of the performance goal if such certification is a condition to vesting; and (iii) date of stockholder approval.
- When the phantom shares are paid, each phantom share holder will be entitled to receive cash in the amount of the number of phantom shares allocated to that person's account multiplied by the share value (as defined) as of the date of vesting, however, the amount of such payment will not be less than the initial value of that person's phantom share account.

Pension Plans

The Named Executive Officers (as well as other of our employees) are eligible for retirement benefits payable under the former Monsanto tax-qualified and non-qualified defined benefit pension plans currently sponsored by Pharmacia in which Monsanto is a participating employer. We intend to establish our own cash balance pension plan and non-qualified plans to provide benefits to our employees beginning at a future date to be determined by Pharmacia. Our pension plans will have the same basic features as the former Monsanto pension plans.

Effective January 1, 1997, the former Monsanto defined benefit pension plan was amended. The former Monsanto non-qualified pension plan that provides benefits to executives that cannot be provided under the former Monsanto qualified plan because of limitations under federal tax law was similarly amended. The amended former Monsanto defined benefit pension plans each consists of two accounts: a "prior plan account" and a "cash balance account."

The opening balance of the prior plan account was the lump sum value of the executive's December 31, 1996 monthly retirement benefit earned at former Monsanto prior to January 1, 1997 under the old defined benefit pension plan described below, calculated using the assumption that the monthly benefit would be payable at age 55 with no reduction for early payment. The formula used to calculate the opening balance for employment with former Monsanto was the greater of 1.4% (1.2% for employees hired by former Monsanto on or after April 1, 1986) of average final compensation multiplied by years of service, without reduction for Social Security or other offset amounts, or 1.5% of average final compensation multiplied by years of service, less a 50% Social Security offset. Average final compensation for purposes of determining the opening balance was the greater of (1) average compensation received during the 36 months of employment prior to 1997 or (2) average compensation received during the highest three of the five calendar years of employment prior to 1997.

For each year of the executive's continued employment with former Monsanto, Pharmacia or us, the executive's prior plan account will be increased by 4% to recognize that prior plan benefits would have grown as a result of pay increases.

For each year that the executive is employed by former Monsanto, Pharmacia or us after 1996, 3% of annual compensation in excess of the Social Security wage base and a percentage (based on age) of annual compensation (salary and annual bonus) will be credited to the cash balance account. The applicable percentages and age ranges are: 3% before age 30, 4% for ages 30 to 39, 5% for ages 40 to 44, 6% for ages 45 to 49, and 7% for age 50 and over. In addition, the cash balance account of executives who earned benefits under former Monsanto's old defined benefit pension plan will be credited each year (for up to 10 years based on prior years of service with former Monsanto or Pharmacia), during which the executive is employed after 1996, with an amount equal to a percentage (based on age) of annual compensation. The applicable percentages and age ranges are: 2% before age 30, 3% for ages 30 to 39, 4% for ages 40 to 44, 5% for ages 45 to 49, and 6% for age 50 and over.

In addition to the retirement benefits for Messrs. Verfaillie and Grant based on their years of service as our employee in the United States, Messrs. Verfaillie and Grant are also eligible for regular retirement benefits based on their respective years of service as our employee outside the United States. In addition, Messrs. Verfaillie and Grant participate in Pharmacia's regular, non-qualified pension plan designed to protect retirement benefits for employees serving in more than one country. However, their total retirement benefits from the combined plans, when considering their total service, are expected to be generally comparable to the benefits described in this section.

Mr. Ide has an individual supplemental retirement arrangement with Pharmacia under which Mr. Ide is entitled to a supplemental retirement benefit, subject to certain conditions, which is designed to produce a total retirement benefit from Pharmacia at age 65 comparable to that which a Pharmacia employee with 30 years of service would receive (taking into account the value of any pension benefits earned as an active employee of Pharmacia and of Monsanto and pension benefits received from prior employers). We assumed all liabilities under this agreement.

Mr. Engelberg also has an individual supplemental retirement arrangement with Pharmacia under which Mr. Engelberg is entitled to a supplemental retirement benefit, subject to certain conditions, which is designed to produce an annual retirement benefit from Pharmacia at age 65 equal to 45% of his average total earnings, reduced by the amount of any benefit received under Pharmacia pension and parity pension plans and by an additional amount. We assumed all liabilities under this agreement.

The estimated annual benefits payable as a single life annuity beginning at age 65 (assuming that each executive officer remains employed by us until age 65 and receives 4% annual compensation increases) are as follows: Mr. Verfaillie, \$799,352; Dr. Fraley, \$708,969; Mr. Grant, \$583,785; Mr. Ide, \$353,505; and Mr. Engelberg, \$309,093.

Committee Reports

Report of the People Committee On Executive Compensation

The people committee is responsible for the establishment and oversight of executive compensation policies and programs for the Company's executive officers. It also approves, reviews and monitors the Company's executive succession plan, and reviews and monitors the Company's performance as it affects its people and the overall compensation policies for its people.

Under the terms of its charter, the committee is required to consist of two or more members of the board of directors who, in the opinion of the board, are independent of management and have no relationship to the Company that may interfere with the exercise of their independence from the Company and its management. Mr. McMillan was appointed to the committee in June 2000 and Ms. King and Mr. Parfet were appointed to the committee in February 2001. Until the appointment of Ms. King and Mr. Parfet, all matters reviewed by the committee were also considered and approved by the full board of directors.

Compensation Policies

The overall objectives of the committee are to develop compensation policies and practices that:

- align management's interests with the long-term interests of stockholders;
- encourage people to behave like owners of the business and reward them when shareowner value is created;
- provide reward systems that are simple, credible and common across the organization;
- promote creativity, innovation and calculated risk taking to achieve outstanding business results;
- encourage people to continually improve their capabilities to deliver business results;
- reward for results rather than on the basis of seniority, tenure, or other entitlement;
- make the Company a great place to work in order to attract world class people at all levels around the globe.

Components of Executive Compensation

In furtherance of these objectives, the compensation programs for all Company executives include three components: (1) base pay, (2) an annual incentive program, and (3) a long-term incentive program.

The levels of compensation at competitive companies were used for comparison in establishing the Company's current executive compensation policies, compensation programs and awards, and were derived from compensation surveys provided by an outside consultant covering companies in the agricultural industry as well as high performing companies in general industry of the same general size. The high performing company group included companies whose three-year total shareowner return was higher than the average. Only some of the companies comprising the Company's peer group are reflected in the comparison. The philosophy underlying each element of executive compensation is discussed below.

The annual and long-term compensation components of the program have been designed to encourage executives to significantly increase shareowner value. Annual incentive compensation for 2000 was based on net income, cash flow, and key performance indicators, all of which affect shareowner value. Long-term compensation is closely tied to providing outstanding returns for shareowners.

Base Pay. Base pay reflects the external market value of a particular role as well as the experiences and qualifications that an individual brings to the role. Base pay is generally targeted to the median of the market.

Annual Incentive Program. The Annual Incentive Program for all regular employees, including executives, provides for cash awards that are determined shortly after the end of the year being measured. These annual awards depend upon the Company's achievement of goals set at the beginning of each year; the individual's level of responsibility and, where applicable, performance of his or her business or staff group; and the individual's personal performance.

The Annual Incentive Program for 2000 was designed to focus on the achievement of key goals for the Company and included performance for the entire year. For executives, including the chief executive officer, three performance goals were established for 2000: net income; net operating cash flow; and key performance indicators covering such items as product launches, biotech acceptance, and successfully accomplishing the initial public offering. Full year financial goals for net income and cash flow were established by the board in consideration of the initial public offering. The annual incentive award pool was determined based on actual results measured against these full year goals.

Each employee's annual incentive opportunity for 2000 was communicated in terms of "outstanding" Company and individual performance as measured against goals set for the year. However, actual award payouts could exceed payouts communicated at the outstanding level if the Company's performance exceeded outstanding or if the individual's performance merited a greater incentive. Neither the incentive pool nor individual awards are capped.

For 2001, the Annual Incentive Program continues to apply to all employees, including executives. Goals have been set for sales growth, earnings per share, and cash flow. Individual incentive opportunities have been communicated at a "target" level of performance as measured against goals, with award opportunities at "outstanding" performance equal to two times that at target performance. Neither the incentive pool nor individual awards are capped. Annual incentives are generally targeted at the median of market for target performance as measured against goals with upside opportunity for above target performance. However, for the chief executive officer and other executive officers target annual incentives will be below the market median if target performance is achieved.

Long-term Incentive Program. Long-term incentive opportunity is delivered in the form of stock options. Long-term compensation for executives is generally targeted to be at or above the 75th percentile of the market.

In determining grants at the initial public offering, the Company utilized competitive data from other companies that had undergone an initial public offering. The long-term incentive opportunity for each individual is established (based on the individual's role) by converting a percentage of base pay to stock options using an estimated Black-Scholes value. Stock options for management (approximately 1,800 people) were granted on October 17, 2000 (the date of the initial public offering) and vest over a 30-month period: 50% in March 2002 and 50% in March 2003. The stock option grants are for a two-year period: 2001 and 2002. New hires receive stock option grants pro-rated over the two-year period. Stock options for all other non-management employees were also granted on the initial public offering date with the same vesting provisions.

Other Grants. The committee may also make infrequent grants of restricted stock to individual executives to hire or retain those individuals or motivate achievement of particular business objectives; however, no grants have been made to date. Additional stock option grants may be made to hire or retain certain individuals, reflect increased responsibility, or motivate the achievement of a particular business objective. Mr. Engelberg received a stock option grant in December 2000 to bring his compensation mix in line with that of other executives. A cash incentive that had been guaranteed under his prior change of control agreement with Pharmacia (that was triggered by the merger of former Monsanto and Pharmacia & Upjohn) was forfeited in exchange for an additional Company stock option grant.

Chief Executive Officer Compensation

Mr. Verfaillie's 2000 salary was set at \$850,000 per annum in September 2000, retroactive to June 1, 2000. The committee recommended an annual incentive award of \$925,000 for Mr. Verfaillie for 2000. The award was determined based on the same criteria used for all employees eligible to participate in the Annual Incentive Program and in recognition of the successful initial public offering. For the year 2001, the annual incentive opportunity for Mr. Verfaillie has been reduced in exchange for the higher risk, stock option grant (made at the time of our initial public offering) that will more closely align his interests with those of stockholders. He is also a party to a Phantom Share Agreement as described at "Approval of the Phantom Share Agreements (Proxy Item No. 2)" and "Executive Compensation — Long Term Incentive Plans" at pages 9 and 16, respectively. In the agreement, Mr. Verfaillie (along with Mr. Grant, Mr. Fraley and one other executive) forfeited his right to a cash separation payment in exchange for a retention award that will vest in October 2002, subject to Monsanto being profitable in 2001. The award amount is based on Monsanto stock performance.

2000 Compensation for Other Executives

The payment of cash awards for the other Named Executive Officers was based on the same factors as for Mr. Verfaillie. The number of options granted to executives at the initial public offering was calculated based on competitive long-term incentive opportunities utilizing data from other companies that had undergone an initial public offering. Company executive plans are designed to achieve a long-term compensation opportunity at or above the 75th percentile for senior executives in comparable positions in other companies. When the Company performs at an outstanding level, total compensation may be at or above the 90th percentile of the market.

Deductibility of Compensation

The goal of the committee is to comply with the requirements of Section 162(m) of the Code, to the extent deemed practicable, with respect to options and annual and long-term incentive programs, as well as the limits approved by the Company's stockholders, in order to avoid losing the deduction for compensation in excess of \$1 million paid to one or more of the Named Executive Officers. We have generally structured our compensation plans with the objective that amounts paid under those plans and arrangements are tax deductible. However, the committee may elect to provide compensation outside those requirements when it deems appropriate to achieve its compensation objectives.

Management Stock Ownership Requirements

The committee and management also believe that an important adjunct to an incentive program is significant stock ownership by the senior executives. Accordingly, the committee has implemented stock ownership requirements for approximately 25 executives. Stock ownership requirements are five times base salary for the Company's chief executive officer; four times base salary for the chief operating officer; three times salary for five other senior executives and one times salary for an additional 19 executives. Unexercised stock options or restricted shares are not counted in satisfying these requirements. The committee has established target dates when each executive must meet stock ownership requirements.

PEOPLE COMMITTEE

C. Steven McMillan, *Chair*Gwendolyn S. King
William U. Parfet
February 21, 2001

Audit and Finance Committee Report

In fulfilling its responsibilities, the audit and finance committee, among other things, has reviewed and discussed the audited financial statements contained in the 2000 Annual Report on SEC Form 10-K with the Company's management and its independent auditors. Management is responsible for the financial statements and the reporting process, including the system of internal controls. The independent auditors are responsible for expressing an opinion on the conformity of those audited financial statements with accounting principles generally accepted in the United States.

In addition, the audit and finance committee discussed with the independent auditors the matters required to be discussed by Statement on Auditing Standards No. 61, Communication with Audit Committees, as amended, as well as the auditors' independence from Monsanto and its management including the matters in the written disclosures and letter required by Independence Standards Board Standard No. 1, Independence Discussions with Audit Committees.

The Company expects to be billed an aggregate amount of \$11.1 million by Deloitte & Touche LLP, the member firms of Deloitte Touche Tohmatsu, and their respective affiliates (which we collectively refer to as "Deloitte") for professional services in 2000. The table below sets forth the components of this aggregate amount.

Description of Professional Service	Amount Paid
Audit Fees – professional services rendered for the audit of our annual financial statements for 2000 and for the reviews of the financial statements included in our Form 10-Qs	\$1.5 million
Financial Information Systems and Implementation Fees – professional services in connection with financial information system and implementation fees rendered in 2000	\$0
All Other Fees – all other professional services rendered in 2000, (including fees for corporate and expatriate tax and assignment services of \$5.7 million)	\$9.6 million

The audit and finance committee of the board of directors considers Deloitte's provision of non-audit services compatible with it maintaining its independence.

In reliance on the reviews and discussions referred to above, the audit and finance committee recommended to the board of directors (and the board of directors has approved) that the audited financial statements be included in the Company's Annual Report on SEC Form 10-K for the year ended December 31, 2000, for filing with the SEC.

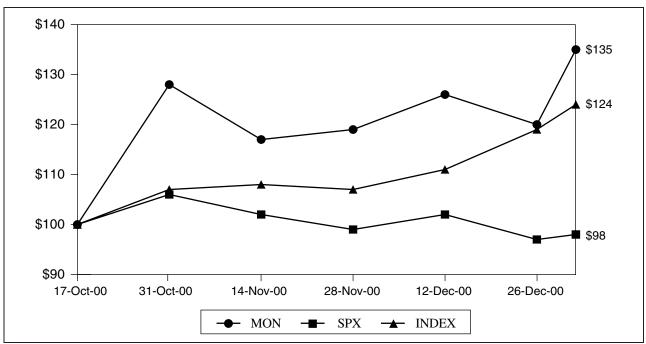
AUDIT AND FINANCE COMMITTEE

John S. Reed, *Chair* C. Steven McMillan William U. Parfet February 21, 2001

Stock Price Performance Graph

The graph below compares, for the period beginning on October 17, 2000 through the end of 2000, total stockholder return on the Company's common stock (assuming reinvestment of dividends) with the cumulative total return of the Standard & Poor's 500 Stock Index (a broad-based market index) and the cumulative total return of a peer group index. Because we are involved in the agricultural products and seeds and genomics businesses, no published peer group accurately mirrors our portfolio of businesses. Accordingly, we created a peer group index that includes Bayer AG ADR, Dow Chemical Company, DuPont (E.I.) de Nemours and Company, BASF AG, Aventis S.A. and Syngenta AG. The peer group index we created reflects the performance of Syngenta AG beginning with its creation on November 13, 2000. These indices are included for comparative purposes only and do not necessarily reflect management's opinion that such indices are an appropriate measure of the relative performance of the stock involved, and are not intended to forecast or be indicative of possible future performance of our common stock.

Total Return to Stockholders[®]



	17-Oct-00	31-Oct-00	14-Nov-00	28-Nov-00	12-Dec-00	26-Dec-00	29-Dec-00
Monsanto Company (MON)	100	128	117	119	126	120	135
S&P 500 (SPX)	100	106	102	99	102	97	98
Peer Group Index (INDEX)	100	107	108	107	111	119	124

① The transfer of the business operations of the former agricultural products division of former Monsanto from Pharmacia to us was effective as of September 1, 2000 and shares of our common stock did not begin trading until October 18, 2000. As a result, the cumulative total stockholder return on our common stock over a five-year period cannot be provided.

Certain Agreements

Change-Of-Control Employment Agreements

We have entered into change-of-control employment agreements with a number of key executives including our Named Executive Officers except for Messrs. Engelberg and Ide. These agreements have terms that initially end on June 30, 2001 and are automatically extended one year at a time, unless we give the executive a notice that no extension will occur. If a change of control of Monsanto occurs during the term of an agreement, or if a change of control of Pharmacia occurs during the term at a time when Pharmacia owns more than 50 percent of our common stock, then the agreement becomes operative for a fixed period.

The agreements provide generally that the executive's terms and conditions of employment, including position, location, compensation and benefits, will not be adversely changed during the three-year period after such a change of control. If, during this three-year period, we terminate the executive's employment other than for cause, death or disability, or the executive terminates for good reason, or if we terminate the executive's employment without cause in connection with or in anticipation of a change of control, the executive is generally entitled to receive:

- a specified multiple of the executive's annual base salary plus an annual bonus amount and an amount to reflect our employer matching contributions under various savings plans,
- · accrued but unpaid compensation,
- · continued welfare benefits for a specified number of years,
- a lump sum payment having an actuarial present value equal to the additional retirement plan benefits the executive would have received if he or she had continued to be employed by us for a specified number of years,
- if the executive has reached age 50 at the conclusion of a specified number of years following employment termination, receipt of lifetime retiree medical benefits, and
- · outplacement benefits.

The specified multiple and the specified number of years is three for Messrs. Verfaillie and Grant, Dr. Fraley and two other executives and two for all other executives covered by such agreements. In addition, the executive is generally entitled to receive a payment in an amount sufficient to make him or her whole for any federal excise tax on excess parachute payments.

Messrs. Engelberg and Ide are parties to change-of-control employment agreements with Pharmacia, which provide similar benefits to those described above. These agreements became effective on March 31, 2000, when the merger involving former Monsanto and Pharmacia & Upjohn took place. Accordingly, if either of these executives experiences a termination of employment without cause or for good reason on or before March 31, 2003, he will be entitled to severance benefits similar to those described above. In addition, he would receive the same severance benefits if he chooses to terminate his employment for any reason during April of 2001. We estimate that the cash severance benefits payable under these agreements would be approximately \$3,100,000 for Mr. Engelberg and \$4,500,000 for Mr. Ide. Pharmacia has retained all severance liabilities under these agreements.

Mr. Ide has announced his intention to resign from his position as the Company's general counsel during 2001. As a result, Mr. Ide will be entitled to the severance benefits referred to above. In addition, Pharmacia has offered to pay Mr. Ide a cash bonus in the amount of \$400,000 if Mr. Ide remains on as the Company's general counsel until March 30, 2001 and executes an appropriate waiver. The bonus is not payable in the event of a termination for "cause" prior to March 30, 2001. Moreover, Pharmacia has offered to pay Mr. Ide an additional \$400,000 in exchange for his services as a consultant to the Company for a one-year period following his termination of employment with Monsanto, payable in quarterly installments. Furthermore, on December 7, 2000, the Company's board of directors/people committee, in recognition of Mr. Ide's willingness to continue to serve, approved a bonus payment to Mr. Ide in the amount of \$150,000 payable if Mr. Ide remains employed through June 1, 2001 or has been released by the Company plus up to an additional \$150,000 based on Mr. Ide's performance during his transition from the general counsel position, subject to execution of an appropriate release. Finally, during the period of Mr. Ide's continued employment, the Company will continue to pay Mr. Ide's regular salary and a pro rata portion of the annual incentive payment.

Phantom Share Agreements

We have entered into Phantom Share Agreements with Pharmacia and each of Mr. Verfaillie, Mr. Grant, Dr. Fraley and one other executive, pursuant to which each of these executives agreed to the termination of his change-of-control employment agreement with Pharmacia as of the closing of the initial public offering. For a more detailed description of the Phantom Share Agreements *see* "Approval of the Phantom Share Agreements (Proxy Item No. 2) at page 9 and "Executive Compensation — Long-Term Incentive Plans — Awards in 2000" at page 16.

Excess Parachute Tax Indemnity Plan

We have adopted the Excess Parachute Tax Indemnity Plan, which provides that if any of our non-employee directors or any of our employees who is not a party to a change of control employment agreement described above is subject to the federal tax on excess parachute payments received in connection with a change of control, we generally will pay him or her an amount to make him or her whole for the tax, and will pay any legal fees he or she may incur to enforce his or her rights under the plan or in connection with any Internal Revenue Service audit related to the excise tax.

Arrangements Between Monsanto And Pharmacia

Prior to our initial public offering, we entered into agreements with Pharmacia, as of September 1, 2000, providing for, among other things, the separation of our businesses from those of Pharmacia. A summary description of the material terms of these agreements, which include a separation agreement and other key related agreements between us and Pharmacia can be found at Appendix A (which is incorporated herein by reference). The full texts of these agreements were filed with the SEC as exhibits to the registration statement relating to our initial public offering.

Certain Other Information Regarding Management

Transactions and Relationships

Mr. Kantor is a partner at the law firm of Mayer, Brown & Platt, which provided services to us and to former Monsanto in 2000 and has been retained to provide services to us in 2001. The amount of legal fees paid by us to Mayer, Brown & Platt during 2000 did not exceed five percent (5%) of such firm's gross revenues for its applicable fiscal year.

Until his retirement in April 2000, Mr. Reed served as Chairman and Co-Chief Executive Officer of Citigroup Inc., the parent company of Salomon Smith Barney Inc., an investment banking firm, which provided services to former Monsanto in 1999 and has provided services to us and to Pharmacia in 2000, including in connection with our initial public offering.

We have entered into a consulting agreement with Mr. AtLee that is described above beginning at page 8 under "Information Regarding Board of Directors and Committees — Compensation of Directors".

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires all Company executive officers, directors, and persons owning more than 10% of any registered class of our capital stock to file reports of ownership and changes in ownership with the SEC. Based solely on the reports received by us and on written representations from reporting persons, we believe that all such persons complied with all applicable filing requirements during 2000 except for (i) Mr. Verfaillie, who inadvertently was late in filing one Form 4 to report one transaction relating to his ceremonial purchase of the first 100 shares of our common stock in the initial public offering; and (ii) Pharmacia, which filed its Form 3 one day late.

Indebtedness

The following executive officers received full-recourse, interest bearing loans for the purchase price of former Monsanto common stock purchased pursuant to former Monsanto's Executive Stock Purchase Plan. This plan has been terminated. Following the merger these executive officers received cash awards under the plan that were required to be used to repay the loans. However, these cash awards did not cover the full amount due. The balance of the loans must be repaid in three annual installments commencing March 31, 2001. The loans may also be prepaid at any time at the executive officer's election. The amount outstanding at December 31, 2000 is also the greatest amount of such indebtedness at any time during the period beginning September 1, 2000 and ending December 31, 2000.

Name	Year of Loan	Interest Rate	Aggregate Amount of Indebtedness as of December 31, 2000	Aggregate Amount of Indebtedness as of March 1, 2001①
Hendrik A. Verfaillie	1996	6.36%	\$2,497,005	\$ 0
Steven L. Engelberg	1996	6.36%	\$1,056,419	\$664,632
Robert T. Fraley, Ph.D.	1996	6.36%	\$ 768,304	\$462,966
R. William Ide III	1996	6.60%	\$1,124,168	\$834,118

① Reflects loan balance after cash awards were used to repay the loans.

General Information

Stockholder Proposals

Proposals Included in Proxy Statement

Proposals of stockholders of the Company that are intended to be presented by such stockholders at the Company's 2002 annual meeting and that stockholders desire to have included in the Company's proxy materials relating to such meeting must be received by the Company at its principal executive offices no later than November 16, 2001, which is 120 calendar days prior to the anniversary of this year's mailing date. Upon timely receipt of any such proposal, the Company will determine whether or not to include such proposal in the proxy statement and proxy in accordance with applicable regulations governing the solicitation of proxies.

Proposals Not Included in Proxy Statement

If a stockholder wishes to present a proposal at the Company's annual meeting in the year 2002 or to nominate one or more directors and the proposal is not intended to be included in the Company's proxy statement relating to that meeting, the stockholder must give advance written notice to the Company prior to the deadline for such meeting determined in accordance with the Company's by-laws. In general, the Company's by-laws provide that such notice should be addressed to the Secretary and be received at the Company's Creve Coeur Campus no less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting. For purposes of the Company's 2002 annual meeting, such notice must be received not later than January 18, 2002 and not earlier than December 19, 2001. These time limits also apply in determining whether notice is timely for purposes of rules adopted by the SEC relating to the exercise of discretionary voting authority. The Company's by-laws set out specific requirements that such written notices must satisfy. Any stockholder filing a written notice of nomination for director must describe various matters regarding the nominee and the stockholder, including such information as name, address, occupation and shares held. Any stockholder filing a notice to bring other business before a stockholder meeting must include in such notice, among other things, a brief description of the proposed business and the reasons therefor, and other specified matters. Copies of those requirements will be forwarded to any stockholder upon written request.

Other Information

The board of directors knows of no matter, other than those referred to in this proxy statement, which will be presented at the meeting. However, if any other matters, including a stockholder proposal excluded from this proxy statement pursuant to the rules of the SEC, properly come before the meeting or any of its adjournments, the person or persons voting the proxies will vote in accordance with their best judgment on such matters. Should any nominee for director be unwilling or unable to serve at the time of the meeting or any adjournments thereof, the persons named in the proxy will vote for the election of such other person for such directorship as the board of directors may recommend, unless, prior to the meeting, the board has eliminated that directorship by reducing the size of the board. The board is not aware that any nominee herein will be unwilling or unable to serve as a director.

The Company will bear the expense of preparing, printing, and mailing this proxy material, as well as the cost of any required solicitation. Directors, officers or employees of the Company may solicit proxies on behalf of the Company. We have engaged Mellon Investor Services ("Mellon") to assist us in the distribution and solicitation of proxies. We expect to pay Mellon approximately \$11,000 for these services plus expenses. In addition, the Company will reimburse banks, brokerage firms, and other custodians, nominees, and fiduciaries for reasonable expenses incurred in forwarding proxy materials to beneficial owners of the Company's stock and obtaining their proxies.

You are urged to vote promptly by marking, signing, dating, and returning your proxy card or by voting by telephone or over the Internet. You may revoke your proxy at any time before it is voted; and if you attend the meeting, as we hope you will, you may vote your shares in person.

By Order of the Board Directors,

R. William Ile A

MONSANTO COMPANY

R. WILLIAM IDE III

Secretary

March 16, 2001



APPENDIX A

SUMMARY DESCRIPTION OF AGREEMENTS BETWEEN MONSANTO AND PHARMACIA

Separation Agreement

The separation agreement contains the key provisions relating to the separation of our businesses from those of Pharmacia. The separation agreement identifies the assets transferred to us by Pharmacia and the liabilities assumed by us from Pharmacia. The separation agreement also describes when and how these transfers and assumptions occurred. In addition, we have entered into additional agreements with Pharmacia governing various interim and ongoing relationships between Pharmacia and us following the separation date. These other agreements include:

- · a corporate agreement;
- a tax sharing agreement;
- an intellectual property transfer agreement;
- an employee benefits and compensation allocation agreement;
- · a services agreement; and
- a campus lease.

Asset Transfer

Effective on September 1, 2000, which we refer to as the separation date, Pharmacia transferred the following assets to us, except as provided in one of the ancillary agreements:

- all assets reflected on our balance sheet as of June 30, 2000 or the accounting records supporting our balance sheet, as adjusted by certain pro forma adjustments, and all assets acquired by Pharmacia between June 30, 2000 and the separation date that would have been included on our balance sheet as of June 30, 2000 had they been owned on June 30, 2000;
- all other assets primarily related to our business or the former agriculture or chemical businesses of former Monsanto;
- the corporate offices in St. Louis, Missouri (Creve Coeur campus) and other real property primarily used by our business:
- the subsidiaries, partnerships, joint ventures and other equity interests primarily related to our business;
- all computers, desks, furniture, equipment and other assets used primarily by Pharmacia employees who became our employees;
- any contingent gains that are primarily related to our business or the former agriculture or chemical businesses of former Monsanto, or otherwise specifically allocated to us;
- 57% of unknown contingent gains arising as of or prior to the separation date that are not primarily related to our business, the former agriculture or chemical businesses of former Monsanto, Pharmacia's business or former Pharmacia businesses, which we expect would generally consist of unknown corporate-level gains not primarily related to any of these businesses; and
- other assets agreed upon by Pharmacia and us.

Assumption Of Liabilities

Effective on the separation date, we assumed the following liabilities from Pharmacia, except as provided in one of the ancillary agreements:

- all liabilities reflected on our balance sheet as of June 30, 2000 or the accounting records supporting our balance sheet, as adjusted by certain pro forma adjustments, and all liabilities of Pharmacia incurred or arising between June 30, 2000 and the separation date that would have been included on our balance sheet as of June 30, 2000 had they arisen or been incurred on or prior to June 30, 2000;
- all other liabilities primarily related or arising primarily from (1) any asset that is transferred to us pursuant to the separation, (2) our business, (3) the former agriculture or chemical businesses of former Monsanto or (4) the disposition of any of these former agriculture or chemical businesses;
- liabilities for worker's compensation or third party claims incurred prior to the separation date at a site transferred to us pursuant to the separation;
- all liabilities for environmental remediation or other environmental responsibilities related to our business and the former agriculture or chemical businesses of former Monsanto, and all real property transferred to us as part of our assets:
- all liabilities for products of our business or the former agriculture or chemical businesses of former Monsanto sold to third parties;
- all liabilities relating to the approximately \$500 million of medium-term bank notes issued by former Monsanto to Brasil Ltda., and all liabilities relating to the approximately \$50 million of non-intercompany debt for which our subsidiaries organized or operating outside the United States are the obligors;
- all of our liabilities relating to a \$1 billion, 364-day credit agreement and a \$500 million, five-year credit agreement;
- all liabilities of former Monsanto that were assumed by Solutia or any of its subsidiaries on September 1, 1997 in connection with its spinoff from former Monsanto, to the extent that Solutia fails to pay, perform or discharge these liabilities;
- any contingent liabilities that are primarily related to our business or the former agriculture or chemical businesses of former Monsanto, or otherwise specifically allocated to us;
- 57% of unknown contingent liabilities arising as of or prior to the separation date that are not primarily related to our business, the former agriculture or chemical businesses of former Monsanto, Pharmacia's business or former Pharmacia businesses, which we expect would generally consist of unknown corporate-level liabilities not primarily related to any of these businesses; and
- other liabilities agreed upon by Pharmacia and us.

Shared Contingent Gains And Liabilities

The separation agreement provides for the division of "shared" contingent gains and liabilities, which are those contingent gains and liabilities arising as of or prior to the separation date that are not primarily related to our business, the former agriculture or chemical businesses of former Monsanto, Pharmacia's business or former Pharmacia businesses.

Shared contingent gains and liabilities are allocated as follows:

- any benefit that may be received from any shared contingent gain will be allocated 43% to Pharmacia and 57% to us. Pharmacia has the authority to prosecute, settle or waive any shared contingent gain;
- any responsibility for any shared contingent liability, except for environmental remediation, will be allocated 43% to Pharmacia and 57% to us, adjusted for insurance proceeds and other offsetting amounts received by either company. Pharmacia will assume the defense of, and may seek to settle or compromise, any third party claim that is a shared contingent liability, and any costs and expenses incurred will be included in the total amount of the shared contingent liability;
- any shared contingent liability for environmental remediation or other environmental responsibility will be borne by each company in proportion to its respective contribution to the site giving rise to the shared contingent liability; and

 Pharmacia and we will form a committee for the purpose of resolving issues regarding shared contingent gains and liabilities.

Financing Arrangements

We and Pharmacia arranged a commercial paper facility prior to the closing of the initial public offering, under which Pharmacia has issued assumable commercial paper in the amount equal to the sum of approximately \$1.8 billion plus the net proceeds we receive from the initial public offering assuming no exercise of the overallotment option, or \$665 million. The proceeds of such commercial paper obligations have been or will be used by Pharmacia to repay Pharmacia indebtedness, a substantial portion of which was incurred in connection with our acquisitions of seed companies, and for Pharmacia's general corporate purposes. Pursuant to the separation agreement, we assumed all liabilities under the commercial paper facility on the closing of the initial public offering. We also assumed from Pharmacia on the separation date the obligations relating to variable-rate, medium-term bank notes in the aggregate principal amount of approximately \$500 million, which mature in 2003 and had an average interest rate of 5.5% as of June 30, 2000. In addition, on the separation date, we indirectly assumed approximately \$50 million of debt owed by our subsidiaries.

The Ex-U.S. Plan and Delayed Transfers

The transfer of international assets and the assumption of international liabilities were accomplished through agreements between international subsidiaries. The separation agreement acknowledges that circumstances in some jurisdictions outside of the United States may require the timing of part of the international separation to be delayed past the separation date.

Indemnification

In general, under the separation agreement, we will indemnify Pharmacia and its representatives and affiliates from all liabilities that we assumed under the separation agreement, including, as of the closing of the initial public offering, the indebtedness under the assumable commercial paper facility, and any and all losses by Pharmacia or its representatives or affiliates arising out of or due to our failure to pay, perform or discharge in due course these liabilities. In general, Pharmacia will indemnify us and our representatives and affiliates from all liabilities that Pharmacia retains under the separation agreement and any and all losses by us or our representatives or affiliates arising out of or due to Pharmacia's failure to pay, perform or discharge in due course these liabilities. All indemnification amounts would be reduced by any insurance proceeds and other offsetting amounts recovered by the indemnitee.

Access to Information

Under the separation agreement, the following terms govern access to information:

- prior to or as promptly as practicable after the separation date, Pharmacia will deliver to us all corporate books and records related to our business;
- from and after the separation date, subject to applicable confidentiality provisions or restrictions, we and Pharmacia will each give the other reasonable access and the ability to duplicate information developed or obtained prior to the separation date within each company's possession relating to the other's businesses, or for audit, accounting, claims, intellectual property protection, litigation and tax purposes, as well as for purposes of fulfilling disclosure and reporting obligations;
- after the separation date, we and Pharmacia will each use reasonable efforts to provide assistance to the other for litigation and to make available to the other employees for the purpose of consultation, or directors, officers, other employees and agents as witnesses, in legal, administrative or other proceedings;
- the company providing information, consultant or witness services under the separation agreement will be entitled to reimbursement from the other for reasonable expenses;
- we and Pharmacia will each retain all proprietary information in its possession relating to the other's business for a
 period of time and if the information is to be destroyed, the destroying company will give the other company the
 opportunity to receive the information at the other company's expense;
- we and Pharmacia will each agree not to disclose or otherwise waive any privilege relating to it or to the other without consent, unless the privilege relates solely to its own business, assets or liabilities; and

• from and after the separation date, Pharmacia and we will agree to hold in strict confidence all information concerning or belonging to the other obtained prior to the separation date or furnished pursuant to the separation agreement, subject to applicable law.

Arbitration and Dispute Resolution

Under the separation agreement, if disputes arise between Pharmacia and us, the following will occur:

- the parties will first attempt to resolve the dispute by direct discussions and negotiation, including, if either party elects, among senior executives;
- if the parties cannot resolve their dispute within 30 days after notice calling for negotiation among senior executives, the parties will attempt to settle the dispute through mediation;
- if the dispute is not resolved within 60 days after initiation of mediation, either party may demand that the dispute be resolved by binding arbitration; and
- the parties will bear their own expenses and attorneys' fees in resolving the dispute and will share equally the costs and expenses of any mediation or arbitration.

No Representations And Warranties

Pursuant to the separation agreement, we understand and agree that Pharmacia did not represent or warrant to us as to the assets to be transferred to us, the liabilities to be assumed by us, our business, the former agriculture or chemical businesses of former Monsanto, our balance sheet or as to any consents or approvals required in connection with the consummation of the transactions contemplated by the separation agreement. We took all assets "as is, where is" and bear the economic and legal risk relating to conveyance of, and title to, the assets.

Insurance

Under the terms of the separation agreement, our assets will include any and all rights of an insured party, including rights of indemnity and the right to be defended by or at the expense of the insurer and to receive insurance proceeds with respect to all of our insured claims under insurance policies held by either us or Pharmacia. Each company is responsible for its own deductibles, self-insured retentions, retrospective premiums, claims handling and other charges owed under the insurance policies.

Non-Competition Provisions

For a two-year period following the separation date, we will be obligated to refrain from commercializing, by selling or transferring for sale or use by the end user, products in the businesses retained by Pharmacia. For a two-year period following the separation date, Pharmacia will be obligated to refrain from commercializing products in the businesses transferred to us.

Expenses

Pharmacia will pay all reasonable and customary out-of-pocket costs and expenses directly related to the preparation, execution and delivery of the separation agreement and other agreements related to the separation, and the consummation of the separation and our initial public offering. These costs and expenses consist of fees and expenses of external advisors (including independent public accountants, consultants and attorneys), expenses directly related to our initial public offering (other than underwriting discounts and commissions), transfer and other costs, registration and filing fees, printing and mailing costs, and any other costs, fees or charges imposed by a governmental entity.

Other Agreements

If there is a conflict or inconsistency between the provisions of the separation agreement and the provisions of any other agreement related to the separation, the provisions of the separation agreement will control over the inconsistent provisions of the other agreement as to matters within the scope of the separation agreement.

Corporate Agreement

The corporate agreement provides Pharmacia with continuing stockholder rights with respect to us following the initial public offering, including preemptive rights, registration rights and rights associated with Pharmacia's auditing obligations.

Preemptive Rights

Under the terms of the corporate agreement, Pharmacia has a continuing preemptive right to purchase common stock from us in order to allow Pharmacia to own at least 80.1% of our outstanding equity and voting power on a fully diluted basis. The exercise price for these shares would be at prevailing market prices measured by the volume-weighted average for the 20 consecutive trading days prior to notice of exercise or, in the case of a public offering of our common stock for cash, a price per share equal to the initial public offering price less underwriters' discounts and commissions. The preemptive right would terminate in the event Pharmacia sells or disposes of its shares to reduce its ownership interest of our outstanding equity and voting power to less than 80.1% on a fully diluted basis.

Registration Rights

Under the corporate agreement, Pharmacia has the right to require us to register for offer and sale all or a portion of our common stock held by Pharmacia, so long as the common stock Pharmacia requires us to register in each case represents at least 5% of the aggregate shares of common stock then issued and outstanding. Pharmacia's registration rights terminate on the first date on which Pharmacia ceases to hold at least 5% of our outstanding shares on a fully diluted basis.

Piggy-Back Registration Rights

If we at any time intend to file on our behalf or on behalf of any of our security holders a registration statement in connection with a public offering of any of our securities on a form and in a manner that would permit the registration for offer and sale of common stock held by Pharmacia, Pharmacia has the right to include its shares of our common stock in such offering.

Unregistered Offerings

Under the terms of the corporate agreement, Pharmacia has the right to require us to prepare an offering memorandum in connection with the offer and sale in an unregistered offering of all or a portion of our common stock, but not less than 5% of our outstanding shares in any one offering, held by Pharmacia. Pharmacia's rights and limitations with respect to such unregistered offerings are comparable to those rights and limitations applicable to Pharmacia in registered offerings. In addition, we have agreed to grant customary registration rights to third parties who purchase our stock from Pharmacia in such an unregistered offering.

Registration Expenses

We are responsible for the registration expenses in connection with the performance of our obligations under the corporate agreement. Pharmacia is responsible for all of the fees and expenses of counsel to Pharmacia, any applicable underwriting discounts or commissions, and any transfer taxes.

Indemnification

Pursuant to the corporate agreement, we will indemnify Pharmacia against any liabilities that may result from untrue statements or omissions in the registration statement. Pharmacia will indemnify us against liabilities that arise out of untrue statements or omissions in the registration statement based on written information furnished by Pharmacia.

Auditing Practices

So long as Pharmacia is required or permitted to consolidate our results of operations and financial position in Pharmacia's financial statements, the companies agree to the following terms relating to auditing practices:

• we will not select a different independent accounting firm than Deloitte & Touche LLP to serve as our independent certified public accountants without Pharmacia's prior written consent;

- we will use reasonable best efforts to enable our auditors to (1) complete their audit such that they will date their opinion on our audited annual financial statements on the same date that Pharmacia's auditors date their opinion on Pharmacia's audited annual financial statements, and (2) complete their quarterly review procedures on our quarterly financial statements on the same date that Pharmacia's auditors complete their quarterly review procedures on Pharmacia's quarterly financial statements;
- we will provide to Pharmacia on a timely basis all information that Pharmacia reasonably requires to meet its schedule for the preparation, printing, filing and public dissemination of its annual and quarterly financial statements;
- we will authorize our auditors to make available to Pharmacia's auditors both (1) the personnel who performed or will perform the annual audits and quarterly reviews of our financial statements, and (2) work papers related to the annual audits and quarterly reviews of our financial statements;
- we will provide Pharmacia's internal auditors with access to our books and records; and
- we will give Pharmacia notice of any proposed significant changes in accounting estimates or principles from those in effect on the separation date.

No Discrimination

Under the terms of the corporate agreement, we agree that, for so long as Pharmacia owns at least 50% of our outstanding common stock, we will not, without the prior written consent of Pharmacia, take any action which has the effect of restricting or limiting the ability of Pharmacia freely to sell, transfer, assign, pledge or otherwise dispose of shares of our common stock or would restrict or limit the rights of any transferee of Pharmacia as a holder of our common stock. In addition, we agree that we will not, without the prior written consent of Pharmacia, limit the legal rights of, or deny any benefit to, Pharmacia as our stockholder in a manner not applicable to our stockholders generally.

Accounting Treatment

Pursuant to the corporate agreement, we agree to refrain from taking any actions that could adversely affect Pharmacia's ability to account for the recent merger transaction involving former Monsanto and Pharmacia & Upjohn as a pooling of interests.

Tax Sharing Agreement

Following our initial public offering, the Company and some of our subsidiaries will be included in Pharmacia's consolidated group for U.S. federal income tax purposes (the "Pharmacia Federal Group") as well as in consolidated, combined, unitary or other similar consolidated returns that include Pharmacia and its subsidiaries for state and local income tax purposes (a "Pharmacia State Group"). As of the separation date, Pharmacia and we entered into a tax sharing agreement.

Pursuant to the tax sharing agreement, with respect to tax returns for any taxable period in which we and any of our subsidiaries (collectively, the "Monsanto Group") are included in the Pharmacia Federal Group or any Pharmacia State Group, we generally will be obligated to pay to Pharmacia the amount of taxes (including estimated taxes) that would be due and payable by us determined, subject to adjustment by Pharmacia, as if the Monsanto Group filed its own tax returns that did not include Pharmacia or other members of the Pharmacia Federal Group or the Pharmacia State Group, as the case may be. If, for any taxable period in which the Monsanto Group is included in the Pharmacia Federal Group or any Pharmacia State Group, the Monsanto Group has a net operating loss or tax credit that reduces the taxes of the Pharmacia Federal Group or any Pharmacia State Group, as the case may be, below the amount that would have been payable if the Monsanto Group had not incurred such loss or tax credit, Pharmacia must pay to us the amount of the reduction in taxes attributable to the loss or tax credit. We will be responsible for any taxes with respect to tax returns that include only the Monsanto Group.

Pharmacia will be responsible for the preparation and filing of all tax returns for any taxable period in which the Monsanto Group is included in the Pharmacia Federal Group or any Pharmacia State Group. Pharmacia may elect at its discretion to include the Monsanto Group in any Pharmacia State Group when inclusion is not required by law. We will be responsible for the preparation and filing of all tax returns that include only the Monsanto Group.

Pharmacia generally will have sole responsibility for, and control over, all audits with respect to any tax return for the Pharmacia Federal Group and any Pharmacia State Group and we generally will have sole responsibility for, and control over, all audits with respect to all tax returns that include only the Monsanto Group.

With respect to tax periods beginning on or after the separation date, in the event of any adjustments to the tax returns of the Pharmacia Federal Group, any Pharmacia State Group or the Monsanto Group, the liability of Pharmacia or us, as the case may be, under the tax sharing agreement will be redetermined by giving effect to such adjustment, and Pharmacia or we, as the case may be, will be obligated to pay to the other party any differences between the original liability and the redetermined liability.

With respect to tax periods beginning before the separation date, we are responsible for tax liabilities attributable to DEKALB Genetics Corporation and its subsidiaries. We will also be responsible for the tax liability arising from transactions pursuant to which the Monsanto Group's pharmaceutical assets in foreign jurisdictions are separated from the Monsanto Group's agricultural assets in foreign jurisdictions ("Separation Transactions"). This liability will be reduced by the present value of any tax asset created as a result of such transactions. Except for the DEKALB tax liabilities, taxes attributable to Separation Transactions and property and sales and use taxes attributable to our assets or businesses, Pharmacia will be responsible for and will indemnify and hold us harmless from all taxes incurred by any member of the Monsanto Group prior to the separation date.

Pharmacia and we will provide each other all information and other assistance reasonably requested by the other party in connection with the preparation and filing of any tax return pursuant to the tax sharing agreement. Disputes arising between Pharmacia and us relating to matters covered by the tax sharing agreement are subject to resolution through third-party dispute resolution provisions.

We will be included in the Pharmacia Federal Group for all taxable periods during which Pharmacia beneficially owns at least 80% of the total voting power and value of our outstanding common stock. Each member of a consolidated group for U.S. federal income tax purposes is jointly and severally liable for the U.S. federal income tax liability of each other member of the consolidated group. As such, although the tax sharing agreement provides for the sharing of liabilities between Pharmacia and us, during the period in which we are included in the Pharmacia Federal Group, we could be liable for any U.S. federal income tax liability that is incurred, but not discharged, by any other member of the Pharmacia Federal Group.

Employee Benefits and Compensation Allocation Agreement

The employee benefits and compensation allocation agreement sets forth the agreement between Pharmacia and us as to the allocation of employees and their compensation and benefits following the separation date.

In general, employees who work exclusively in the businesses being transferred to us were transferred to us and our subsidiaries as of the separation date, and employees who work exclusively in the businesses being retained by Pharmacia remained with Pharmacia and its other subsidiaries. Outside the United States, employees who work as staff employees supporting all of the businesses generally were allocated to the primary businesses in each country, unless factors dictated otherwise. In the United States, staff employees working in St. Louis, Missouri generally were allocated to us and staff employees working in Chicago, Illinois generally were assigned to Pharmacia, unless certain factors dictated otherwise. In some cases, staff employees of Pharmacia working in St. Louis will provide services to both Pharmacia and us under the services agreement. In some cases, the staff employees assigned to one company will provide support services to the other company under the services agreement. See "Services Agreement" in this Appendix. For example, in the United States, the staff employees transferred to us may continue to provide services to Pharmacia. Former employees of former Monsanto who had been employed in the United States were generally allocated to us if they retired before 1995. Former employees of former Monsanto who had been employed outside the United States were generally assigned to us if they either had been working primarily in the agricultural business at the time they retired or were members of the corporate staff in countries where the agricultural business was the primary business of former Monsanto unless local law or other factors dictate otherwise.

We assumed responsibility for all obligations under any individual employment letters or similar agreements between Pharmacia and employees who transferred to us other than the severance liabilities under change-of-control employment agreements between Pharmacia and each of Messrs. Engelberg and Ide and two other executives. *See* "Certain Agreements — Change-of-Control Employment Agreements" beginning at page 24 of the body of the proxy statement. The employee benefits and compensation allocation agreement provides that the severance benefits for staff employees who are terminated within two years after our initial public offering will be borne by Pharmacia.

In the United States, employees and former employees allocated to us continue to participate in the former Monsanto Company Pension Plan, the related ERISA Parity Pension Plan and the former Monsanto Company Supplemental Retirement Plan, each of which will continue to be sponsored by Pharmacia for a period of time following our initial public offering, and we will bear the costs of their participation. The period of this continued participation will last until such time as we are able to establish our own qualified pension plan with benefits similar to those provided under the former Monsanto Company Pension Plan, and obtain a determination letter from the Internal Revenue Service that the qualified pension plan meets the requirements for tax qualification, or such later date as Pharmacia may determine. When the continued participation of our employees in the former Monsanto Company Pension Plan does cease, our new pension plans will assume liability for the pension benefits of our employees and the former employees allocated to us, as described above, and assets to fund the liabilities under the qualified pension plan on an accrued-benefits-obligation basis will be transferred from the trust for the former Monsanto Company Pension Plan to the trust for our qualified pension plan. If, at the time of the plan split, the assets of the Monsanto Company Pension Plan have a value at least equal to its total accrued benefit obligations, then our plan will receive assets having a value at least equal to the accrued benefit obligation for the liabilities it assumes. If the Monsanto Company Pension Plan has surplus assets in excess of its total accrued benefit obligation, Pharmacia will determine whether to transfer any portion of the surplus to our plan. If Pharmacia determines to transfer a portion of surplus assets to our plan, the amount of surplus transferred will equal either:

- our proportionate share of the surplus, based upon the percentage of the total accrued benefit obligations of the Monsanto Company Pension Plan that our plan assumes, or
- the lesser of our proportionate share of the surplus or the amount of the projected benefit obligation for the liabilities our plan assumes,

as determined by Pharmacia. If, at the time of the plan split, the assets of the Monsanto Company Pension Plan have a value less than its total accrued benefit obligations, then our plan will receive a proportionate share of those assets, based upon the percentage of the total accrued benefit obligations of the Monsanto Company Pension Plan that our plan assumes. Before this split takes place, we will bear the costs of providing benefits to our employees and former employees allocated to us under the former Monsanto Company Pension Plan.

We will establish a qualified savings and investment plan, which will be a qualified defined contribution plan similar to the former Monsanto Company Savings and Investment Plan, and a related nonqualified plan, which will be similar to the former Monsanto Company ERISA Parity Savings and Investment Plan, to provide benefits to our employees as of March 31, 2001, or as soon as is administratively feasible after that date. The accounts of our employees under the former Monsanto Company Savings and Investment Plan will be transferred to our new plan. In connection therewith, a portion of the employee stock ownership plan component of the former Monsanto Company Savings and Investment Plan also will be transferred to our plan. Our qualified savings and investment plan will assume a percentage of the debt obligations of the former Monsanto Company Savings and Investment Plan, and receive the same percentage of the employer securities financed by that debt, based upon the relative eligible pay of our employees participating in the plan as compared to the Pharmacia employees participating in the plan.

Pension plans maintained outside the United States in which both our employees and those of Pharmacia participate will generally be divided between the two companies. If such plans are funded, the assets will generally be split in proportion to the relative projected benefit obligations of the two separate plans, except to the extent otherwise required by law.

We have assumed sponsorship of all of former Monsanto's U.S. medical, life, disability and other welfare benefit plans effective September 1, 2000, and Pharmacia is a participating employer in those plans. Outside of the United States, the company that is going to assume sponsorship of the benefit plans in which both Pharmacia and our employees will participate will generally be designated as the host company. Pharmacia will bear the cost of the continued participation in the plans assumed by us by Pharmacia employees and by former employees allocated to Pharmacia, and we will bear the costs of the continued participation plans by our employees and by former employees allocated to us in plans assumed by Pharmacia. There may be some deviations from these general rules where appropriate because of local law or other local considerations.

Cost-sharing for the benefits provided to one company's employees by plans sponsored by the other company generally will be based upon actual cost of providing the benefits to each company's employees and former employees. In addition, the employee benefits and compensation allocation agreement provides that we and Pharmacia will share any costs or liabilities involving the former Monsanto employee benefit plans and relating to compliance issues arising before our initial public offering or, after such offering, if such issues involve the plans in which we and Pharmacia both participate.

Intellectual Property Transfer Agreement

The intellectual property transfer agreement, referred to as the "IPTA," is a master agreement encompassing several agreements which allocates between Pharmacia and us rights relating to patents, patent applications, invention disclosures, unpatented technology (such as know-how), technology agreements, trademarks, copyrights and other forms of intellectual property. The IPTA generally provides that both parties agree not to disclose confidential information of the other party. Further, each party agrees not to use the information except when such use has been agreed to by the other party.

Patent Rights

Under the terms of the IPTA, Pharmacia assigned to us ownership of patents, patent applications and invention disclosures directed to technology related exclusively to the businesses transferred to us. If the technology is used by both Pharmacia and us, but primarily by Pharmacia, such patents, patent applications and invention disclosures were retained by Pharmacia and licensed to us for use in our business field. If the technology is used by both Pharmacia and us, but primarily by us, such patents, patent applications and invention disclosures were assigned to us and a license provided to Pharmacia for use in Pharmacia's business field.

The IPTA provides that both parties will assist each other in (1) the filing of patent applications, (2) the prosecution of the patent applications and (3) any patent litigation. Pharmacia shall bear the costs of transferring and securing Monsanto's intellectual property rights under the IPTA. Either party may prosecute certain patents and patent applications. If the party prosecuting the patent or application is not the party that allowed the patent or application to lapse, then the party that allowed the lapse will pay for the assignment and transfer of the patent or patent application to the prosecuting party. Further, the IPTA specifies that for a period of three years both parties will be obligated to correct any bona fide error made in allocating the rights between the parties.

We believe that all material patent rights necessary to conduct our business will be either assigned or licensed to us by Pharmacia under the IPTA.

Unpatented Technology

Unpatented technology that relates exclusively to our business as of the separation date was assigned to us. Unpatented technology used by both Pharmacia and us, but primarily by Pharmacia, was retained by Pharmacia and licensed royalty-free to us. Unpatented technology used by Pharmacia and us, but primarily by us, was assigned to us and licensed royalty-free to Pharmacia.

Technology Agreements

Pharmacia has entered into numerous agreements with third parties relating to patents, patent applications and/or technology. To the extent such agreements can be identified as relating exclusively to us, and to the extent assignment is allowed to be made, Pharmacia assigned to us such agreements relating exclusively to our business. If the subject technology is used by both Pharmacia and us, but primarily by us, such agreements were assigned to us and a license provided to Pharmacia for use in Pharmacia's business field. In any case and to the extent that the agreement is used by both businesses, we and Pharmacia will continue to permit the agreement to be used by both businesses to the extent the agreement allows. Royalty payments under these technology agreements will be allocated between Pharmacia and us on a prorated basis, based on the use of the technology.

Trademarks

Pharmacia assigned to us at the separation date trademarks used exclusively by us. Pharmacia also assigned to us all marks relating to the Monsanto name, as well as the block M and the Food, Health and Hope logo. We will provide a license to Pharmacia, limited to six months, for Pharmacia to utilize trademarks, including the Monsanto name, the block M and the Food, Health and Hope logo. After six months, Pharmacia will no longer have the right to use those trademarks.

Copyrights

Pharmacia assigned to us all copyrights that are primarily used in our business as of the separation date.

First Right To Negotiate

Also, for two years after the separation date, we and Pharmacia will each be obligated to offer the other a first right to negotiate a license for technology developed after the separation date that has a use in the other's business field. The term for initiating such negotiation will expire three years from the separation date. Such negotiation will be conducted in good faith and will reflect commercially reasonable license terms. Further, the financial terms of such license will be no less favorable than financial terms granted to any third party for the subject technology in a similar field of use.

Services Agreement

The services agreement governs the provision by Pharmacia to us and by us to Pharmacia of support services, such as financial management, accounting, tax, payroll, legal, investor relations, human resources administration, financial transaction support, information technology, data processing, procurement, real estate management and other general administrative functions. The terms of these services are generally until December 31, 2001, subject to exceptions. We anticipate that we will negotiate a new agreement with Pharmacia for the continued provision of some of these services for some period after December 31, 2001, but we cannot guarantee that we will be able to do so.

During the four months beginning September 1, 2000, we provided services in the amount of \$261 million to Pharmacia. During the same period Pharmacia provided services to us in the amount of \$162 million. At December 31, 2000, we had a net receivable balance of \$99 million with Pharmacia.

Campus Lease

We currently lease from Pharmacia the premises occupied by us generally located in Chesterfield, Missouri ("Premises") pursuant to a Lease Term Sheet ("Term Sheet"). We contemplate entering into a Campus Lease Agreement ("Lease") with Pharmacia covering the Premises, which we are in the process of negotiating currently. Under the Lease, we will use the Premises for general office, research and other purposes consistent with our current use of the Premises under the Term Sheet. Both the Term Sheet and the Lease include use of common areas, such as driveways, sidewalks, parking areas, loading areas and access roads.

It is expected that the Lease will have a term of 15 years, commencing upon execution. In the absence of an Event of Default (as defined in the Lease), we would have the right to extend the Lease for up to two successive five-year periods, upon one-year prior notice. If we complete a Major Capital Improvement (as defined in the Lease), and no Event of Default has occurred, we would have the right to extend the Lease for a 10-year period, upon one-year prior notice. We would also have the right to terminate the Lease by notifying the Pharmacia in writing three years before termination. In addition, if there is no uncurred Event of Default (as defined in the Lease), and we have elected to add an Extension Area (as defined in the Lease) to the Premises, we would have the right to extend the Lease for 12 consecutive five-year terms, subject to certain terms and conditions.

We will pay our percentage of the Base Rent (as defined in the Lease) as well as our percentage share of the costs of a basic set of services (as defined in the Lease), property taxes, insurance costs, other taxes for personal property, equipment or other property used in connection with providing the basic services and other costs of maintaining the Premises, as well as other additional services.

At Pharmacia's cost, Pharmacia may relocate the Premises with written notice to us and our approval. We may not refuse the relocation if the new premises are comparable in size, physical characteristics and our conforming uses of the space.

Allocation Of Corporate Opportunities

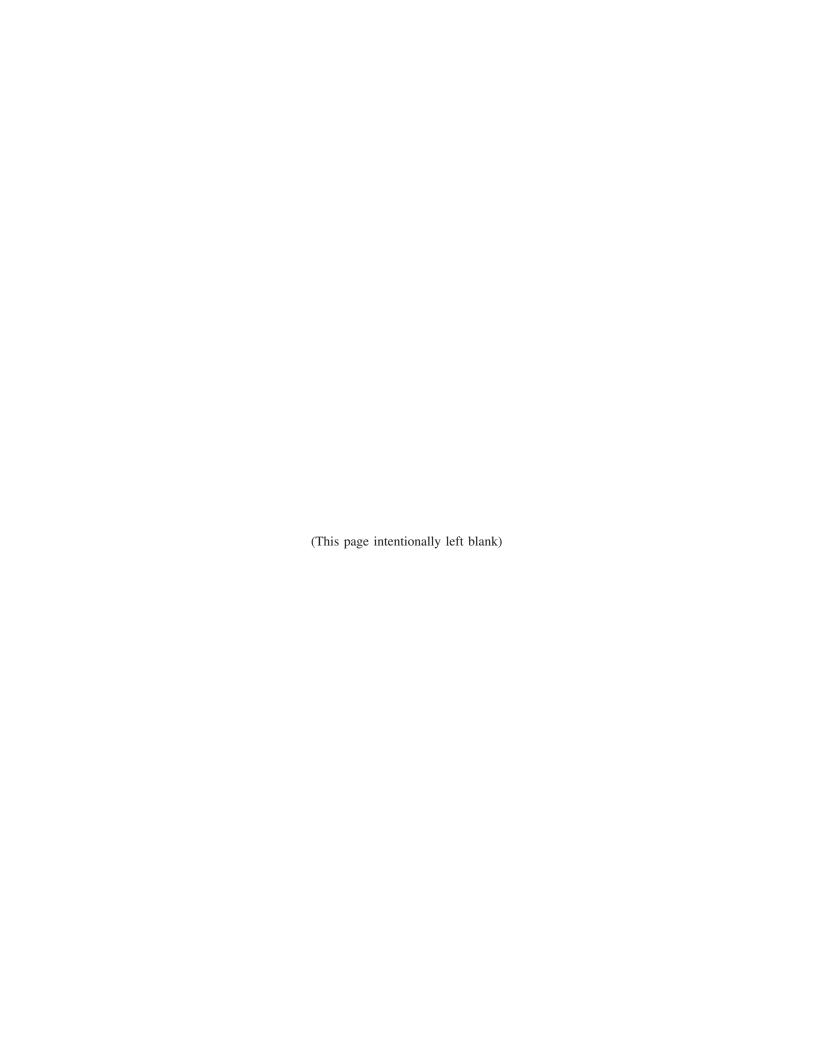
Our certificate of incorporation provides that, unless otherwise provided in a written agreement between us and Pharmacia, Pharmacia will have no duty to refrain from engaging in the same or similar activities or lines of business as our company engages in or proposes to engage in at the time of our initial public offering, and, to the fullest extent permitted by law, neither Pharmacia nor any officer or director of Pharmacia (except as provided below) will be liable to us or our stockholders for breach of any fiduciary duty by reason of any such activities of Pharmacia. In the event that Pharmacia acquires knowledge of a potential transaction or matter which may be a corporate opportunity for both Pharmacia and us, Pharmacia will, to the fullest extent permitted by law, have no duty to communicate or offer such

corporate opportunity to us and will, to the fullest extent permitted by law, not be liable to us or our stockholders for breach of any fiduciary duty as a stockholder of our company by reason of the fact that Pharmacia pursues or acquires such corporate opportunity for itself, directs such corporate opportunity to another person, or does not communicate information regarding such corporate opportunity to us.

In the event that one of our directors or officers who is also a director or officer of Pharmacia acquires knowledge of a potential transaction or matter which may be a corporate opportunity for both us and Pharmacia, such director or officer will, to the fullest extent permitted by law, have fully satisfied the fiduciary duty of such director or officer to us and our stockholders with respect to such corporate opportunity if such director or officer acts in a manner consistent with the following policy:

- a corporate opportunity offered to any person who is an officer of our company, and who is also a director but not an officer of Pharmacia, will belong to us;
- a corporate opportunity offered to any person who is a director but not an officer of our company, and who is also a
 director or officer of Pharmacia, will belong to us if such opportunity is expressly offered to such person in his or her
 capacity as a director of our company, and otherwise will belong to Pharmacia; and
- a corporate opportunity offered to any person who is an officer of both our company and Pharmacia will belong to us if such opportunity is expressly offered to such person in his or her capacity as an officer of our company, and otherwise will belong to Pharmacia.

These corporate opportunities provisions will expire once Pharmacia owns less than 20% of our common stock and once no person who is a director or officer of our company is also a director or officer of Pharmacia.



APPENDIX B

AUDIT AND FINANCE COMMITTEE CHARTER

- 1. In accordance with the Company's By-Laws, there shall be a committee of the Board of Directors to be known as the Audit and Finance Committee. The Audit and Finance Committee's composition of at least three directors shall meet the requirements of the Audit Committee Policy of the New York Stock Exchange as in effect from time to time. Accordingly, all members of the Committee shall be directors: (a) who, in the opinion of the Company's Board of Directors, have no relationship to the Company that may interfere with the exercise of their independence from the Company and its management; and (b) who are financially literate or who are able to become financially literate within a reasonable period of time after appointment to the Audit and Finance Committee. In addition, at least one member of the Committee shall have accounting or related financial management expertise.
- 2. The Audit and Finance Committee is appointed by the Board to assist the Board in fulfilling its responsibility to oversee (a) the Company's financial reporting processes and systems of internal accounting and financial controls, (b) the selection of the Company's independent accountants, (c) the independence and performance of the Company's independent accountants and internal audit staff, (d) the scope and effectiveness of the annual independent audit of the Company's financial statements, (e) the integrity of the Company's financial statements and financial reports, and (f) the compliance by the Company with applicable legal and regulatory requirements and Pharmacia's Global Standards of Business Conduct.
- 3. The Board of Directors and the Audit and Finance Committee recognize that the Company's management is responsible for preparing the Company's financial statements and that the independent accountants are responsible for auditing those financial statements. Management, including its finance and internal audit staffs, is responsible for the fair presentation of the information set forth in such financial statements in conformity with generally accepted accounting principles. The independent accountants' responsibility is to provide their opinion, based on their audits, as to whether the financial statements fairly present, in all material respects, the financial position, results of operations and cash flows of the Company in conformity with generally accepted accounting principles. It is not the duty of the Audit and Finance Committee, or any of its members, to conduct separate auditing or accounting reviews or to provide independent assurance of the Company's compliance with applicable legal and regulatory requirements or Pharmacia's Global Standards of Business Conduct but only to provide general oversight of these matters.
- 4. In discharging its oversight role, the Audit and Finance Committee is empowered to investigate any matter brought to its attention with full access to all books, records, facilities and personnel of the Company and to retain outside counsel, auditors or other experts to advise the Audit and Finance Committee as determined necessary or appropriate from time to time. Because the Board and the Audit and Finance Committee are to represent the Company's shareholders, the Company's independent accountants are accountable to the Board and the Audit and Finance Committee. The Audit and Finance Committee may request that any officer or employee of the Company or of the Company's independent accountants attend Audit and Finance Committee meetings.

Financial Reporting

- 5. In performing its financial reporting oversight responsibilities, the Committee shall:
 - a) Review and assess the adequacy of the Audit and Finance Committee's charter annually and recommend any proposed changes to the Board for approval.
 - b) Make recommendations to the Board with respect to the appointment, and where deemed necessary, the replacement of the Company's independent accountants.

- c) Review and approve the timing and scope of the independent accountants' audit examination and the related fees.
- d) Review the audit results, including any material comments and recommendations made by the Company's independent accountants and the Company's responses thereto.
- e) Review material changes in, and overall compliance with, accounting and financial reporting requirements, policies and procedures.
- f) Review and discuss the scope and effectiveness of the Company's internal accounting and financial controls with the Company's financial management and independent accountants.
- g) Review the scope of internal auditing activities and any significant internal audit findings.
- h) Review with Company management and the independent accountants the Company's audited financial statements to be included in its Annual Report and review and consider with the independent accountants the matters required to be discussed by Statement of Auditing Standards No. 61.
- i) Prior to the filing of each annual report on Form 10-K, the Chair of the Audit and Finance Committee or the full Audit and Finance Committee shall review and consider with the independent accountants the Company's financial results to be included in such annual report and any matters required to be discussed by Statement of Auditing Standards No. 61.
- j) Review and discuss management consulting services performed by the independent accountants and the related fees and their impact on the independent accountants' independence.
- k) Obtain from the independent accountants, on an annual basis, a formal written statement delineating all relationships between the independent accountants and the Company consistent with Independence Standards Board Standard Number 1, and review and discuss with the independent accountants any such relationships and their impact on the independent accountants' independence.
- 1) Provide any required reports to be included in the Company's proxy statement.
- m) Report to the Board on Audit and Finance Committee activities and significant issues.

Compliance Oversight

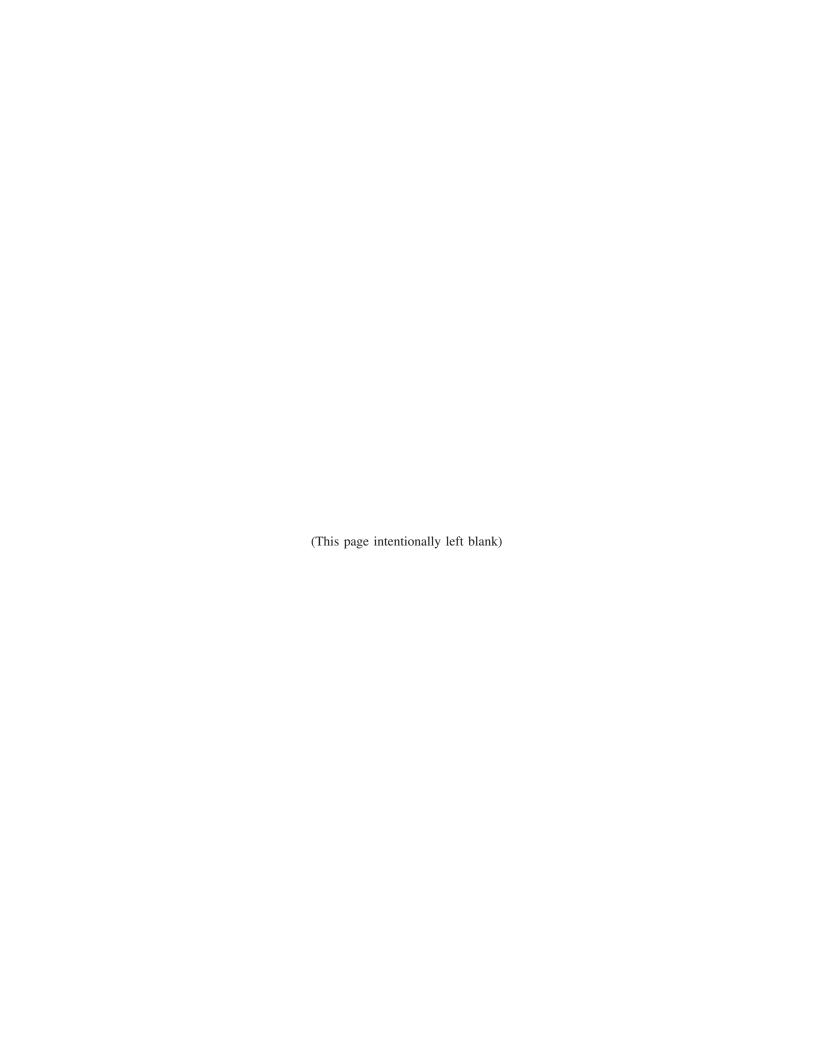
- 6. In discharging its compliance oversight responsibilities, the Audit and Finance Committee shall:
 - a) Obtain reports, at least annually, from the Company's Chief Compliance Officer and the Chief Internal Auditor regarding the Company and its subsidiaries' compliance with appropriate legal and regulatory requirements and with Pharmacia's Global Standards of Business Conduct.
 - b) Advise the Board with respect to the Company's policies and procedures regarding compliance with applicable legal and regulatory requirements and Pharmacia's Global Standards of Business Conduct, and any significant findings of noncompliance.
 - c) Review annually the Company's information security program and the specific policies, programs and practices employed to protect against information misuse.
 - d) Review annually the Company's general risk management policies, practices and procedures.
 - e) Review annually the quality of Monsanto Company's accounting policies and procedures with the independent auditor.

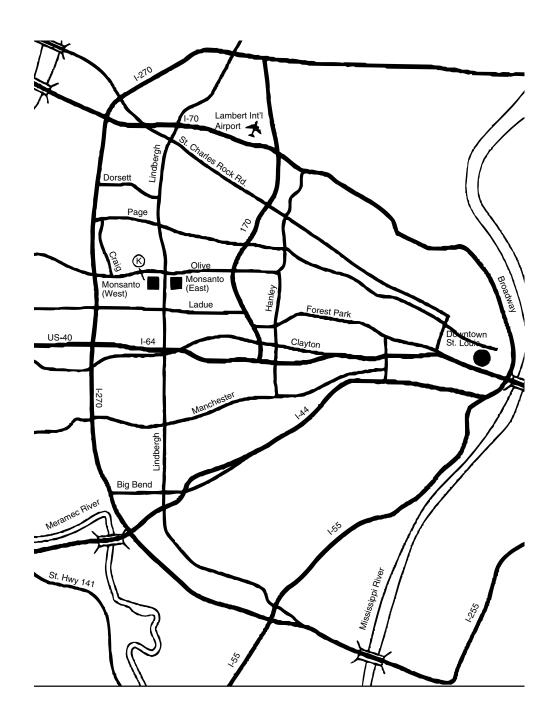
Financial Oversight

- 7. In discharging its finance oversight responsibilities, the Audit and Finance Committee shall:
 - a) Review and discuss the Company's financial plans, policies and budgets to ensure their adequacy and soundness in providing for the Company's current operations and long-term growth.
 - b) Review, discuss and make recommendations to the Board concerning proposed equity, debt or other securities offerings and private placements.
 - c) Review and make recommendations to the Board concerning its dividend policy and dividends to be paid.

Employee Benefit Plans Investment Fiduciary Function

- 8. Perform all of the fiduciary functions of the Company with respect to the control and management of the assets of each employee pension or welfare benefit plan sponsored by the Company, excluding the management and control of the operation and administration of such plans, to the extent that such authority and responsibility is not otherwise reserved, assigned or delegated to the Board of Directors, a committee thereof, or other committee, individual or entity.
- 9. The Audit and Finance Committee shall meet at least four times per year. Meetings will be held at the convenience of the members, but, preferably, in advance of meetings of the Board of Directors. Minutes of each meeting shall be kept.
- 10. The members and chair of the Audit and Finance Committee shall be appointed by the Board of Directors at least annually.





Directions from downtown St. Louis:

Take Interstate 64/Highway 40 west to Lindbergh Boulevard north. Take Lindbergh Boulevard north about $2^{1/2}$ miles to the Olive Boulevard west exit. Follow Olive to the first traffic light. Turn left and immediately left again into Monsanto's Creve Coeur Campus. Please follow the signs to the parking area and entrance to Building K.

Directions from St. Louis International Airport (Lambert):

Take Interstate 70 west to Lindbergh Boulevard south. Take Lindbergh Boulevard south about 6 miles to Olive Boulevard west exit. Follow to the first traffic light. Proceed directly across the intersection and then immediately turn left into Monsanto's Creve Coeur Campus. Please follow the signs to the parking area and entrance to Building K.

Notice of Annual Meeting of Stockholders and Proxy Statement

