SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C. 20549

FORM 10-K

Annual Report Pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934

For the fiscal year ended December 31, 1976 Commission file number 1-2516

MONSANTO COMPANY

(Exact name of registrant as specified in its charter)

DELAWARE	43-0420020
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
800 NORTH LINDBERGH BLVD., ST. LOUIS, MO.	63166
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (314) - 694-1000

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
$2.75 Cumulative Convertible Preferred Stock	New York Stock Exchange
Common Stock, $2 par value	New York Stock Exchange
9¼% Sinking Fund Debentures due 2000	New York Stock Exchange
8¼% Sinking Fund Debentures due 2000	New York Stock Exchange
8% Notes due 1985	New York Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act:

None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ✓ No_

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the close of the period covered by this report.

Class	Outstanding at December 31, 1976
Common Stock, $2 par value	36,438,841 shares

PART I

Monsanto Company ("the Company") was incorporated in 1933 under Delaware law and is the successor to a Missouri corporation, Monsanto Chemical Works, organized in 1901. Except where otherwise indicated, the term "Monsanto," as used in this report means the Company and all subsidiaries in which it has more than a 50% interest taken as a whole.

Item 1. BUSINESS AND PRODUCTS

Monsanto is a multi-national company engaged directly and through subsidiaries in the manufacture and sale of a widely diversified line of products derived principally from petroleum, natural gas and phosphate ore, along with other raw materials. Monsanto chemicals, plastics and fibers are marketed as raw materials and intermediate products, and also are converted by Monsanto into finished products.

Effective November 1, 1976, a sixth operating unit, Monsanto Chemical Intermediates Company, was established and Monsanto Polymers & Petrochemicals Company was renamed Monsanto Plastics & Resins Company. Monsanto Chemical Intermediates Company assumed responsibility for certain operations formerly a part of the Monsanto Polymers & Petrochemicals Company, the Monsanto Industrial Chemicals Company and the Monsanto Textiles Company operating units. At the same time, Monsanto Plastics & Resins Company assumed responsibility for certain operations formerly a part of the Monsanto Industrial Chemicals Company operating unit and has subsequently assumed responsibility for certain operations formerly a part of the Monsanto Commercial Products Company operating unit.

Sales and operating results for Monsanto's lines of business shown herein have been restated to reflect both the formation of Monsanto Chemical Intermediates Company and the related change in the internal transfer pricing methods for some products. In aggregate, Monsanto's results are not affected by these changes.

The following table compares net sales and operating income (i.e., income before other income, interest charges, other income charges, and provision for income taxes) for the years 1972 through 1976 for Monsanto's six lines of business:

	Year Ended December 31,									
	1976		1975		1974		1973		1972	
	(Dollars in millions)									
	Net Sales	Operating Income	Net Sales	Operating Income	Net Sales	Operating Income	Net Sales	Operating Income	Net Sales	Operating Income
Agricultural Products	$ 573.2	$236.1	$ 547.4	$258.9	$ 410.7	$176.7	$ 283.4	$118.3	$ 222.3	$ 79.3
Chemical Intermediates (a)	476.2	148.4	390.3	90.3	416.8	82.2	347.3	20.0	288.2	21.1
Commercial Products	398.2	(2.5)	318.7	(11.1)	299.0	(15.6)	239.3	(9.6)	185.7	(19.2)
Industrial Chemicals	969.4	200.8	852.8	193.8	788.8	143.3	553.5	84.0	473.5	48.6
Plastics & Resins	1,018.7	95.8	766.3	38.8	812.6	98.4	628.4	74.0	589.2	39.1
Textiles (b)	853.5	(10.8)	747.2	(17.2)	770.0	65.2	701.8	119.5	536.5	46.5
Total	$4,570.2	$667.8	$3,624.7	$547.4	$3,497.9	$550.8	$2,647.7	$406.2	$2,295.4	$216.4

(a) The Company sold its petroleum refining and related marketing facilities, which constituted the major part of its oil and gas business, in September 1972. These facilities contributed $69.8 and $5.5 million to net sales and operating income, respectively, in 1972.

(b) Includes net sales of $69.7 million and an operating loss of $3.8 million in 1974 contributed by Olympia Industries, Inc., the assets of which were acquired in July 1974.

PRINCIPAL PRODUCTS

The following is a list of major products within Monsanto's six lines of business:

Agricultural Products

Herbicides, Insecticides and Other Products: Herbicides and insecticides; nitrogenous fertilizer materials such as anhydrous ammonia, ammonium nitrate, and blended mixed fertilizers; ammonium

MONS 003472

nitrate based industrial blasting agents; animal breeding stock; nitric acid; and a plant growth regulator.

Chemical Intermediates

Petrochemicals (including Textiles Intermediates): Chemicals derived from oil or gas, including styrene monomer, acrylonitrile, phenol, acetic acid, benzene, methanol, ethylene and propylene, used by Monsanto or its customers to make plastics, man-made fibers, synthetic rubber and other chemicals; adipic acid, adiponitrile, hexamethylenediamine, and nylon salt used by Monsanto or its customers to make flavorings, coatings, plastics and nylon fiber.

Process Chemicals: Phthalic anhydride, maleic anhydride and fumaric acid for use as intermediates in coatings, drugs, dyes, plastics and flavorings; defoamers; phosphorous pentasulfide; phosphorous trichloride, phosphorous oxychloride, monochlorobenzene, nitrochlorobenzenes and their derivatives; sulfuric acid; hydrochloric acid; caustic potash; and sodium sulfite.

Oil & Gas Production and Exploration: Crude oil and natural gas.

Commercial Products

Process Controls and Electronics: Process control electronic instrumentation, valves, gas regulators and other similar products; electronic test and measurement instruments; semiconductor materials; and optoelectronic devices.

Chemical and Environmental Systems: Pollution abatement systems, engineering and construction services, and vanadium catalyst.

Other Products: A variety of other products including Cycle-Safe® containers.

Industrial Chemicals

Detergents and Phosphates: Phosphoric acid and its sodium, calcium, ammonium and potassium salts for synthetic detergents, dentifrices and many other uses; other detergent intermediates such as biodegradable alkylbenzenes and nonionic actives, germicides and soap bacteriostats.

Specialty Chemicals: Flavorings and fragrances; aspirin and other pharmaceuticals; lactic, fumaric and adipic acids; phosphate leavening agents and food ingredients; animal feed supplements and antioxidants; functional fluids including dielectric fluids and heat and pressure transfer media; bleaching compounds; silicate esters and silica sols for a wide variety of industrial uses; bone ash; lampblack; print paste thickeners; and ammonium phosphate formulations for wildfire control.

Rubber Chemicals: Accelerators, antioxidants and other chemicals for processing natural and synthetic rubbers; test instruments and specialized production equipment for the rubber processing industry.

Plasticizers: Plasticizers used to impart flexibility to plastics and fire retardants.

Plastics and Resins

Plastic Materials: Thermoplastics including polystyrene, ABS, SAN, EPS, polyethylene and nylon used to make appliance housings, automotive parts, construction materials, packaging and consumer products.

Resin Products: Polyvinyl butyral sheet used to make laminated glass; specialty resins including phenolic, melamine, urea and vinyl acetates used to make surface coatings, adhesives and bonding materials; and fortified rosin and rosin sizes, wet strength resins and specialty coatings for paper.

Fabricated Products: Plastic end products including bottles, molded products, foamed products and plastic coated fabrics; low density polyethylene film; and AstroTurf® functional surfaces.

MONS 003473

Textiles

Man-Made Fibers and Fabrics: Nylon 6,6, acrylic, modacrylic and polyester fibers for use either singly or in combination with other man-made or natural fibers and Cerex® and other spun-bonded fabrics in a wide range of consumer and industrial applications.

The table below sets forth the dollar amount and percentage of Monsanto's net sales contributed by each product group during the last five years:

	Year Ended December 31,									
	1976		1975		1974		1973		1972	
	(Dollars in millions)									
Agricultural Products:										
Herbicides, Insecticides & Other Products	$ 573.2	13.4%	$ 547.4	15.1%	$ 410.7	11.7%	$ 283.4	10.7%	$ 222.3	10.0%
Chemical Intermediates:										
Petrochemicals	284.0	6.6	230.5	6.4	258.1	7.4	143.6	5.4	121.6	5.5
Process Chemicals	125.2	2.9	101.3	2.8	107.9	3.1	74.2	2.8	63.0	2.8
Oil & Gas Production and Exploration (a)	67.0	1.6	58.5	1.6	50.8	1.5	29.5	1.1	97.6	4.4
	476.2	11.1	390.3	10.8	416.8	12.0	247.3	9.3	282.2	12.7
Commercial Products:										
Process Controls & Electronics	286.3	6.7	237.9	6.6	212.4	6.1	194.3	7.4	137.3	6.2
Chemical & Environmental Systems and Other Products	111.9	2.6	80.8	2.2	86.6	2.5	45.0	1.7	48.4	2.2
	398.2	9.3	318.7	8.8	299.0	8.6	239.3	9.1	185.7	8.4
Industrial Chemicals:										
Detergents & Phosphates	310.5	7.3	315.4	8.7	254.5	7.3	173.9	6.6	161.5	7.2
Specialty Chemicals	254.9	6.0	206.3	5.7	196.5	5.6	143.8	5.4	120.5	5.4
Rubber Chemicals	199.0	4.7	172.4	4.7	169.7	4.8	127.2	4.8	103.2	4.6
Plasticizers	186.0	4.4	158.7	4.4	168.1	4.8	108.6	4.1	88.3	4.0
	950.4	22.4	852.8	23.5	788.8	22.5	553.5	20.9	473.5	21.2
Plastics & Resins:										
Plastic Materials	499.6	11.7	351.1	9.7	385.9	11.0	278.5	10.5	223.4	10.0
Resin Products	291.6	6.8	223.5	6.2	237.9	6.8	184.9	7.0	151.4	6.8
Fabricated Products	227.6	5.3	193.7	5.3	198.8	5.7	159.7	6.0	158.4	7.0
	1,018.7	23.8	768.3	21.2	822.6	23.5	623.4	23.5	533.2	23.8
Textiles:										
Man-Made Fibers (b)	853.5	20.0	747.2	20.6	770.0	22.0	701.5	26.5	536.5	23.9
Total Company	$4,270.2	100.0%	$3,624.7	100.0%	$3,497.9	100.0%	$2,647.7	100.0%	$2,225.4	100.0%

(a) The Company sold its petroleum refining and related marketing facilities, constituting the major part of its oil and gas business, in September 1972, which facilities contributed $69.8 million (3.1%) to net sales in 1972.

(b) Includes $69.7 million (2.0%) in 1974 contributed by Olympia Industries, Inc., the assets of which were acquired in July 1974.

International Operations

The Company is engaged in research, manufacturing or sales operations through subsidiary and affiliated companies in Europe, Canada, Latin America, Australia, Asia and Africa. A substantially full line of products is manufactured abroad. Monsanto has investments, either directly or through affiliated companies, in 97 manufacturing plants in 21 foreign countries, and it maintains 77 sales offices in 41 foreign countries. In addition, certain manufacturing facilities in continental Europe are being expanded and major new manufacturing facilities are under construction in the United Kingdom

MONS 003474

and, through an affiliate, in Australia. As of December 31, 1976, Monsanto had approximately 17,960 employes located outside the United States, virtually all of whom were foreign nationals.

Export and foreign subsidiary sales were $1,292.0 million in 1976 and $1,067.4 million in 1975, representing approximately 30% and 29%, respectively, of Monsanto's worldwide net sales in those years. The rate of profitability on export sales was greater than that on domestic sales in 1976 and was approximately the same in 1975. The rate of profitability on foreign subsidiary sales and other foreign investments in 1976 was lower than the rate of profitability on domestic sales reflecting the slower economic recovery outside of the United States. Because of slack foreign demand in 1975, the rate of profitability in 1975 on foreign subsidiary sales and other foreign investments was also lower than the rate of profitability on U.S. sales.

Because of the diversity of Monsanto's international activities and the locations of its principal overseas manufacturing facilities, Monsanto has not experienced risks of doing business abroad materially greater than in the United States. Monsanto's foreign operations are subject to a number of potential risks and limitations, such as fluctuations in currency values, exchange control regulations, wage and price controls and domestic and foreign governmental policies affecting United States companies doing business abroad. Aggregate net exchange losses resulting from currency transactions and translation of foreign currency financial statements were $29.4 million in 1976. During recent years European operations accounted for approximately one-half of Monsanto's foreign net sales, approximately 80% of its foreign capital expenditures and more than three-fourths of its foreign gross plant investment. See Note 3 of Notes to Financial Statements for further information concerning the Company's equity in the net income and the total assets of its foreign subsidiaries.

Sale of Products

Monsanto's products are sold directly to various industries, to distributors and jobbers and to the general public, principally by its own sales force.

Raw Materials and Energy Resources

Although Monsanto produces a significant portion of its raw material requirements internally, the major portion of its needs is purchased from outside sources. Although Monsanto does not consider itself dependent upon any one supplier for a material amount of its total raw material purchases, certain important raw materials, including condensate, natural gas, benzene, cyclohexane, and various chemical intermediates, are obtained from a few major suppliers. While these raw materials are currently available and Monsanto has contracted with various suppliers to purchase a substantial part of its anticipated 1977 requirements, their continuing availability and price are subject to world market conditions.

Monsanto uses natural gas as an energy source in the operation of many of its production facilities and as a raw material. In recognition of a growing shortage of natural gas supplies in the United States, Monsanto has initiated a program of facility revisions to permit use of alternate fuels. Final phases of this initial fuel conversion program will be substantially completed in 1977. Economics and government actions may require a continuing program of fuel conversions and substitutions in future years. The total impact of these actions cannot be accurately predicted.

Monsanto's ability to obtain petroleum products and crude oil for domestic petrochemical feedstocks and fuels is subject to regulations administered by, among others, the Federal Energy Administration. Although Monsanto's operations have not been significantly curtailed by these programs, the future impact of the present allocation program or any future programs cannot be accurately predicted. Along with other factors, the allocation procedures to date have generally assisted Monsanto in acquiring its requirements. In recent months a number of previously existing federal allocation and price control programs affecting petroleum products have been suspended. Current regulations, however, indicate that crude oil will continue under various controls at least through May of 1979.

MONS 003475

The precise impact of future raw material and energy shortages on Monsanto's business as a whole cannot be accurately predicted for 1977 or future years. Operations and products may, at times, be adversely affected. In addition, Monsanto's operations in certain world areas may, at times, be affected more than in other areas depending on the extent of any such shortages.

Technology

Research, development, engineering and patent work constitute an important part of Monsanto's activities. In 1976, expenditures for such work totaled 3.6% of consolidated net sales. During the four preceding years this percentage has ranged from 3.6% to 4.2%. As of December 31, 1976, Monsanto had approximately 4,300 employes engaged in these activities. Monsanto's technical efforts can be classified into three primary areas: *regenerative* — work which seeks to improve Monsanto's existing technology; *expansion* — work which extends Monsanto's participation in its present markets, either through the development of new products and processes or through the development of additional uses for present products; and *venture* — work which has as its object moving Monsanto into new fields or into a major departure from its present fields.

Monsanto is developing a number of products which generally are not yet profitable, or if profitable, only marginally so. These include Cycle-Safe® containers and nonwoven fabrics. Some of these products are a part of Monsanto's venture program, and some are in pilot or initial commercial production. Research and development costs associated with these activities are expensed in the period in which they are incurred.

Recently, Monsanto recommended to a municipal customer that its experimental solid waste disposal project with Monsanto be terminated. Continuing mechanical unreliability and the inability to predict clear-cut success were cited as major reasons behind the recommendation. For an account of recent developments affecting the Cycle-Safe® container program, refer to the "Environment" section herein.

Monsanto owns a large number of patents which relate to a wide variety of products and processes, has pending a substantial number of patent applications, and is licensed under a small number of patents. Monsanto does not consider that its business as a whole is dependent on any single patent or group of patents. Nevertheless, Monsanto's patents in the aggregate are of material importance in the operation of its business, particularly in the agricultural chemicals field where proprietary products, such as Polaris® plant growth regulator, Lasso®, Avadex®, Roundup® and Machete® herbicides, or their use, are covered by patents in many countries and are substantial contributors to sales and earnings. Such patents have expiration dates extending from 1977 through the early 1990's.

Competition

Monsanto encounters substantial competition in all of its lines of business. This competition is expected to continue in both United States and foreign markets from other manufacturers of the same products and different products designed for the same uses. Depending on the product involved, various types of competition are encountered including price, delivery, service and product performance and quality.

The number of Monsanto's principal competitors varies from product to product. It is not practical to estimate a precise number of all competitors because of the large variety of Monsanto's products, the markets served and the worldwide business interests of Monsanto. Overall, however, Monsanto regards its principal product groups to be competitive with many other products of other producers and believes that it is an important producer of many of such product groups.

Employe Relations

As of December 31, 1976, Monsanto had approximately 61,900 employes worldwide. Satisfactory relations have prevailed between Monsanto and its employes.

MONS 003476

Franchises and Concessions

Monsanto holds directly or by assignment numerous phosphate and oil and gas leases issued on behalf of the United States and various states, and petroleum exploration rights issued by foreign governments. In addition, Monsanto holds numerous phosphate and oil and gas leases granted by private parties. No one of these leases or exploration rights taken individually is deemed by the Company to be material. In 1976, Oil & Gas Production and Exploration contributed $67.0 million (1.6%) to Monsanto's net sales.

Environment

Monsanto is subject to various laws and governmental regulations relating to pollution control and other environmental matters. It can be anticipated that increasingly stringent requirements will be imposed upon Monsanto and industry in general with respect to such matters. Compliance could involve substantial expenditures by Monsanto for the installation and operation of additional pollution control equipment and plant modification or even discontinuance of some product lines or operations. The cost of compliance may have a far-reaching impact on the economics of production. The precise effect on Monsanto's operations will depend on determinations being made by government on environmental matters and on discharge limitations under water pollution and air quality laws.

As part of its long-term pollution control program, the Company spent, in the United States, approximately $80 million in 1976 on capital projects to control pollution and more than $45 million on operating and maintaining pollution control systems. Estimates with respect to anticipated expenditures for capital projects are periodically reviewed. Although the exact amount is not determinable, the Company estimates that during 1977 approximately $89 million will be spent in the United States on additional capital projects to control pollution with a portion of this amount being financed through industrial development bonds. The Company further estimates that the costs of operating and maintaining pollution control systems in 1977 and future years will exceed 1976 levels.

The Company anticipates increasing costs for testing and reviewing the toxicological and environmental aspects of its current and future products and manufacturing processes. With respect to phosphates and their relationship to eutrophication, the Company continues to monitor legal and scientific developments and to evaluate their impact on the Company's business.

On February 18, 1977, the Company suspended production of its acrylonitrile/styrene copolymer Cycle-Safe® container. This action followed an announcement by the Food and Drug Administration (FDA) of its intention to suspend the food additive regulations permitting the use of acrylonitrile copolymers in the fabrication of plastic containers for carbonated beverages. In announcing its intention, the FDA referred to interim findings of a two year toxicity study of acrylonitrile monomer being conducted under the auspices of the Manufacturing Chemists Association, of which the Company is a member. Some of these findings indicated that at high levels of 100 parts per million and 300 parts per million of acrylonitrile in the drinking water of rats there was an increase in the incidence of tumors and other pathological changes. On March 4, 1977, the Acting Commissioner of the FDA signed an order suspending the above-mentioned food additive regulations. This action was taken notwithstanding the fact that data produced by the most sensitive validated test methods heretofore acceptable to the FDA has shown no detectable migration of acrylonitrile from the Cycle-Safe® container into the container's contents under normal conditions of use. The Company is taking all appropriate steps to demonstrate the safety of the container to the FDA, and as a result of the FDA action is also pursuing legal proceedings to protect its interests. As of December 31, 1976, the Company had net investment of approximately $55 million in working capital, buildings and equipment related to the Cycle-Safe® container.

In the order signed March 4, 1977, FDA also proposed to amend the interim food additive regulations for those acrylonitrile copolymers permitted for food contact use by lowering the amount of acrylonitrile monomer permitted to migrate from acrylonitrile copolymers. The Company manufactures acrylonitrile-butadiene-styrene copolymer which is used by customers in various applications including food packaging. Food packaging uses will be affected by this proposal.

MONS 003477

Prior to the foregoing events, the Natural Resources Defense Council, Inc. ("NRDC") had commenced actions in the U.S. District Court for the District of Columbia and the Court of Appeals for the District of Columbia Circuit for review of the FDA regulations authorizing the use of plastic containers and asserting a failure by the FDA to comply with the National Environmental Policy Act in issuing the regulations without having issued and considered a final Environmental Impact Statement ("EIS"). The NRDC suit in the District Court was dismissed for lack of jurisdiction, and NRDC's appeal from that dismissal was then consolidated with the suit commenced in the Court of Appeals. On October 8, 1976, the FDA issued a final EIS with respect to plastic bottles (such as the Company's Cycle-Safe® containers) for carbonated beverages and beer. It generally concluded that: non-returnable plastic bottles will result in some increase in litter and solid waste to the extent that, in addition to primarily replacing other non-returnable containers, they replace some returnable containers; plastic bottles have certain advantages with respect to safety and energy usage; there is little difference between plastic and other non-returnable bottles in other environmental aspects; and there will be no irreversible or irretrievable commitment of resources in manufacturing plastic bottles. In addition, the States of Maine, Michigan, Oregon and Vermont have laws imposing mandatory deposits on all beverage containers. Other states may enact such legislation.

These administrative, legislative and litigative developments may significantly affect the future of the Cycle-Safe® container and other acrylonitrile copolymer container businesses.

Monsanto is a major producer of acrylonitrile, a chemical compound used principally in the manufacture of plastics and fibers, including some of Monsanto's major products.

Legal Proceedings

Because of the size and nature of its business, Monsanto is a party to numerous legal proceedings. Most of these proceedings have arisen in the ordinary course of business and involve claims for money damages.

The Company is a defendant in various lawsuits alleging damages from products containing polychlorinated biphenyls (PCB's). Some of these lawsuits purport to be class actions, among which are the following: three class actions purport to be on behalf of those having alleged interests, such as ownership of property, business operations or utilization of certain water bodies as a source of food or a means of recreation, connected with the Coosa River and its tributaries and Weiss Lake located between the States of Georgia and Alabama. These suits were filed in the U.S. District Court for the Northern District of Georgia on September 20, 1976, the Superior Court of Fulton County, State of Georgia, on September 24, 1976, and the U.S. District Court for the Northern District of Alabama on December 29, 1976. Damages claimed in each of the first two of these suits are $500 million, and in the last is $1 billion. The State of Alabama, through its Attorney General, has intervened in the Northern District of Alabama suit alleging $100 million actual damages, $100,000 punitive damages and restoration and clean-up costs. These lawsuits claim that the Company failed to warn of the alleged dangers of PCB's. The Company will vigorously defend all of such lawsuits. It is possible that additional class action lawsuits, based upon similar causes of action and claiming substantial damages, may be instituted.

On February 13, 1974, Texas Chemical & Plastics Corp. filed an action in the U.S. District Court for the Southern District of New York against the Company alleging breach of contract, breach of a duty of fair dealing, fraud and misrepresentation and an attempt to monopolize the impact polystyrene market in the southeastern United States in violation of Section 2 of the Sherman Act in connection with a polystyrene technical assistance agreement and an alleged styrene monomer supply agreement. Damages claimed are $40.2 million, which trebled would be $120.6 million, plus punitive damages in an unspecified amount and attorneys' fees. The plaintiff also sought a declaratory judgment that the Company has violated Section 2 of the Sherman Act and an injunction against further violations. In October 1975, the plaintiff amended its complaint to drop the claims under Section 2 of the Sherman Act and to add a claim under Section 1 of the Sherman Act. The Company is vigorously defending this suit.

MONS 003478

On February 3, 1975, an action entitled *Villanueva Compania Naviera S.A. v. S.S. Edgar M. Queeny, et al*, was commenced by the owners of S.S. Corinthos in the U.S. District Court for the Eastern District of Pennsylvania against S.S. Edgar M. Queeny, Bankers Trust Company, Keystone Shipping Company and the Company for damages arising out of a collision in the Delaware River on January 31, 1975, between S.S. Edgar M. Queeny and S.S. Corinthos. The Company is bareboat charterer of S.S. Edgar M. Queeny from Bankers Trust Company, and Keystone Shipping Company is bareboat charterer of the vessel from the Company. Keystone was operating the vessel at the time of the collision. Various other claims for property damage, personal injuries and deaths, and oil-spill cleanup have been made, which, along with the claim of Villaneuva Compania Naviera S.A., aggregate approximately $117 million before deducting duplicate claims which, the Company is advised, reduce the total claimed to approximately $84 million. Additional claims may be made. Hull insurance includes coverage for damage to S.S. Corinthos and its cargo in the amount of $20 million, and protection and indemnity insurance includes coverage for any liability for death and personal injury claims and claims to the property of others, except S.S. Corinthos and its cargo, in the amount of $5 million, and there is oil-spill coverage in an amount exceeding the amount of oil-spill claims. There is excess insurance, including coverage for hull and protection and indemnity claims, aggregating $70 million. All such insurance is subject to specified deductibles. On February 7, 1975, a limitation of liability proceeding was commenced in the same court on behalf of Bankers Trust, Keystone Shipping and the Company seeking to limit liability for all claims to the value of S.S. Edgar M. Queeny following the collision, which is estimated to be approximately $11 million. The Company believes, based on the facts it now has and the advice of its admiralty counsel, Messrs. Krusen, Evans and Byrne, Philadelphia, Pa., that the final disposition of all claims will be within the limits of insurance insuring the Company, S.S. Edgar M. Queeny, Bankers Trust, and Keystone Shipping against damages arising out of this event.

The Company intervened in November 1971 as a defendant in a suit brought in July 1971 by the State of Florida in the Federal District Court for the District of Columbia against Rogers C. B. Morton, then Secretary of the Interior, and others, seeking injunctive and declaratory relief against granting of leases for phosphate mining in the Osceola National Forest. The suit alleges failure to comply with the National Environmental Policy Act of 1969 and other environmental laws. The Company holds prospecting permits granted by the United States Department of the Interior which give the Company the right to obtain mining leases if valuable phosphate deposits are located. Although the Company intervened to protect this right, it has no present plans to engage in phosphate mining operations in the Osceola National Forest and believes that an adverse decision in this suit would have a minimal effect on Monsanto as a whole.

On August 20, 1975, the State of Texas, for and on behalf of the Texas Water Quality Board, filed suit in the District Court of Galveston County, Texas seeking a temporary injunction, permanent injunction and civil penalties for alleged violations of the Texas Water Quality Act and the provisions of a waste disposal permit issued to the Company for the disposal of industrial waste into a pit near its Texas City plant. Current utilization of the pit is with the knowledge and approval of the Texas Water Quality Board. The civil penalties sought are in the maximum amount of $1,000 for each of an unspecified number of acts of violation and $1,000 for each day of violation beginning with September 30, 1969 and continuing until the Company ceases the alleged violations of such permit.

On October 29, 1975, the Illinois Environmental Protection Agency filed an action with the Illinois Pollution Control Board alleging violations of two air regulations by the operation of boilers at the Company's W. G. Krummrich plant, Sauget, Illinois. The violations allegedly began on June 1, September 1 and October 12, 1975. The complaint seeks an order to cease and desist the alleged violations, implementation of a compliance program, and fines of $10,000 plus $1,000 per day for each of eight alleged violations. The Illinois Supreme Court has declared invalid certain environmental regulations related to the alleged violations.

On July 8, 1976, the Illinois Environmental Protection Agency filed a complaint before the Illinois Pollution Control Board alleging violation of Illinois environmental laws in that Monsanto was the owner of chlorosulfonic acid that was allowed to escape from a railroad tank car owned by GATX

MONS 003479

Leasing Corporation on May 29, 1976. The complaint seeks a monetary penalty not to exceed $10,000 and an order to cease and desist from further violations.

On February 9, 1977, the Company was served with a complaint by the New Jersey Department of Environmental Protection in connection with an action instituted in the Superior Court of Gloucester County, New Jersey. The action alleges an unlawful discharge of petroleum into the river resulting from the January 31, 1975 collision between the S.S. Edgar M. Queeny and the S.S. Corinthos, referred to above. Plaintiff claims $79,905 in damages from the loss of 2,283 Ruddy Ducks, $8,567 reimbursement for clean-up efforts, and $6,000 in statutory penalties.

The U.S. Coast Guard recently sent a letter advising the Company that a civil penalty in the amount of $250 was being preliminarily assessed for the alleged discharge of a small amount of oil from a tank barge which was being unloaded at a St. Louis, Missouri terminal.

For further information, see Note 10 of Notes to Financial Statements.

Item 2. SUMMARY OF OPERATIONS

The Statement of Consolidated Income of the Company and Subsidiaries for the five years ended December 31, 1976 and Management's Discussion and Analysis thereof are contained on pages S-3 through S-7 of the Financial Supplement filed as Exhibit I to this report and are incorporated herein by reference.

Item 3. PROPERTIES

The General Offices of the Company are located on a 282 acre tract of land in St. Louis County, Missouri. Monsanto has 63 plants in the United States as well as certain research laboratories and technical centers.

Monsanto's principal plants worldwide and the principal products made at such plants as of December 31, 1976, are described below. The plants described are owned in fee except as noted below.

Location, Approximate Size and Number of Employees	Principal Products
Addyston, Ohio. The plant occupies 62 acres of a 110 acre site and has approximately 900 employes.	Plastic materials including polystyrene, ABS, SAN, phenolics, styrene and latices; formaldehyde; foamed polystyrene board.
Alvin, Texas. The plant occupies approximately 800 acres of a 3,072 acre tract. Including research and development personnel, it has approximately 850 employes.	Petrochemicals, including ethylene, propylene, benzene, naphthalene, butylenes, xylenes, acrylonitrile, butadiene, phenol and alkylbenzene; formaldehyde and phenolic resins.
Columbia, Tenn. The plant occupies 325 acres of 5,320 acres of mineral lands or mined out mineral lands and has approximately 700 employes.	Elemental phosphorus.
Decatur, Ala. The plant occupies approximately 420 acres of a 670 acre tract. Including applications research and development personnel, it has approximately 2,600 employes.	Acrylic, modacrylic, nylon and polyester fibers and nylon intermediates.
Greenwood, S. C. The plant occupies approximately 102 acres of a 1,559 acre tract and has approximately 1,900 employes.	Nylon 6,6 fiber.

MONS 003480

Location, Approximate Size and Number of Employee	Principal Products
Guntersville, Ala. (Sand Mountain). The plant occupies approximately 200 acres of an 864 acre tract and has approximately 1,100 employes.	Polyester fibers.
Luling, La. The plant occupies approximately 400 acres of a 1,400 acre tract and has approximately 800 employes.	Ammonia; ammonium nitrate; nitric, adipic and cyanuric acids; Avadex® and Roundup® herbicides; ACL® bleaching compounds; EMA® resins.
Marshalltown, Ia. The plants occupy 81 acres of tracts totaling 287 acres and have approximately 3,150 employes.	Process control valves, regulators, control equipment and electronic instrumentation primarily for the chemical, utilities, petroleum and paper pulp industries.
Muscatine, Ia. This plant is on a 500 acre tract, approximately 240 of which are devoted to manufacturing, and has approximately 550 employes.	Lasso®, Machete® and Ramrod® proprietary herbicides. Plastic materials including ABS and SAN.
Pensacola, Fla. The plant occupies approximately 289 acres of a 2,281 acre tract. Including research and development personnel, it has approximately 3,000 employes.	Nylon 6,6 fiber, nylon intermediates, nylon molding resins, spun-bonded fabric and AstroTurf® functional surfaces.
St. Louis, Mo. (John F. Queeny Plant). The plant occupies approximately 56 acres of a 63 acre tract and has approximately 1,450 employes.	Pharmaceuticals; functional fluids; rubber chemicals; plasticizers; synthetic flavors; food ingredients; process and agricultural chemicals.
Sauget, Ill. The plant occupies approximately 120 acres of a 308 acre tract and has approximately 1,300 employes.	Heavy chemicals, chlorine and caustic; intermediates for the plastics, dyestuff, rubber and other industries; wood preservatives, dry bleach and phosphorous chemicals.
Springfield, Mass. These plants occupy approximately 105 acres of a 328 acre tract. Including research and development personnel, they have approximately 1,450 employes.	Broad range of plastic materials including polystyrene, phenolics, polyvinyl butyral sheet, reinforced nylon; speciality resins including phenolic and vinyl acetates; formaldehyde.
Texas City, Texas. The plant occupies approximately 256 acres of a 336 acre tract. Including research and development personnel, it has approximately 1,650 employes.	Petrochemicals including ethylene, styrene monomer and methanol; acetic acid; phthalic anhydride; oxoalcohol; phthalate plasticizers; lactic acid; and polyethylene.
Antwerp, Belgium. The plant occupies 86 acres of a 260 acre leased tract and has approximately 600 employes.	Rubber and agricultural chemicals; plasticizers; ABS and SAN plastic materials; polyvinyl butyral resins; and Gelva® multipolymer solutions (GMS).
Coleraine, U.K. This plant is on a 125 acre tract and has approximately 660 employes.	Acrylic fibers.
Echternach, Luxembourg. This plant is on a 300 acre tract and has approximately 1,050 employes.	Nylon fiber.

MONS 003481

Location, Approximate Size and Number of Employees	Principal Products
Seal Sand, U.K. The plant occupies 102 acres of a 230 acre tract and has approximately 200 employes.	Acrylonitrile.
New York, New York. The Company is a lessee under a 25-year lease which extends until November 24, 1996, with a net commitment as of December 31, 1976, of $52 million for 7 floors in an office building at 1114 Avenue of the Americas.	

Item 4. PARENTS AND SUBSIDIARIES

The following is a list of the Company's subsidiaries as of December 31, 1976, except for unnamed subsidiaries which, considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary. The corporate relationship of the various companies is indicated by indentation.

	Percentage of Voting Power Owned by Immediate Parent
Companies included in consolidated statements:	
Monsanto Company (Delaware Corporation) (Registrant):	
Fisher Controls Company, Inc. (Delaware Corporation)	100%
Fisher Controls Company of Canada Limited (Canadian Corporation)	100
Fisher Governor de Mexico, S.A. (Mexican Corporation)	100
Monsanto Australia Limited (Australian Corporation)	100[1]
Monsanto Canada Limited (Canadian Corporation)	100
Monsanto Cie S.A. (Luxembourg Corporation)	100[3]
Monsanto Enviro-Chem Systems, Inc. (Delaware Corporation)	100
Monsanto (Deutschland) GmbH (West German Corporation)	100
Monsanto Europe S.A. (Belgian Corporation)	100[2]
Monsanto International Sales Company (Delaware Corporation)	100
Monsanto Limited (United Kingdom Corporation)	100[4]
Monsanto Luxembourg S.A. (Luxembourg Corporation)	100

[1] Combined voting power of the Company and by the following of its subsidiaries: Monsanto Limited and Monsanto Overseas, S.A.

[2] Combined voting power of the Company and by the following of its subsidiaries: Chemstrand Overseas, S.A.; Chemstrand, Inc.; Monsanto Research Corporation; Monsanto Service Company; Monsanto Investment Company, Inc.; Plax Incorporated and Monsanto Guatemala, Inc.

[3] Combined voting power of the Company and by the following of its subsidiaries: Monsanto Investment Company, Inc.; Monsanto Research Corporation; Monsanto Service Company; Monsanto Guatemala, Inc.; Leonard Construction Company; Monsanto Dominicana, Inc. and FRP Company.

[4] Combined voting power of the Company and Monsanto International Finance Company (a subsidiary).

MONS 003482

Item 5. LEGAL PROCEEDINGS

Because of the size and nature of its business, the Company is a party to a number of legal proceedings. Most of these proceedings have arisen in the ordinary course of business and involve claims for money damages.

For information concerning certain legal proceedings involving the Company, see "Business and Products — Environment and Legal Proceedings" contained in Item 1 to this report, which is incorporated herein by reference.

Item 6. INCREASES AND DECREASES IN OUTSTANDING SECURITIES

(a) Equity Securities.

(1) $2.75 Preferred Stock, without par value

A decrease of 1,283,597 shares during period January 5, 1976 through December 28, 1976		
Shares outstanding, December 31, 1975		1,666,184
Shares converted into Common Stock, $2 par value, at the initial conversion rate of 1.12 shares of Common Stock for each share of $2.75 Preferred Stock surrendered		(1,283,597)
Shares outstanding, December 31, 1976		382,587

(2) Common Stock, $2 par value

An increase of 1,591,844 shares during period January 2, 1976 through December 31, 1976		
Shares outstanding, December 31, 1975		34,847,397
Shares issued on conversion of Monsanto International Finance Company convertible debentures	21,458	
Shares issued on conversion of Monsanto Limited convertible loan stock	34,471	
Shares issued pursuant to stock option plans of Monsanto Company:		
1969 Plan	73,977	
1974 Plan	25,401	
Shares issued on conversion at the initial rate of 1.12 shares of Common Stock for each share of $2.75 Preferred Stock, without par value	1,437,537	1,591,844
Shares outstanding, December 31, 1976		36,439,241

(b) Sales of Certain Unregistered Securities.

(1) Equity — None.

(2) Debt — During the year ended December 31, 1976 no material amounts of debt securities were issued by the Company in reliance upon the exemption from registration provided by Section 4(2) of the Securities Act of 1933, as amended. For information regarding long-term debt of the Company and its Subsidiaries, bank credit arrangements and guarantees of subsidiary indebtedness, see Notes 5 and 11 of Notes to Financial Statements contained in Exhibit I, and Schedule XI contained in Item 10(a), respectively, of this report.

Item 7. APPROXIMATE NUMBER OF EQUITY SECURITY HOLDERS

(1) Title of Class	(2) Number of Record Holders
$2.75 Preferred Stock, without par value	1,956
Common Stock, $2 par value	84,647

MONS 003483

Item 8. EXECUTIVE OFFICERS OF THE REGISTRANT

The executive officers of the Company on March 1, 1977 were:

Name — Age	Present Position with Registrant	Year First Became an Officer	Other Business Experience since January 1, 1972 (References are to Positions Within Monsanto Unless Otherwise Noted)
John W. Hanley, 55	Director; Chairman of the Board; President and Chief Executive Officer; Chairman of Executive Committee and Member of Audit and Finance Committee	1972	Formerly employed by The Procter & Gamble Company in the following capacities which involved organization and management responsibilities at the corporate level of the company: Group Executive, 1967; Director, 1969; Executive Vice President, 1970. Joined Monsanto as Director, President and Chief Executive Officer, 1972; Chairman of the Board, 1975.
Edmond S. Bauer, 58	Director; Executive Vice President	1971	Vice President and General Manager, Agricultural Division, Monsanto Commercial Products Co.; Group Vice President — Monsanto Agricultural Products Co., 1975; and present position, 1975.
Robert L. Berra, 52	Vice President, Personnel	1974	Assistant Director, Corporate Personnel Department; Vice President, Personnel and Public Relations, Foremost-McKesson, 1970. Rejoined Monsanto in present position, 1974.
H. Harold Bible, 61	Director; Executive Vice President; Member of Pension & Savings Funds and Employe Benefits Plans Committee	1958	Vice President — Administration and Director; Senior Vice President, 1972; Group Vice President, 1973; Managing Director — Monsanto Industrial Chemicals Co., 1974; and present position, 1975.
Robert E. Burke, 48	Vice President and Managing Director — Monsanto Textiles Co.	1976	Director, Industrial Business Group, Textiles Division, Monsanto Textiles Co.; General Manager, Carpet and Industrial Business Groups, Monsanto Textiles Co., 1973; General Manager, Apparel and Nonwovens Division — Monsanto Textiles Co., 1975; and present position, 1976.
James E. Crawford, Jr., 54	Group Vice President; Managing Director — International	1963	General Manager, Fabricated Products Division — Monsanto Commercial Products Co.; Vice President, General Manager, International Division, 1973; and present position, 1975.
John R. Eck, 62	Director; Group Vice President, Managing Director — Monsanto Chemical Intermediates Co.	1961	Director and Managing Director — Monsanto Polymers & Petrochemicals Co.; Group Vice President, 1973; and present position, 1976.
Louis Fernandez, 52	Director; Executive Vice President — Corporate Staff	1969	Vice President, Director and Managing Director — Monsanto Textiles Co.; Group Vice President, 1973; and present position, 1976.
Francis J. Fitzgerald, 49	Group Vice President; Managing Director — Monsanto Industrial Chemicals Co.	1975	General Manager, Detergents and Fine Chemicals Division — Monsanto Industrial Chemicals Co.; General Manager, Specialty and Process Chemicals Division — Monsanto Industrial Chemicals Co., 1974; Vice President and Managing Director — Monsanto Industrial Chemicals Co., 1975; and present position, 1976.
James J. Kerley, 54	Director; Executive Vice President — Administrative Staff; Member of Pension and Savings Funds, Executive and Audit & Finance Committees	1970	Joined Monsanto as Director and Vice President — Finance, 1970; Group Vice President — Administrative Staff, 1974; and present position, 1976.

MONS 003484

Name — Age	Present Position with Registrant	Year First Became an Officer	Other Business Experience since January 1, 1972 (References are to Positions Within Monsanto Unless Otherwise Noted)
Richard J. Mahoney, 43	Group Vice President; Managing Director — Monsanto Plastics & Resins Co.	1975	Pesticide Products Sales Director, Agricultural Division — Monsanto Agricultural Products Co.; Director, Sales, Agricultural Division — Monsanto Agricultural Products Co., 1972; Director, Operations, International, Monsanto Agricultural Products Co., 1974; General Manager, Overseas Division, Monsanto Agricultural Products Co., 1975; Vice President and Managing Director — Monsanto Agricultural Products Co., 1975; and present position, 1976.
Joseph Thomas Nolan, 56	Vice President, Public Affairs	1976	Senior Vice President, Group Executive, Chase Manhattan Bank Corporate Communications Group, 1968; Professor, Journalism & Public Affairs, University of South Carolina, 1974; and present position, 1976.
Richard C. O'Sullivan, 49	Vice President and Treasurer	1971	Joined Monsanto as Controller, 1971; Treasurer, 1973; and present position, 1976.
Edwin J. Putzell, Jr., 63	Vice President, Secretary and General Counsel	1951	No change in position during last five years.
Nicholas L. Reding, 42	Vice President; Managing Director — Monsanto Agricultural Products Co.	1976	Director, International Markets, Monsanto Agricultural Products Co.; Director, Operations, Herbicides, Monsanto Agricultural Products Co., 1974; General Manager, Herbicides Division, Monsanto Agricultural Products Co., 1975; General Manager, Crop Chemicals Division, Monsanto Agricultural Products Co., 1975; and present position, 1976.
Francis E. Reese, 57	Director, Group Vice President — Facilities & Planning Staff	1968	Vice President and General Manager, Hydrocarbons & Polymers Division; Group General Manager — Monsanto Polymers & Petrochemicals Co., 1972; General Manager, International Division and Director, 1973; Managing Director — International Division, 1973; and present position, 1975.
Ernest S. Robson, Jr., 56	Vice President, Director of Energy and Materials Management	1974	General Manager, Rubber & Process Chemicals Division — Monsanto Industrial Chemicals Co.; and present position, 1974.
Tom K. Smith, Jr., 58	Director, Group Vice President — Operations Staff; Member, Employe Benefits Plans Committee	1960	Managing Director — Monsanto Commercial Products Co., and Director; Group Vice President, 1973; and present position, 1975.
Francis A. Stroble, 46	Controller	1975	Controller, Monsanto Polymers & Petrochemicals Co.; Director, Management Information & Systems Department, 1973; and present position, 1975.
Monte C. Throdahl, 57	Director, Group Vice President — Technical Staff; Member of Executive Committee	1965	Vice President — Technology and Director; and present position, 1973.

The above-listed individuals are elected, or appointed to the office set opposite their names to hold office until their successors are duly elected and have qualified, or until their earlier death, resignation or removal.

MONS 003485

Item 9. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Except as set forth below, the information provided by the Company pursuant to Item 9 appearing in the Annual Report on Form 10-K for the year ended December 31, 1975, with respect to Delaware Law, the Company's By-Laws, Pension Trust Liability Insurance, Directors and Officers Liability and Company Reimbursement Insurance, and General Liability Insurance maintained by the Company is still applicable. The information provided regarding:

(i) Excess Umbrella Liability Insurance maintained by the Company is still applicable except that it now covers losses up to $123,000,000 in excess of the limits of the primary General Liability Insurance and is in seven layers; and

(ii) Proposed amendment to the Company's By-Law 53 relating to indemnification of directors, officers and employes is still applicable except that the amendment was adopted by shareholders at the Annual Meeting on April 22, 1976.

Item 10. FINANCIAL STATEMENTS AND EXHIBITS FILED

(a) Financial Statements and Supporting Schedules.

Monsanto Company and Subsidiaries:

Financial Supplement filed as Exhibit I to this Annual Report on Form 10-K, which includes the following financial statements for the five years ended December 31, 1976 except as noted below:

Statement of Consolidated Income

Statement of Consolidated Financial Position at December 31, 1976 and 1975

Statements of Consolidated Additional Contributed Capital and Reinvested Earnings

Statement of Changes in Consolidated Financial Position

Notes to Financial Statements

Replacement Cost Data

The following schedules for the years ended December 31, 1976 and 1975:

V — Property, Plant and Equipment

VI — Accumulated Depreciation, Depletion and Amortization of Property, Plant and Equipment

IX — Bonds, Mortgages and Similar Debt (December 31, 1976 only)

XI — Guarantees of Securities of Other Issuers (December 31, 1976 only)

XII — Valuation and Qualifying Accounts and Reserves

XIII — Capital Shares (December 31, 1976 only)

The following schedules are omitted because of the absence of the conditions under which they are required: I, II, III, IV, VII, VIII, X, XIV, XV, XVI, XVII, XVIII and XIX.

Financial statements and schedules for Monsanto Company are not included herein as permitted by Instruction 1(b)(i) to Financial Statements.

MONS 003486

(b) Exhibits.

I — 1976 Financial Supplement of Monsanto Company.

II — Monsanto Company *Certificate of Incorporation*, as amended April 22, 1976 — an amended Basic Document, filed as Exhibit 1 to registrant's Form 8-K Current Report for the month of April 1976 and incorporated herein by reference.

III — Monsanto Company By-Laws, as amended April 22, 1976 — an amended Basic Document, filed as Exhibit 2 to registrant's Form 8-K Current Report for the month of April 1976 and incorporated herein by reference.

IV — Monsanto Savings and Investment Plan, as amended effective January 1, 1976, filed as Exhibit 1 to Post-Effective Amendment No. 2 to Registration Statement on Form S-8 (File No. 2-52510) and incorporated herein by reference.

V — Copies of policies providing additional Excess Umbrella Liability Insurance, filed as Exhibit 4.6 to Post-Effective Amendment No. 10 to Registration Statement on Form S-7 (File No. 2-36636) and incorporated herein by reference.

MONS 003487

SCHEDULE V

MONSANTO COMPANY AND SUBSIDIARIES

PROPERTY, PLANT AND EQUIPMENT
FOR THE YEARS ENDED DECEMBER 31, 1976 AND 1975
(Dollars in millions)

COLUMN A	COLUMN B	COLUMN C	COLUMN D	COLUMN E		COLUMN F
Classification	Balance at Beginning of Year	Additions at Cost	Retirements	Transfers Between Accounts	Other Changes	Balance at End of Year
Year Ended December 31, 1976:						
Land	$ 41.7	$ 2.7	$ 0.3	$ (0.1)	$ 0.5 [1]	$ 44.5
Buildings	500.3	34.7	6.2	11.0	2.0 [1]	541.8
Machinery, equipment, etc.	2,908.6	589.9	78.0	(10.9)	30.3 [1] (0.7) [2]	3,439.2
Mineral rights and oil and gas properties	169.3	19.5	6.0			182.8
	$3,619.9	$646.8	$90.5		$32.1	$4,208.3
Year Ended December 31, 1975:						
Land	$ 35.9	$ 5.0	$	$	$ 0.8 [1]	$ 41.7
Buildings	458.0	35.4	3.0	9.3	6.6 [1]	500.3
Machinery, equipment, etc.	2,510.6	467.3	68.2	(9.3)	9.1 [1] (0.9) [2]	2,908.6
Mineral rights and oil and gas properties	158.0	20.0	8.7			169.3
	$3,158.5	$527.7	$79.9		$15.6	$3,619.9

NOTES:

[1] Property related to acquired subsidiaries.

[2] Property related to acquired subsidiaries and $23.0 Industrial Development Bonds.

[3] Amortization of leasehold improvements.

MONS 003488

SCHEDULE VI

MONSANTO COMPANY AND SUBSIDIARIES

ACCUMULATED DEPRECIATION, DEPLETION AND AMORTIZATION OF PROPERTY, PLANT AND EQUIPMENT FOR THE YEARS ENDED DECEMBER 31, 1976 AND 1975

(Dollars in millions)

COLUMN A Description	COLUMN B Balance at Beginning of Year	COLUMN C Additions Charged to Costs and Expenses	COLUMN D Retirements	COLUMN E Other Changes	COLUMN F Balance at End of Year
Year Ended December 31, 1976:					
Buildings — depreciation	$ 233.3	$ 19.1	$ 2.4	$(0.3)[1]	$ 249.7
Machinery, equipment, etc. — depreciation	1,601.5	159.4	47.7	4.0 [1]	1,717.2
Mineral rights and oil and gas properties:					
Depreciation	37.0	9.1	1.7		44.4
Depletion	52.4	5.5	2.3		55.6
Government grants	35.6	(4.5)[2]	0.8	20.7 [3]	51.8
	$1,959.8	$188.6	$54.3	$24.4	$2,118.5
Year Ended December 31, 1975:					
Buildings — depreciation	$ 215.7	$ 17.0	$ 2.2	$ 2.8 [1]	$ 233.3
Machinery, equipment, etc. — depreciation	1,512.1	136.9	55.5	8.0 [1]	1,601.5
Mineral rights and oil and gas properties:					
Depreciation	31.8	7.0	1.8		37.0
Depletion	53.7	3.4	4.7		52.4
Government grants	31.6	(3.7)[2]	0.6	8.3 [3]	35.6
	$1,844.9	$160.6	$64.8	$19.1	$1,959.8

NOTES:

[1] Accumulated depreciation related to acquired subsidiaries.

[2] Amortization of government grants credited to income.

[3] Government grants.

MONS 003489

SCHEDULE IX

MONSANTO COMPANY AND SUBSIDIARIES

BONDS, MORTGAGES AND SIMILAR DEBT, DECEMBER 31, 1976

(Dollars in millions)

COLUMN A	COLUMN B	COLUMN C	COLUMN E	
			Amount Shown in Accompanying Statement of Financial Position Under Caption	
Name of Issuer and Title of Each Issue	Amount Authorized by Indenture	Amount Issued and not Retired or Canceled	"Long-Term Debt"	"Current Liabilities"
Monsanto Company:				
6¼% - 8½% bank loan, due 1977/1979 (West German deutsche mark)	$ 15.9	$ 15.9	$ 11.4	$ 4.5
8% notes, due 1985	100.0	100.0	100.0	
4¾% promissory notes, due 1993	100.0	76.7	72.0	4.7
8½% sinking fund debentures, due 2000	175.0	175.0	175.0	
9¼% sinking fund debentures, due 2000	150.0	143.3	138.0	5.3
3¾% income debentures, due 2002	66.0	66.0	66.0	
3¾% income debentures, due 2002, second series	25.0	25.0	25.0	
4¼% income debentures, due 2008	50.0	50.0	50.0	
Issued in connection with Industrial Development Bonds:				
5½% notes, due 1983	1.0	1.0	1.0	
5.70% notes, due 1984	1.0	1.0	1.0	
5¾% notes, due 1985	1.5	1.5	1.5	
5¾% notes, due 1985	1.5	1.5	1.5	
6¼% notes, due 1985	4.0	4.0	4.0	
5¾% notes, due 1986	1.0	1.0	1.0	
5¾% notes, due 1986	1.0	1.0	1.0	
5¾% notes, due 1986	2.0	2.0	2.0	
5½% notes, due 1986	1.0	1.0	1.0	
7% notes, due 1990	2.0	2.0	2.0	
5¾% notes, due 1991	1.0	1.0	1.0	
5¼% notes, due 1997	3.0	3.0	3.0	
5.70% notes, due 1998	3.3	3.3	3.3	
7½% notes, due 2000	5.4	5.4	5.4	
7¼% notes, due 2000	1.7	1.7	1.7	
6.20% notes, due 2001	2.4	2.4	2.4	
7¼% notes, due 2005	3.7	3.7	3.7	
7¼% notes, due 2005	3.5	3.5	3.5	
7¼% notes, due 2005	1.0	1.0	1.0	
7¼% notes, due 2005	1.0	1.0	1.0	
7¼% notes, due 2005	3.5	3.5	3.5	
6¼% notes, due 2006	13.9	13.9	13.9	
6¼% notes, due 2006	7.0	7.0	7.0	
Monsanto International Finance Company:				
4½% guaranteed sinking fund debentures, due 1985	25.0	22.5	20.0	2.5
Monsanto International N.V. (Netherlands Antilles subsidiary):				
8¾% guaranteed sinking fund debentures, due 1985	20.0	11.6	10.2	1.4
5½% guaranteed bonds, due 1987 (Swiss franc)	38.0	38.0	38.0	
Monsanto Limited (United Kingdom subsidiary) (British pound):				
6% debentures, due 1977/1988	5.1	2.8	2.7	0.1
5% debentures, due 1988	6.0	3.7	3.7	
5% guaranteed loan stock, due 1982/1988	18.4	10.1	10.1	
5% guaranteed loan stock, due 1982/1987	2.6	2.6	2.6	
6¼% guaranteed loan stock, due 1982/1987	2.6	2.6	2.6	
Monsanto (Suisse) S.A. (Swiss subsidiary) (Swiss franc):				
6¾% guaranteed sinking fund debentures, due 1985	16.0	12.0	12.0	
6¾% guaranteed sinking fund debentures, due 1986	24.0	20.0	20.0	
Monsanto Europe S.A. (Belgian subsidiary) (Belgian franc):				
9% guaranteed bank loan, due 1977/1988	24.4	18.8	16.9	1.9
8.80% guaranteed bank loan, due 1977/1983	12.5	9.7	8.3	1.4
9¼% guaranteed bonds, due 1982/1991	10.0	10.0	10.0	
11.15% guaranteed bank loan, due 1980/1988	12.5	12.5	12.5	
Monsanto (Deutschland) GmbH (West German subsidiary) (West German deutsche mark):				
6¼% guaranteed bank loan, due 1980	31.5	17.8	17.8	
3½% guaranteed government agency (BA) loan, due 1988	5.0	3.3	2.7	0.6
7% bank loans, due 1977	1.6	0.5		0.5

MONS 003490

SCHEDULE IX
(Continued)

MONSANTO COMPANY AND SUBSIDIARIES

BONDS, MORTGAGES AND SIMILAR DEBT, DECEMBER 31, 1976

(Dollars in millions)

COLUMN A	COLUMN B	COLUMN C	COLUMN E	
			Amount Shown in Accompanying Statement of Financial Position Under Caption	
Name of Issuer and Title of Each Issue	Amount Authorized by Indenture	Amount Issued and not Retired or Canceled	"Long-Term Debt"	"Current Liabilities"
Monsanto Australia Limited (Australian subsidiary) (Australian dollar):				
13% bank loan	$ 3.0	$ 3.0	$ 3.0	$
Companhia Brasileira de Plasticos Monsanto (Brazilian subsidiary) (Brazilian cruzeiro):				
Bank loan, due 1978	1.6	1.6	1.6	
Compania Industrial de Plasticos S.A. (Mexican subsidiary) (Mexican peso):				
13% - 19% bank loans, due 1977/1980	5.0	2.6	1.4	1.2
P. T. Monsanto Pan Electronics (Indonesian subsidiary) (Indonesian rupiah):				
9% bank loan	0.9	0.4	0.3	0.1
Olympia Industries, Inc.:				
8% - 8¼% long-term lease indebtedness, due 1983/1988	3.8	2.2	2.0	0.2
Milwaukee Die Casting Company:				
7½% bank loan, due 1980	0.1	0.1	0.1	
Nippon Fisher Company, Inc. (Japanese subsidiary) (Japanese yen):				
12¾% bank loan, due 1977/1979	0.8	0.6	0.4	0.2
Fisher Governor de Mexico, S.A. (Mexican subsidiary) (Mexican peso):				
14½% bank loan, due 1980	0.1	0.1	0.1	
Industrias Monsanto S.A. (Brazilian subsidiary) (Brazilian cruzeiro):				
Bank loans	8.9	7.0	6.7	0.3
Societe Monsanto S.A. (French subsidiary) (French franc):				
Bank loans	16.1	10.6	10.6	
Israel Chemical Fibres Limited (Israeli subsidiary) (Israeli pound):				
Bank loans	2.3	2.3	1.9	0.4
			$915.4	$85.3

NOTES:

Columns D(1), F, G and H have been omitted as the answers thereto would have been "None."

Column D(2) is the same as Column C.

See "Long-Term Debt" under Notes to Financial Statements in Financial Supplement.

MONS 003491

SCHEDULE XI

MONSANTO COMPANY AND SUBSIDIARIES

GUARANTEES OF SECURITIES OF OTHER ISSUERS, DECEMBER 31, 1970

(Dollars in millions)

COLUMN A Name of Issuer of Securities Guaranteed by Person for Which Statement is Filed	COLUMN B Title of Issue of Each Class of Securities Guaranteed	COLUMN C Total Amount Guaranteed and Outstanding
Village of Sauget, Illinois	Pollution Control Revenue Bonds (Serial Bonds)	$2.6
Village of Sauget, Illinois	Pollution Control Revenue Bonds (Term Bonds)	5.1
Galveston County Water District, Texas	Industrial Development Bonds	0.6
Gulf Coast Waste Disposal	Pollution Control Revenue Bonds	0.9
Alscondel, S.A.	Bank Loans	5.9
Mindia Chemicals Ltd.	Bank Loans	4.2
Columbine Coal Company	Bank Term Loan	3.7
Surrey Industries	Bank Term Loans	0.6
Nippon Fisher Company, Ltd.	Bank Term Loan	0.7
Jack Burton Management Company	Bank Real Estate Loans	0.3
Bayer Philippines Inc.	Bank Loan	0.4
Employes of Monsanto Company and Subsidiaries	Real Estate Loans	0.6
		$25.0

NOTES:

Columns D, E and G have been omitted as the answers thereto would have been "None."

In answer to Column F, all guaranteed securities are guaranteed as to principal and interest.

The annual aggregate amount of interest guaranteed is approximately $1.7.

MONS 003492

SCHEDULE XII

MONSANTO COMPANY AND SUBSIDIARIES

VALUATION AND QUALIFYING ACCOUNTS AND RESERVES FOR THE YEARS ENDED DECEMBER 31, 1976 AND 1975

(Dollars in millions)

COLUMN A	COLUMN B	COLUMN C		COLUMN D	COLUMN E
		Additions			
Description	Balance at Beginning of Year	Charged to Costs and Expenses	Charged to Other Accounts	Deductions	Balance at End of Year
Year Ended December 31, 1976:					
Reserves deducted from related assets in the Statement of Consolidated Financial Position:					
Doubtful receivables, trade receivables in foreign currencies and returns and allowances	$19.0	$17.1		$ 2.6 (a) 14.9 (b)	$18.6
Reserves for inventory losses, obsolescence and long-term construction contract losses	$38.2		$ 4.3 (c)	$ 1.8 (d)	$40.7 (g)
Reserves included under the caption "Other Liabilities and Deferred Credits — Miscellaneous" in the Statement of Consolidated Financial Position:					
Employes' bonus — Unawarded	$ 4.2	$14.8		$12.1 (e)	$ 6.9
Miscellaneous	$17.5				$15.1
Year ended December 31, 1975:					
Reserves deducted from related assets in the Statement of Consolidated Financial Position:					
Doubtful receivables, trade receivables in foreign currencies and returns and allowances	$16.2	$12.2		$ 3.5 (a) 5.9 (b)	$19.0
Reserves for inventory losses, obsolescence and long-term construction contract losses	$36.4		$ 3.7 (c)	$ 1.9 (d)	$38.2 (g)
Miscellaneous	$ 2.8				$ —
Reserves included under the caption "Other Liabilities and Deferred Credits — Miscellaneous" in the Statement of Consolidated Financial Position:					
Employes' bonus — Unawarded	$ 3.1	$10.5		$ 9.4 (e)	$ 4.2
Losses under self-insurance program	$ 5.9	$(5.9)(h)			
Reserve for foreign operations		$ 0.9		$ 0.9 (f)	
Miscellaneous	$14.6				$17.5

NOTES:

(a) Uncollectible accounts written off, less recoveries.

(b) Allowances granted.

(c) Transfer from Reserves included in "Other Liabilities and Deferred Credits — Miscellaneous."

(d) Credited to costs and expenses.

(e) Bonus awards transferred to current liabilities.

(f) Net exchange and translation losses.

(g) Includes reserves for projected cost overruns on several construction projects of the Company's wholly-owned subsidiary, Monsanto Enviro-Chem Systems, Inc., as indicated below:

	1976	1975
Deducted from inventories	$36.3	$35.8
Included in "Other Liabilities and Deferred Credits — Miscellaneous"	1.1	1.7
	$37.4	$37.5

(h) Represents a credit to costs and expenses to eliminate the self-insurance reserve over a two-year period in accordance with the accounting for contingencies statement issued by the Financial Accounting Standards Board.

MONS 003493

SCHEDULE XIII

MONSANTO COMPANY AND SUBSIDIARIES

CAPITAL SHARES

COLUMN A	COLUMN B	COLUMN C	COLUMN D		COLUMN E		COLUMN F		COLUMN G	
			Number of Shares Included in Column C Which Are		Shares Outstanding as Shown on or Included in Accompanying Statement of Financial Position		Number of Shares Held by Affiliates for Which Statements are Filed Herewith		Number of Shares Reserved for Options, Warrants, Conversions and Other Rights	
Name of Issuer and Title of Issue (1)	Number of Shares Authorized by Charter	Number of Shares Issued and Not Retired or Canceled	Held by or for Account of Issuer Thereof	Held by or for Account of Issuer Thereof	Number	Amount at Which Shown (In millions)	Pursuant Included in Consolidated Statements	Others	Directors, Officers and Employees	Others
Monsanto Company:										
Preferred stock without par value	10,000,000	382,587	None	382,587	382,587	$ 0.8	None	None	None	None
Common stock, par value $2 each	100,000,000(2)	36,708,144	291,729(3)	36,416,415	36,708,144	73.4	None	None	1,074,507(4)	950,301
Australian Petrochemicals Limited:										
Common stock, par value $A1 each	10,000,000	2,000,000	None	2,000,000	900,000	1.0	1,100,000	None	None	None
Companhia Brasileira de Plasticos Monsanto:										
Preferred shares, par value 1 Cr. each	17,433,111	17,433,111	None	17,433,111	13,820,434	1.5	3,612,677	None	None	None
Ordinary shares, par value 1 Cr. each	48,566,889	48,566,889	None	48,566,889	14,911,425	1.6	33,655,464	None	None	None
Nippon Fisher Company, Ltd.:										
Common stock, par value ¥500 each	1,200,000	1,200,000	None	1,200,000	350,000	0.6	850,000	None	None	None
Israel Chemical Fibres Limited:										
Ordinary shares, Class "A", par value I£1 each	7,931,850	7,931,850	None	7,931,850	None	None	7,931,850	None	None	None
Ordinary shares, Class "B", par value I£1 each	7,068,150	7,068,150	None	7,068,150	7,068,150	1.4	None	None	None	None
Three Other Partially-Owned Subsidiaries	19,350	17,750	None	17,750	1,956	0.1	15,794	None	None	None
						$80.4				
Shareowners' Equity — Capital stock						$74.2				
Minority Interests — Capital stock						6.2				
						$80.4				

MONS 003494

Notes:

(1) Capital shares of wholly-owned subsidiaries have been omitted; answers to Columns G(1) and (2) would be "None."

(2) At the Annual Meeting held on April 22, 1976, the shareowners of the Company approved a proposal to increase the authorized number of shares of common stock, with par value $2, from 50,000,000 to 100,000,000 shares.

(3) Held for employe stock purchase plan (17,398), specific corporate purposes (5,430) and general corporate purposes (268,903).

(4) Reserved for stock options granted and available for grant. See Employe Stock Options in Supplemental Notes to Financial Statements.

PART II

Items 11-15.

These items have been omitted pursuant to General Instruction H since the registrant has filed a definitive proxy statement which involves the election of directors pursuant to Regulation 14A.

SIGNATURE

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MONSANTO COMPANY
(Registrant)

By /s/ FRANCIS A. STROBLE
Francis A. Stroble
Controller

Date March 25, 1977

MONS 003495

CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

Monsanto Company:

We hereby consent to the incorporation by reference in your annual report on Form 10-K which you are filing with the Securities and Exchange Commission for the year ended December 31, 1976, of our opinion dated February 11, 1977, included in your Financial Supplement (Exhibit I, 10-K report).

We also consent to our opinion referred to above being considered as comprehending our opinion that the financial schedules as listed in Item 10 present fairly in all material respects the information shown therein.

HASKINS & SELLS

Saint Louis, Missouri
March 25, 1977

MONS 003496