

Monsanto

**1976
ANNUAL
REPORT**
MONSANTO
COMPANY

DSW 021004

Table of Contents

Operational Highlights	3
Letter to Shareowners	4
Operating Summaries:	
Monsanto Agricultural Products Company.....	10
Monsanto Chemical Intermediates Company.....	14
Monsanto Commercial Products Company.....	18
Monsanto Industrial Chemicals Company.....	20
Monsanto Plastics & Resins Company.....	24
Monsanto Textiles Company.....	28
International Division	32
Research and Development	36
Social Responsibility	38
Financial Section Contents	41
Directors and Officers	66

Annual Meeting

The next Annual Meeting of the shareowners of Monsanto Company will be held at 2:30 p.m., Friday, April 22, 1977, at the company's General Offices, 800 N. Lindbergh Blvd., St. Louis County, Mo. A formal notice of the meeting, together with a proxy statement and form of proxy, is being mailed to each shareowner.

10-K Report

Available

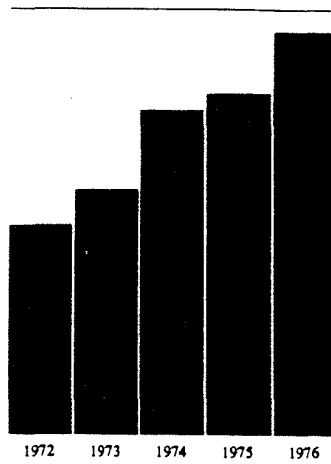
A copy of Monsanto Company's 10-K Report filed with the Securities and Exchange Commission for 1976, which contains additional information relating to Monsanto, can be obtained by writing to: Shareowner Relations Department, Monsanto Company, 800 N. Lindbergh Blvd., St. Louis, Mo. 63166.

Italics identify Monsanto's trademarks.

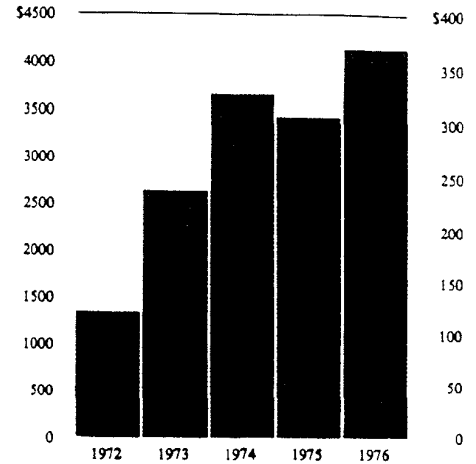
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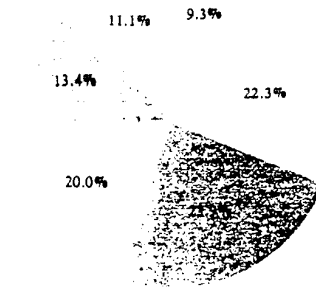
NET SALES



NET INCOME

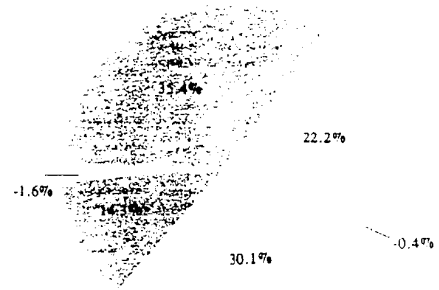


NET SALES-1976



- Agricultural Products
- Chemical Intermediates
- Commercial Products
- Industrial Chemicals
- Plastics & Resins
- Textiles

OPERATING INCOME-1976



- Agricultural Products
- Chemical Intermediates
- Commercial Products
- Industrial Chemicals
- Plastics & Resins
- Textiles

OPERATIONAL HIGHLIGHTS

(Dollars in millions, except per share)

	1976	1975
Net Sales	\$4,270.2	\$3,624.7
Net Income	\$ 366.3	\$ 306.3
Per Common Share:		
Primary Earnings	\$ 10.05	\$ 8.63
Fully Diluted Earnings	9.77	8.22
Dividends	2.75	2.55
Shareowners' Equity	61.79	56.62
Depreciation, Obsolescence and Depletion	\$ 226.0	\$ 172.7
Property, Plant and Equipment Additions	\$ 646.8	\$ 527.7
Research and Development	\$ 111.2	\$ 115.7
Year-End:		
Shareowners—Common Shares	84,647	91,725
Employees	61,903	59,242

Operating Results by Lines of Business

	1976		1975	
	Net Sales	Income	Net Sales	Income
Lines of Business:				
Agricultural Products	\$ 573.2	\$236.1	\$ 547.4	\$252.9
Chemical Intermediates	476.2	148.4	390.3	90.2
Commercial Products	398.2	(2.5)	318.7	(11.1)
Industrial Chemicals	950.4	200.8	852.8	193.8
Plastics & Resins	1,018.7	95.6	768.3	38.8
Textiles	853.5	(10.6)	747.2	(17.2)
Sales and Operating Income	<u>\$4,270.2</u>	<u>667.8</u>	<u>\$3,624.7</u>	<u>547.4</u>
Income Charges (Credits) — Net		<u>50.1</u>		<u>11.1</u>
Income Before Income Taxes		617.7		536.3
Provision for Income Taxes		<u>251.4</u>		<u>230.0</u>
Net Income		<u>\$366.3</u>		<u>\$306.3</u>

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

DSW 021007

TO OUR SHAREOWNERS

For 1976, Monsanto Company recorded significant gains in sales, net income and earnings per common share—establishing new Company records for each.

During the year, progress was also made in refining the Company's commitment to its various constituencies. We strengthened our strategic planning concepts to help ensure optimum long-term returns for our shareowners. New emphasis was placed on ensuring an even higher degree of civic and social responsiveness in all areas of the world in which we do business. We built on our continuing record of accomplishment to provide job satisfaction and growth opportunities for the 61,903 men and women who comprise our employe family.

In addition, we realigned Monsanto's operating companies, placing greater emphasis on the key areas of improved process development and manufacturing cost control. In realigning the corporate organizational structure, we took advantage of the opportunity to modify and broaden the responsibilities of a number of younger Monsanto managers. The experience they will receive in their new positions will help provide for the appropriate internally-developed management capability for the future.

In summary, Monsanto's management is pleased to report its accomplishments for 1976. In addition to telling the 1976 story, this report is designed to provide you with a further understanding of the programs that we are pursuing to ensure a satisfactory future for the Company, its employes and its shareowners.

FINANCIAL RESULTS

For 1976, consolidated net sales were \$4.270 billion compared with \$3.625 billion for 1975—an increase of 18 per cent.

Net income for 1976 was \$366.3 million—a 20 per cent increase over the \$306.3 million reported for last year.

Primary earnings per common share were \$10.05. On a fully-diluted basis, earnings per common share were \$9.77. For 1975, primary earnings per common share were \$8.63 and fully-diluted earnings were \$8.22.

The record financial results for 1976 are further evidence of the value of a diversified product line. Meaningful sales and profit gains were achieved despite several negative factors—such as the inability to price certain products to recover cost increases and the unfavorable supply-demand imbalance for man-made fibers and general-purpose polystyrene, both in the United States and in Europe.

In the interpretation of our results for 1976, it is important to note the adverse impact of three factors that—to some extent—are nonoperational or nonrecurring. For 1976, foreign currency exchange and translation losses had the effect of penalizing earnings by 62 cents per share. The most significant of these was the devaluation of the Mexican peso, which had an adverse earnings impact of 28 cents per share. While the effect of currency fluctuations is a fact of doing business, we believe that 1976 was an unusual year.

In the fourth quarter, management elected to close operations at the Tuscaloosa, Alabama, plant of Olympia Industries, Inc.—a wholly-owned subsidiary—where dyed-textured yarns were produced. This resulted in a



Director
Edward L. Palmer

Chairman
John W. Hanley

Director
Richard I. Fricke

DSW 021008

charge to earnings of 20 cents per share. Also in the fourth quarter, management elected to accelerate the provision for obsolescence of certain machinery and equipment, resulting in a further charge of 15 cents to per-share earnings.

Despite these factors, 1976 results were a continuation of the business turnaround that Monsanto has accomplished over the past six years. The magnitude of the turnaround is best exemplified by reviewing some of the key measures of managerial stewardship.

The after tax-return on total assets—which is the acid test of the business and its management—was improved from the 1975 level reaching 9 per cent. The employment of debt is a necessary business risk and, of

course, it improved the return on shareowners' equity. For 1976, return on average equity was 17 per cent.

A very important end product of Monsanto's growth has been a vastly improved financial position—an important plus in planning the future of the Company. At the end of 1976, the Company had \$320 million of cash and marketable securities. Long-term debt was 29 per cent of total debt plus equity, which leaves ample room for the employment of debt financing as required for future expansion. At year-end, shareowners' equity per share was \$61.79 up from \$56.62 per share at the end of 1975. For the fourth consecutive year, dividends were increased. At present, the annual rate of payment is \$2.80 per share and has been increased 56 per cent since 1972.

The fine performance reported for 1976 is a credit to the men and women who comprise Monsanto's worldwide employe family. Their accomplishments provided the impetus necessary to set new records and their dedication will provide the momentum for future accomplishments.

STRUCTURAL CHANGES

On November 1, 1976, a sixth operating unit—the Monsanto Chemical Intermediates Company—was established. Its creation centralizes into one unit of Monsanto the responsibility for the manufacture of basic "building block" chemicals and intermediates at the lowest cost in support of downstream products and markets. It enables the other five operating units to concentrate their efforts on building or augmenting positions of prominence in their specific product or market areas.

The new operating unit was formed from the petrochemicals segment of the former Monsanto Polymers & Petrochemicals Company which in turn was recast as the Monsanto Plastics & Resins Company; the process chemicals business from Monsanto Industrial Chemicals Company; the textile fibers intermediates business from Monsanto Textiles Company, and Monsanto's oil and gas production and exploration group.

Following the formation of Monsanto Chemical Intermediates Company, it was determined that Monsanto Company should change its internal transfer pricing policy on certain large-volume chemicals, such as styrene monomer used in plastics and acrylonitrile used in man-made fibers. Operating units will be charged for these products at cost rather than at market price. As a result shareowners will have a better perception and understanding of the integrated nature of Monsanto's businesses. This decision has no effect on corporate operating results, but it does affect the



Director
Jean Mayer

Director
H. Harold Bible

Director
Buck Mickel

Director
John R. Eck

DSW 021009

operating results of the six Monsanto operating units. Accordingly, product line profit results for the past five years have been restated to reflect the change.

OPERATIONS REVIEW

Monsanto's 1976 results were importantly influenced by U.S. economic conditions and closely paralleled the economic vitality of the nations in which we do business.

The year-to-year improvement in worldwide economic conditions led to dramatic turnarounds for two Monsanto operating units. Monsanto Plastics & Resins Company registered a sales gain of 33 per cent and an operating income gain of 146 per cent compared with 1975's recession-impacted results. Monsanto Chemical Intermediates Company was also a beneficiary of the improved business climate, and sales in this operating unit increased 22 per cent and operating income 65 per cent.

Monsanto Industrial Chemicals Company registered the sixth consecutive year-to-year gain in sales and operating income.

Monsanto Agricultural Products Company recorded a modest sales increase but operating income declined slightly.

Improved sales in all product areas, together with a year-to-year decrease in expense levels for *Cycle-Safe* containers enabled Monsanto Commercial Products Company to record a 25 per cent increase in revenues. It did, however, experience a modest operating loss.

While Monsanto Textiles Company was unprofitable for the second consecutive year, strategies implemented in 1976 helped to reduce the magnitude of its operating loss and should provide an improved operating base for the future.

The body of this report contains detailed analyses and discussions of each of Monsanto's six operating companies.

CAPITAL SPENDING

Monsanto Company continued its aggressive capital spending program in 1976 and during the year completed construction on several major new plants. Spending for new plant and equipment reached \$646.8 million, a record for the Company.

Construction of a major new acrylonitrile plant was completed at Texas City, Texas. A large ammonia production facility was completed during the year, as were plants for the production of *Avadex*, *Lasso* and *Roundup* herbicides. Other plant completions increased our production capability for ABS and SAN plastics, engineering thermoplastics, rubber chemicals and phosphates.

Our capital spending program will continue to be quite aggressive, and

expenditures for the five-year period of 1976 through 1980 should approach \$3 billion.

BOARD AND EXECUTIVE CHANGES

On February 25, 1977, Mrs. Margaret Bush Wilson, a St. Louis attorney and Chairman of the National Association for the Advancement of Colored People was elected to Monsanto's Board of Directors, bringing Board membership to 17.

There were a number of important executive changes made during 1976.

On October 22, the Board of Directors elected Dr. Louis Fernandez and Mr. James J. Kerley executive vice presidents. Dr. Fernandez is now responsible for Monsanto's Technical, Facilities & Planning, and Operations



Director
James J. Kerley

Director
Charles H. Sommer

Director
Edmond S. Bauer

staffs. Mr. Kerley maintains responsibility for the Administrative staff, continues as chief financial officer and now serves as chairman of the newly-formed Social Responsibility Committee.

At the same time, Group Vice President John R. Eck was named managing director of Monsanto Chemical Intermediates Company. Mr. Francis J. Fitzgerald and Mr. Richard J. Mahoney were elected group vice presidents. Mr. Fitzgerald continues as managing director of Monsanto Industrial Chemicals Company and Mr. Mahoney was named managing director of Monsanto Plastics & Resins Company. Mr. Robert E. Burke was elected a vice president and named managing director of Monsanto Textiles Company, succeeding Dr.

Fernandez. Mr. Nicholas L. Reding was elected a vice president and named managing director of Monsanto Agricultural Products Company, succeeding Mr. Mahoney.

Earlier in the year, Dr. Joseph T. Nolan was elected vice president—public affairs and Mr. Richard C. O'Sullivan, treasurer, was elected to the additional position of vice president.

The formation of a Social Responsibility Committee creates an overview advisory group that will assist executive management in carrying out broad corporate objectives dealing with the responsibilities of corporate citizenship. In addition to its chairman, Mr. Kerley, others named to serve on the committee include Executive Vice Presidents Edmond S. Bauer and Louis

Fernandez, Group Vice President James E. Crawford Jr. and Vice Presidents Robert L. Berra and Joseph T. Nolan.

We were saddened by the sudden death of Director John L. Gillis early in 1976. Mr. Gillis had served Monsanto for 39 years before his retirement in 1974, had been a member of its Board of Directors for more than 20 years and was a former senior vice president of the Company.

CORPORATE CONCERNS AND OBLIGATIONS

As a science-based company, Monsanto shares the legitimate concerns about the health and safety of employees, customers, consumers and society. We have long taken pride in being a leader in the chemical industry—an industry that supplies thousands of products essential to our economic well-being and to the quality of life to which we have all become accustomed.

During 1976, broad-based product testing programs were expanded. Shortly after mid-year, the Company announced its plans to build a multi-million dollar biological research and testing laboratory in St. Louis. The new facility will enhance Monsanto's ability to test the medical and environmental effects of our products, raw materials and chemical intermediates.

Monsanto was instrumental in launching a new industry-wide approach to ensure the safety of chemical materials and is part of the Chemical Industry Institute of Toxicology. This new, independent scientific organization is dedicated to the objective study of toxicological issues and, during 1976, announced the construction of its own testing laboratory.

As testing techniques become increasingly sophisticated and scientific measuring devices provide greater sensitivity, the chemical industry could find that some of its products create previously unidentifiable environmental risks.



Director
J. W. Fisher

Director
Monte C. Throdahl

Director
Margaret Bush Wilson

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Indicative of this situation was Monsanto's announcement last year that it would withdraw from the production and sale of polychlorinated biphenyls (PCB's) which have been found to be persistent in the environment. PCB's have been, for many years, the standard dielectric insulating fluid for the electrical industry because of superior functional properties and excellent fire resistance. At the time of the discovery of the chemical's persistence, no substitutes were available that provided an equivalent fire safety margin. As adequate replacements began to come into use, Monsanto scheduled total withdrawal from the market by October, 1977.

As a responsible and responsive company, Monsanto will continue its broad-based efforts to ensure the safety of its products so that the benefits they provide society will continue to be realized.

In the same spirit, Monsanto will attempt to help its various constituencies to understand the pragmatic significance of the mass of analytical data from chemical, toxicological, biological and environmental tests now becoming broadly available. We will try to help avoid the kind of disruptive misinterpretation of this information which was so evident in the "Cranberry Crisis" and in other similar unfortunate tempests.

Illustrative of the confusion that often surrounds chemical testing was the recent reaction to an industry-sponsored series of studies on the effects of massive feeding of a chemical intermediate called acrylonitrile. As is customary in these tests, extremely large quantities of the chemical in question are fed to laboratory animals to deliberately cause some substantial abnormality. From the determination of these extreme positions it is hoped to ascertain the practical hazards for humans or the environment from less extreme amounts—or, indeed, whether

there is any human hazard at all in normal use.

The preliminary findings of these studies, as anticipated, showed that abnormalities did develop in rats at the upper end of the dosage.

As a point of reference, it is useful to translate these feeding levels into human terms. An individual would have to eat 1,600 pounds of food per day for a year—each pound of which contained the maximum amount of acrylonitrile currently permitted by the Food and Drug Administration—to duplicate even the lowest level of acrylonitrile used in the test. And no abnormalities developed in a 365-day test at this level.

Even though the findings were preliminary and inconclusive, the FDA announced it would suspend approval

for the use of Monsanto's *Cycle-Safe* plastic bottles in which acrylonitrile is a material fused into the plastic. Although no time schedule was set for this action, some bottlers and retailers were understandably reluctant to continue aggressive utilization of the plastic containers—not because of any scientific data but rather because of possible consumer misunderstanding on the true safety of the bottle.

In our opinion, the preliminary findings do not justify this extreme action by the FDA. We are confident that *Cycle-Safe* containers pose no hazard for consumers. We believe *Cycle-Safe* represents contemporary packaging in the finest sense, offering recyclability, energy conservation, and convenience for consumer and distribution channels alike.



Director
Tom K. Smith Jr.

Director
Donald C. Carroll

Director
Louis Fernandez

Director
Francis E. Reese

DSW 021012

We are desirous of working with the FDA to strive for even higher standards of safety in a wide range of food packaging materials—and to establish equitable, realistic and measurable standards for *Cycle-Safe* and other containers. This cooperative effort could represent a step forward for our society.

1977 OUTLOOK

As the year 1977 opened, severe winter weather and the shortages of natural gas caused some production disruptions as Monsanto temporarily converted some plants from natural gas to higher-cost energy sources of propane and oil. Because we had already implemented an alternate fuels policy for U.S. plants, the impact of the natural gas shortage on our operations was minimized. The shortages did, however, severely curtail operations at many of our customers' plants. It is difficult, at this early juncture, to accurately estimate the impact of the weather on our first-quarter results.

As the year progresses, we expect to see moderate growth in real U.S. Gross National Product—a growth that should be sustained throughout 1977 and into 1978. Outside the United States, we anticipate that growth rates in the economies in which we operate will be only marginally better than those of 1976.

Within these general parameters, there appears to be meaningful strength in certain industry groups that impact directly on Monsanto's business. U.S. housing starts improved to an annual rate of approximately 1.5 million in 1976 and are forecast to reach 1.7 million in 1977. The forecast increase could stimulate sales of man-made fibers for carpets and home furnishings, plasticizers used in vinyl flooring, plastics used in drain pipe and resins used in flooring and roofing.

Another strong automotive year is predicted for 1977, with sales of approximately 9.1 million U.S.-

produced automobiles forecast. These sales have a close correlation to our revenues from plastics and rubber chemicals, plasticizers and fibers.

U.S. farmers are expected to plant approximately the same number of corn and soybean acres as last year—a favorable indication for our herbicide businesses.

While the overall economic picture appears sound, there are several factors which will adversely impact our 1977 results.

Excess industry capacity for polystyrene plastics is expected to continue throughout 1977 as demand lags supply. New increases in industry capacity for the production of styrene monomer, used in the formulation of plastics, have created softness in selling prices for this product. We believe that this softness could continue for much of this year.

The supply-demand imbalance in the man-made fiber industry, particularly in polyester filament, has caused selling prices for this fiber to be severely depressed for the past two years, and it is unclear when this business will return to fully-satisfactory profitability.

These areas are illustrative of the uncertainties facing the Company as it enters a new year and suggest that future corporate results, just as in the past, will include short-term variations. We believe, however, that 1977 will be another strong year and one in which we will continue to build on our underlying strengths for longer-term growth in sales and earnings.

Recognizing that our shareowners and their elected Board of Directors must constantly judge the performance of Monsanto, it may be worthwhile to share a point of view on the significance of longer-term results versus the sharp focus the press tends to assign to quarterly results.

Within a fully satisfactory annual result, in terms of sales and profit growth, we may well encompass one or more quarters which do not equal or exceed the performance data of the

prior year's period. We submit that a more meaningful perspective can be developed by studying the record of the longer period where short-term effects are placed in a more proper perspective.

To illustrate, net income for the first quarter of 1976 was up 61 per cent over the same quarter of the previous year while fourth quarter net income was down 40 per cent in the same type of comparison. Yet, net income for the year was up 20 per cent over that of 1975.

More significant than the short-term or quarterly variations is the fact that net income has grown at an annual rate of 15 per cent over the last three years—a period which includes the impact of a business recession—and at an annual rate of more than 11 per cent during the ten-year period highlighted in the financial section of this annual report.

While neither of these statistics is necessarily indicative of the sustainable long-term growth of the Company, these longer-term patterns provide a more meaningful insight into the quality of Monsanto's performance. Your management's goal will continue to be long-term sensible growth for our shareowners.



John W. Hanley
Chairman of the Board
and President

March 16, 1977

DSW 021013

MONSANTO AGRICULTURAL PRODUCTS COMPANY

For 1976, Monsanto Agricultural Products Company attained a modest increase in sales but experienced a slight decline in operating income compared with 1975. Although worldwide herbicide business was up substantially, income was adversely affected by price attrition in nitrogen products and reduced insecticide sales.

Lasso increased its market share in corn acreage and maintained its share of the soybean market. In 1976 *Lasso* was used on more acres of corn and soybean crops than any other herbicide.

Farmers' increased use of herbicide mixtures and a higher level of broadcast applications were important factors leading to the record year for *Lasso*.

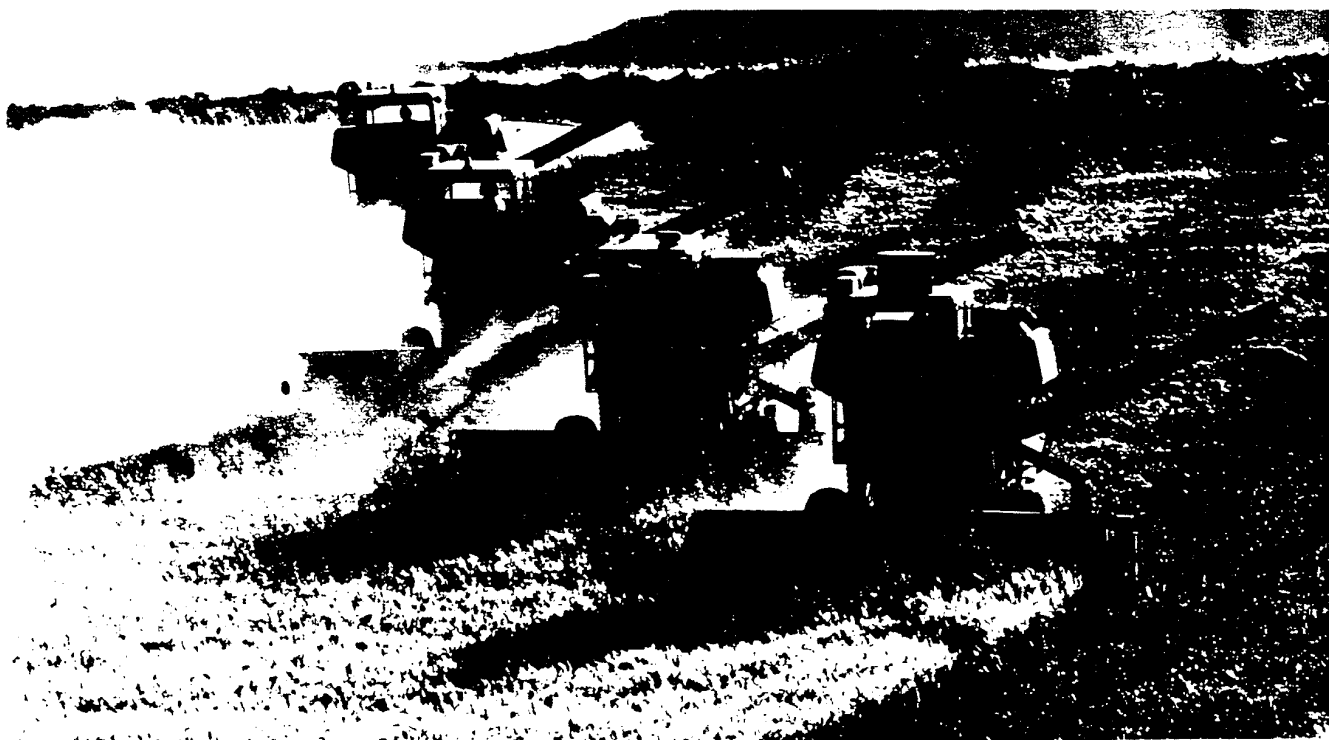
There is a continuing shift from granular herbicides, which are used on individual rows of crops, to liquid herbicides sprayed in broadcast fashion over the entire field. The broadcast technique provides better weed control. Some 80 per cent of all corn and soybean acres in the Midwest United

(Dollars in millions)

	Sales	Operating Income
1976	\$573.2	\$236.1
1975	547.4	252.9
1974	410.7	176.7
1973	283.4	118.3
1972	222.3	79.3

SALES RECORD FOR *LASO*

Lasso herbicides closed out the spring season and the year with record sales. This large-volume, proprietary Monsanto herbicide is used to control grassy weeds, principally in corn and soybean crops. In the important Midwestern United States market,



Combines move in formation through an Idaho barley field treated with *Avadex* herbicide, a long-standing favorite for controlling wild oats in wheat, barley and sugar beets.

States were treated with broadcast applications in 1976.

Monsanto was an early contributor to the concept of herbicide mixtures with which, in a single application, the farmer can treat a greater variety of weeds using a combination of herbicides, some which control broad leaf weeds and others, like *Lasso*, which control grassy-type weeds.

Approximately one-half of the Midwestern corn and soybean acres are treated with a herbicide mixture and Monsanto is the decided leader in brand share of these mixtures.

As a result of the increased use of herbicides during the year, inventories of *Lasso* liquid in the distribution network were at very low levels by the

end of the season, a situation which enhances prospects for 1977 sales.

In September, the company again announced its intentions to begin herbicide shipments to U.S. distributors during the fourth quarter. This concept was initiated in 1975 to ensure that product would be available at the distributor and retail levels on a timely and orderly basis for the spring planting season.

Also in September, prices for *Lasso* and *Ramrod* herbicides were increased eight per cent, the first price increase in two years, and only the second increase since the products were introduced.

A major capacity expansion for the production of *Lasso* herbicides was

completed late in the year at Muscatine, Iowa. The new unit increases total capacity by 40 per cent and assures adequate product availability to meet increasing market demand.

SALES OF *ROUNDUP* STRONG

Sales of *Roundup*, Monsanto's exciting new herbicide, far exceeded expectations in 1976. *Roundup* was introduced early in 1974 for industrial uses and completed its first commercial year on cropland acreage in the United States in 1976.

Roundup, post-emergent, non-selective herbicide, controls a broad spectrum of annual and perennial weeds. It is, for example, used to



Ammonium nitrate fertilizer from Monsanto's Luling, Louisiana, and El Dorado, Arkansas, plants helps produce thriving pasturelands across the Southern United States.

Sugarcane crops, such as this one in Brazil, produce higher yields with *Polaris* plant growth regulator, a product which increases sugar content and enhances ripening.

control heretofore difficult-to-destroy perennial weed infestations in European cereal crops and vineyards, in Malaysian rubber plantations, in United States feedgrain crops, and in Brazilian coffee plantations.

Market acceptance of *Roundup* has been significantly more rapid than even that of *Lasso* in the comparable phase of that product's life cycle. Surveys indicate a high level of user satisfaction and outstanding product performance. A major expansion of a plant producing *Roundup* was completed early in 1976 to meet growing demand.

SALES OF AVADEx CONTINUE GROWTH

Increased use of *Avadex* herbicides

in Canada contributed to a new sales record for this family of herbicides. The product is used to control wild oats in sugar beets, and wheat and other small grains. A new plant began operations in Luling and production at Antwerp, Belgium was expanded to keep up with the growing demand for *Avadex*.

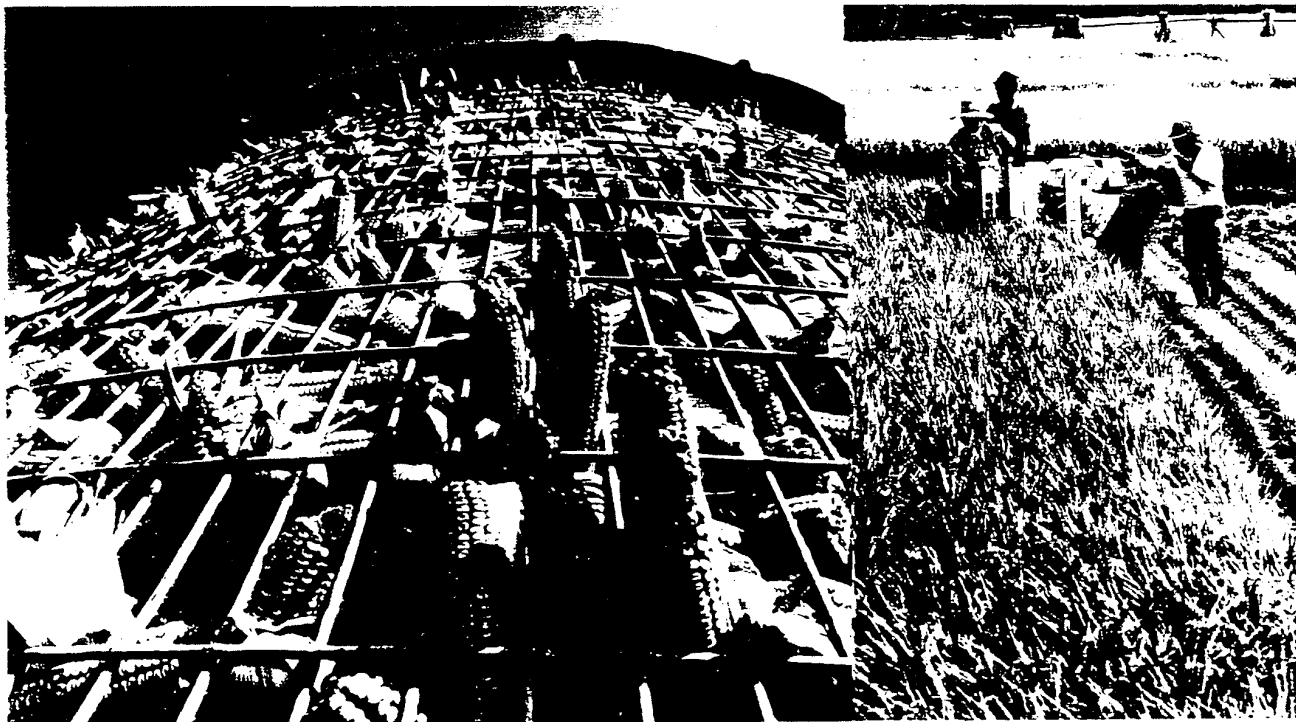
Shipments of *Machete* rice herbicide increased during 1976. *Machete* is sold in the Far East for control of rice weeds such as barnyard grass. Major markets are Japan, the Republic of Korea and Taiwan.

Sales of *Polaris* plant growth regulator, which increases sucrose content in sugarcane, were extended outside of the United States in 1976.

The first of Monsanto's planned plant growth regulators to directly improve crop yields, *Polaris* is now available in Brazil and the Caribbean—target markets with excellent potential for this product. A major research program continues in the development of additional plant growth regulators, and new candidates for products to enhance the growth of other crops are now in the early stages of testing.

OTHER ACTIVITIES

Shipments of parathion were down from the previous year. The major use of this insecticide is for the control of the bollworm and boll weevil in cotton. Because of late cotton plantings and lack of rain in the Mississippi River



Lasso is one of the most effective and popular herbicides for controlling weeds in corn, soybeans and other crops, helping to improve yields as shown by this crib-bursting corn for animal feed.

A Japanese paddy treated with Monsanto's *Machete* herbicide provides a lush stand of rice for a mechanical harvester, a rarity in the Far East where most such work is still done by hand.

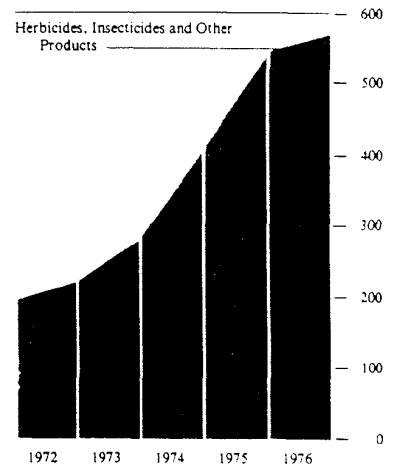
delta region, insect problems were light, affecting sales.

Despite increased shipments of nitrogen products, selling prices were down substantially from the levels of the prior year and significantly impacted profitability. Demand continued strong for ammonium nitrates used in the fertilizer and mining industries.

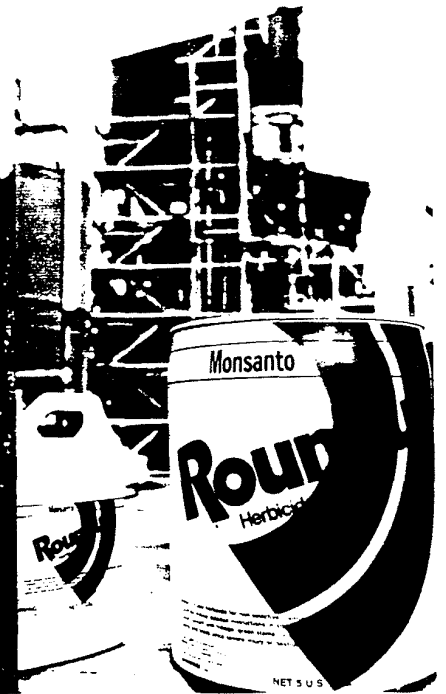
At Farmers Hybrid Company, Inc., a wholly-owned subsidiary that markets hybrid animal stock, boar sales increased.

The subsidiary's innovative commercial approach of selling animals through sales centers was expanded in 1976. Seven new centers were opened, bringing the number in operation to 14 at year-end.

1976 HIGHLIGHTS (Dollars in Millions)



French grapes are just one of the many crops protected by *Roundup*, a herbicide which effectively kills the root systems of tough perennial weeds and breaks down harmlessly in the soil.



Roundup, was used in an ever-increasing number of agricultural applications around the world in 1976. Capacity at Luling, Louisiana, was expanded to meet demand.

MONSANTO CHEMICAL INTERMEDIATES COMPANY

For 1976, Monsanto Chemical Intermediates Company recorded a strong increase in sales and operating income from depressed 1975 results. Sales increased 22 per cent and operating income advanced 65 per cent.

SIXTH OPERATING COMPANY FORMED

On November 1, the Chemical Intermediates Company was established to centralize responsibility for the process development and production of the intermediate chemicals that are used as "building block" materials. In addition to its merchant sales, the operating company serves as a supplier of raw materials to

the other five operating companies.

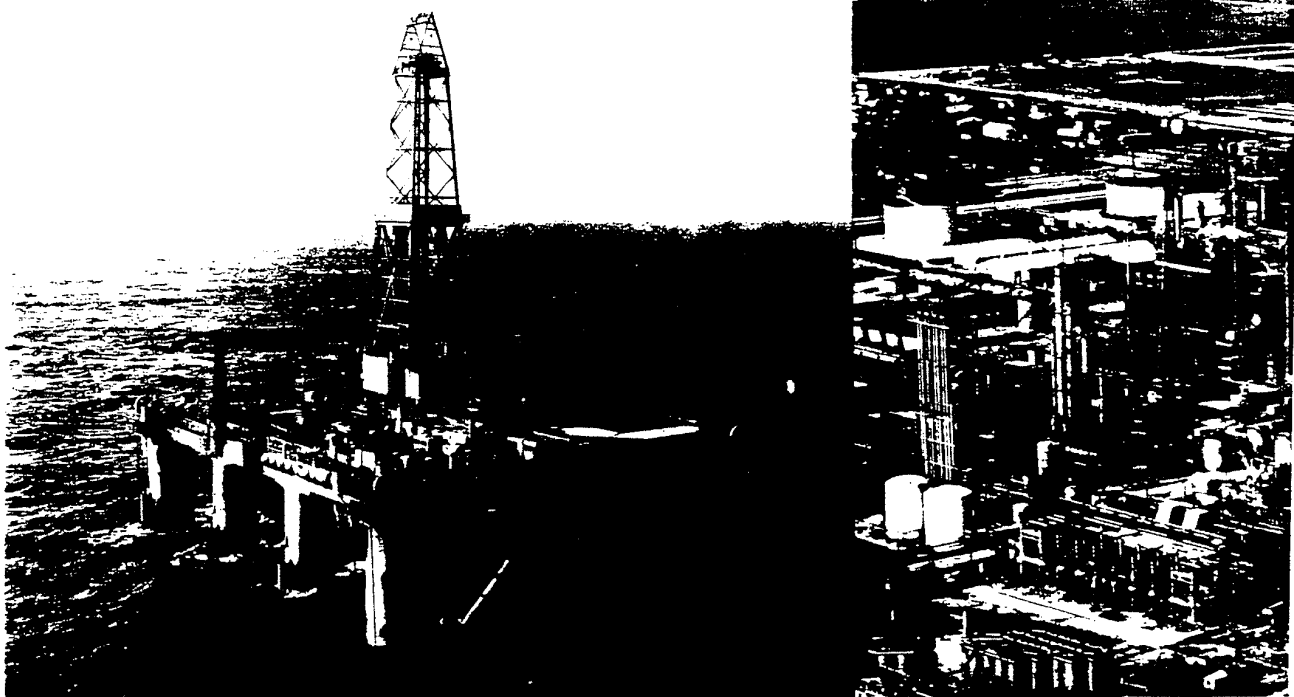
The new unit's product line includes Monsanto's petrochemicals, process chemicals and textile intermediate chemicals, as well as oil and gas production and exploration.

While integrating Monsanto's various intermediate chemical production skills, this new unit will stress cost improvement through development of improved processes and alternative raw material routes.

The first half of 1976 was marked by continued strong recovery of sales of intermediate chemicals. This reflected demand for end products based on these raw materials. The business upturn outside of the United States also resulted in a favorable surge

(Dollars in millions)

	Sales	Operating Income
1976	\$476.2	\$148.4
1975	390.3	90.2
1974	416.8	82.2
1973	247.3	20.0
1972	282.2	21.1



Monsanto continued oil drilling operations in the U.K. North Sea. Delineation drilling was commencing at the end of 1976 on one block in which an oil discovery was announced previously.

in exports. During the second half of the year demand tapered off and a few products came under pricing pressure — principally phenol and styrene monomer, two major petrochemicals used to make resins and plastics.

PETROCHEMICALS STRONG

Petrochemicals, the largest business group in this operating company, had the greatest growth in sales volume. There was strong demand in the first half for practically all petrochemical products, particularly styrene monomer.

Acrylonitrile plants operated at capacity for most of the year. This basic petrochemical is a key raw

material in Monsanto's production of *Acrilan* acrylic fibers, a nylon intermediate chemical, and *Lustran* ABS and SAN plastics.

Construction of a 420-million-pound-a-year acrylonitrile plant at Texas City, Texas, was completed at year-end. After completing start-up, it will nearly double the production capability in the United States. A comparable acrylonitrile plant is under construction at Teesside, England, with completion planned for late in 1977.

Monsanto's acetic acid technology continues to be licensed to principal producers throughout the world. Acetic acid is increasingly in demand as a raw material for such products as man-made fibers, adhesives, paint solvents,

herbicides, food additives and pharmaceuticals. During 1976, the company granted additional licenses for use of its process technology.

RAW MATERIAL BASE

Expansion of production capacity, such as in acrylonitrile, is one action taken to ensure that the company's raw material position and its costs are secure. During 1976, the Continental Oil Company and Monsanto Company agreed in principle to enter into a joint venture to produce ethylene and related products at Monsanto's Chocolate Bayou ethylene complex near Alvin, Texas. Negotiations continue on the formal agreements necessary for the venture but it should be noted that



At Texas City, Texas, Monsanto Chemical Intermediates Company operates this huge petrochemical complex, supplying other Monsanto operating units with "building block" chemicals.

there are substantial issues as yet unresolved.

Construction progressed during the year at Teesside, England, on a plant for production of a key nylon intermediate. The plant, due for completion late in 1977, will make hexamethylenediamine, providing a firm raw material base for Monsanto's European nylon fiber operations. The plant, a joint venture with a unit of Montedison of Italy, will use a proprietary process developed by Monsanto. Acrylonitrile, the principal raw material for the plant, will be produced in the plant currently under construction by Monsanto at the same site.

In Australia, a new facility to manufacture styrene monomer is under

construction, with completion expected during the second half of 1977. That unit is a joint venture with a subsidiary of Broken Hill Proprietary Co. Ltd. of Australia. The joint venture will combine the marketing and technological strengths of Monsanto with the strong raw material base of BHP.

PROCESS CHEMICALS SALES INCREASE

Demand for process chemicals, which are intermediates used by many types of manufacturers, improved during 1976. Revenues were strong during the first half but were somewhat reduced during the second half.

Revenues from oil and gas

production and exploration increased during 1976. These operations continue to provide Monsanto a partial offset against world-market oil and gas costs. In the United States, gas wells were completed in Wyoming, Texas, Oklahoma and New Mexico. Monsanto is the operator and a major owner of an exploration group in the U. K. North Sea. Confirmation drilling is under way there to determine whether an earlier-discovered oil reservoir is of commercial scope.

ENERGY SAVING PROGRAMS

As part of a concerted effort to conserve energy and fuel, multimillion-dollar programs were begun in 1976 at Monsanto's Chocolate Bayou and Texas City

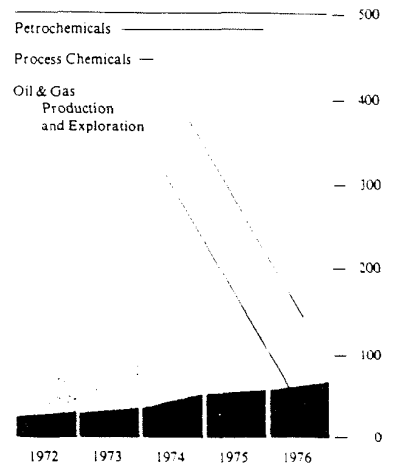


These photos are indicative of the wide range of uses resulting from products supplied by Monsanto Chemical Intermediates Company.

Acrylonitrile, butadiene and styrene are among the major intermediate chemicals used in the manufacture of a wide variety of plastic resins, including *Lustran* ABS plastics and *Lustrex* polystyrene from Monsanto.

petrochemical plants. The two programs are expected to save 7.2 trillion BTUs of energy annually—approximately the same energy for the requirements of a U.S. Midwest city with a population of 360,000 during the October to March heating period. This effort represents a large portion of Monsanto's total energy-saving commitment for the five-year period ending in 1980.

1976 HIGHLIGHTS (Dollars in Millions)



Massive tires for off-highway trucks such as these at a Montana copper mine are made with Monsanto rubber chemicals and nylon tire cord to provide the strength and resistance to pressure and heat needed to carry tremendous loads.



Manufactured from chemicals derived from petroleum and natural gas, Monsanto nylon is used by the textiles and transportation industries in end-use applications in which performance and durability are important considerations.

MONSANTO COMMERCIAL PRODUCTS COMPANY

Product line sales gains in Monsanto Commercial Products Company—including valves and process controls, chemical and environmental systems and electronics—resulted in a 25 per cent year-to-year growth in sales. Operating income was again limited by developmental and start-up expenses associated with *Cycle-Safe* containers program and were written off as incurred. *Cycle-Safe* container status is discussed on pages 8 and 9.

(Dollars in millions)

	Sales	Operating Income
1976	\$398.2	\$ (2.5)
1975	318.7	(11.1)
1974	299.0	(15.6)
1973	239.3	(9.6)
1972	185.7	(19.2)

FISHER CONTROLS SALES UP

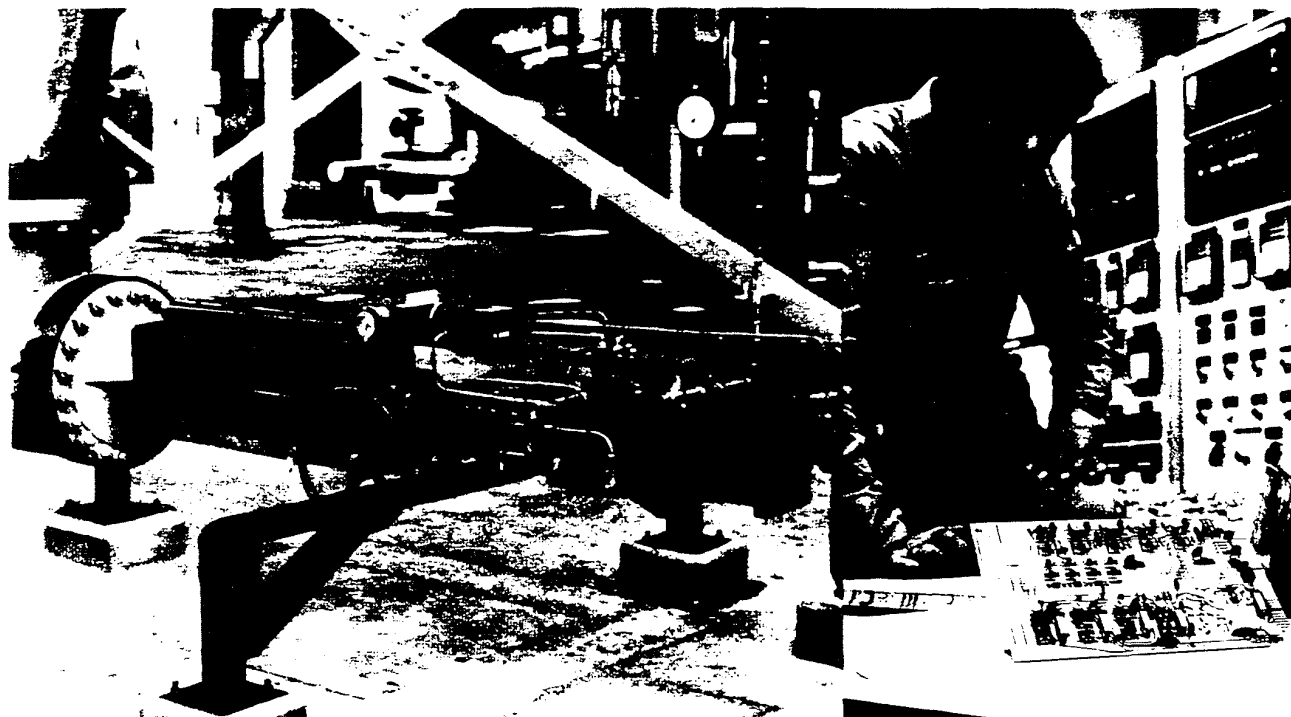
The Fisher Controls Company, a wholly-owned subsidiary of Monsanto, continued its steady growth and during 1976 generated record sales and profits. The economic expansion of 1976 led to increased shipments of Fisher valves, regulators, controllers

and electronic instruments used by the process industry. Order backlog continued to grow, and at year-end was at an all-time high.

Special-order valves for large projects such as oil pipelines have been a major addition to the Fisher line. Late in 1976, Fisher began production of rotary shaft valves at a new plant in Sherman, Texas. The valves, first introduced about a year earlier, provide more economical control of fluid flow for the energy industry.

ELECTRONIC PRODUCTS REBOUND

As the electronic industry recovered from its depressed state of 1975, sales of electronic materials rebounded. Volume increased significantly during the first half of the year, and although



Flow of liquids or gases through control valves frequently creates undesirable noise. Monsanto's Fisher Controls subsidiary is a leader in control valve noise abatement technology.

Sophisticated analog and digital process controls, shown here at Monsanto's Antwerp, Belgium, plant, are designed and manufactured by Fisher Controls Company for the chemical, oil and gas, power, and pulp and paper industries.

it tapered off in the second half, it appeared to stabilize at year-end.

Shipments of silicon wafers reflected a strong year for the U.S. semiconductor industry. Business conditions permitted price increases, and expansion of the silicon plant at St. Peters, Missouri, was underway.

Sales of III-V semiconductor materials to manufacturers of light-emitting diodes, which are used in watches and calculators, began the year strong before leveling off in the final months. For much of 1976, diodes and other optical devices were in a sold-out position due to their new uses as signal indicators in automobiles, computers and copying equipment.

ENVIRO-CHEM SALES GROW

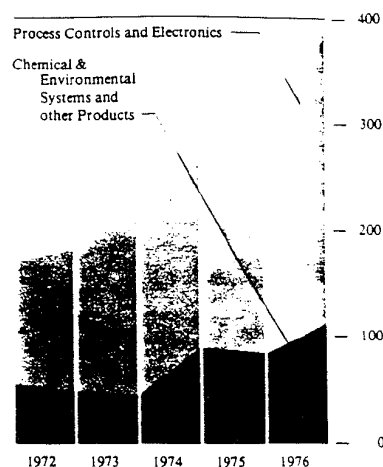
Chemical and environmental systems

by Monsanto Enviro-Chem Systems, Inc., achieved sizable sales and profit growth during the year. New and expanding markets have broadened the use of the group's *Brink* mist eliminators.

Early in 1977, Enviro-Chem recommended termination of the experimental *Landgard* pyrolysis resource recovery system to the City of Baltimore, Maryland. The recommendation was made because of continuing mechanical unreliability and the inability to predict a clear-cut success for the project. Monsanto Company had set up a reserve for a potential loss in the *Landgard* program. Consequently, termination is not expected to have a financial impact on 1977 income.

1976 HIGHLIGHTS

(Dollars in Millions)



The *FLIP-TRAN* automatic packaging system, developed by Monsanto, protects polished silicon wafers from contamination in order to meet the exacting quality demands of the semiconductor industry.

Liquid aerosols, soluble solids, mists from noxious gases and other pollutants from industrial processing are trapped and prevented from reaching the environment by highly efficient *Brink* mist eliminator systems.

MONSANTO INDUSTRIAL CHEMICALS COMPANY

For the sixth consecutive year, Monsanto Industrial Chemicals Company recorded increased sales and operating income. Because this operating company's 1975 performance was not substantially affected by the recession, growth in 1976 was all the more impressive.

Sales increased 11 per cent compared with 1975, and operating income rose four per cent. On a year-to-year basis, rubber chemicals, specialty chemicals and plasticizers increased in sales volume but sales of detergents and phosphates declined.

PHOSPHATE DEMAND OFF

Reduced levels of phosphate builders in laundry detergents, resulting

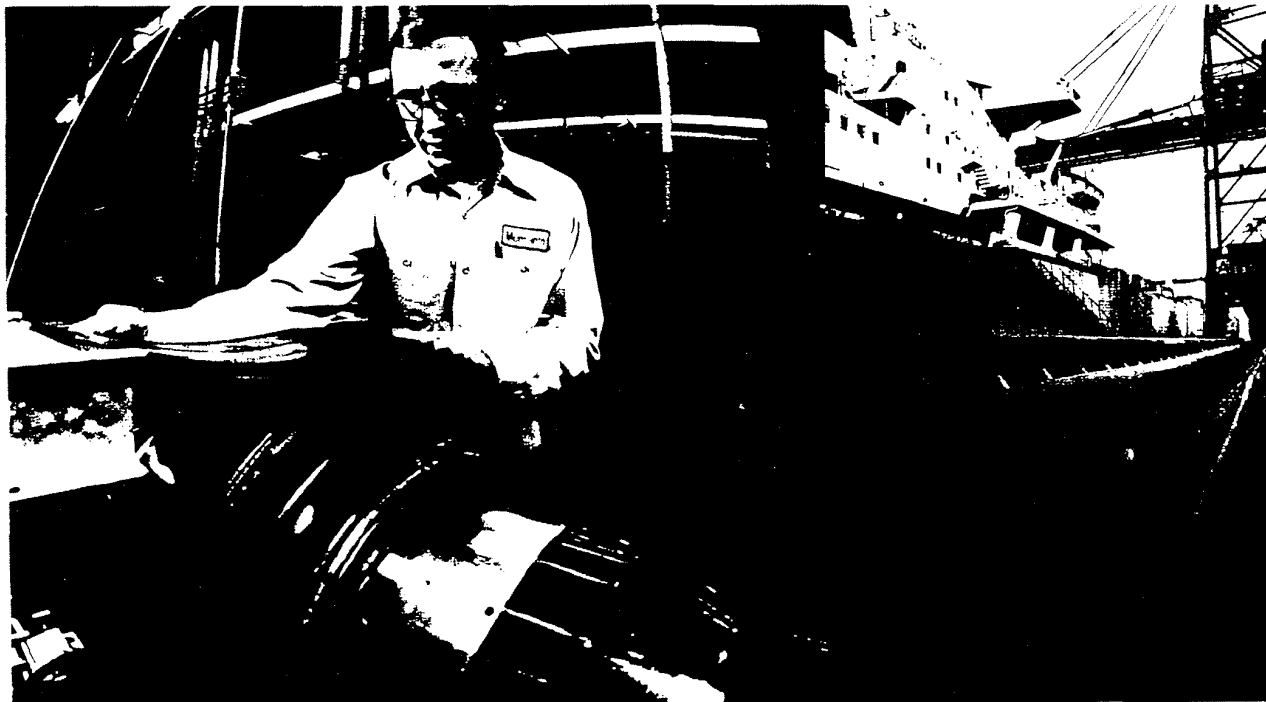
from environmental criticism, contributed to lower sales of a major builder—sodium tripolyphosphate. Overall demand in the heavy duty detergent markets dipped somewhat in 1975, but in 1976 normal growth was resumed.

Shipments of phosphorus to Mexico also were affected by a weaker detergent market in that country and greater self sufficiency in detergent phosphates.

Demand for phosphate salts and other phosphorus derivatives—used for food additives and a variety of industrial purposes—produced a year-to-year gain. However, these sales were not sufficient to offset the decline in the detergent business.

(Dollars in millions)

	Sales	Operating Income
1976	\$950.4	\$200.8
1975	852.8	193.8
1974	788.8	143.3
1973	553.5	84.0
1972	473.5	48.6



Tire research at the Akron Marketing and Research Center provides realistic end-use testing of rubber chemicals. Here, a technician builds a tire to test *Santogard* PVI, a prevulcanization inhibitor.

Continuous rubber belts, processed using Monsanto's prevulcanization inhibitor, speed the unloading of coal bound for the British steel industry.

During June, a new Monsanto plant in Brazil began production of phosphoric acid and various phosphate salts. Elemental phosphorus for the unit is being supplied by Monsanto from the United States.

PLASTICIZERS REBOUND

Sales of Monsanto plasticizers rebounded well in line with the economy, particularly during the first six months of the year. These products are used to impart flexibility and other desirable qualities in plastics, especially polyvinyl chloride (PVC) plastics.

The recovery was led by two proprietary products, *Santicizer* 160, which is used widely in vinyl flooring, and *Santicizer* 711, a general

purpose plasticizer which finds major applications in vinyl automobile upholstery and wire and cable coverings. Industry PVC sales, after a strong start, began to slow in the third quarter, paralleling the economy, and plasticizer sales softened accordingly. Despite this cyclical effect, plasticizer sales volume for the year increased 17 per cent.

A new plant for production of *Santicizer* 160 will be completed in 1977 in St. Louis, increasing worldwide capacity by 40 per cent. In June, a new plant at Newport, England, began producing flame-retarding *Santicizer* plasticizers for use in wall coverings and drapery backings.

RUBBER CHEMICALS ADVANCE

Rubber chemicals sales worldwide achieved a new record despite an extended strike at the four major tire companies in the United States. About 60 per cent of the sales of the rubber chemicals business came from outside of the United States, and for 1976 included important sales to Eastern Europe.

Monsanto continued steps to solidify its position as the leading supplier of chemicals for producing natural and synthetic rubber, including process accelerators to speed vulcanization and antidegradants to extend rubber product life. A new plant in Brazil supplies *Santoflex* rubber antidegradants to that country's



Vinyl plastics used for easy-care interior upholstery, dashboards and other automotive parts are made softer and more flexible with *Santicizer* 711, a Monsanto plasticizer.

Monsanto is the world's leading supplier of bulk aspirin, the largest selling analgesic used in a wide array of well-known pain relievers.

expanding rubber industry. At Ruabon, North Wales, a new plant began supplying *Santogard* PVI, a patented rubber prevulcanization inhibitor. In participation with Indian investors, new production facilities near Bombay began making accelerators and antidegradants.

The rubber chemicals group introduced a new line of mixing control instruments called power integrators. These improve the quality of rubber products by increasing the uniformity of rubber mixing. The power integrators are part of a growing family of Monsanto instruments used to measure and control rubber processing.

Work continued on composite

materials, based on a blend of short fibers and rubber, designed to improve the properties of fabricated rubber products.

SPECIALTY CHEMICALS STRONG

The operating company's sales of specialty chemicals recovered from the depressed results of 1975. *ACL* swimming pool chemicals had a strong year. Food and fine chemicals experienced steady demand, and *Dequest* water treating chemicals recorded excellent results throughout 1976.

Monsanto will become the sole U.S. producer of sorbic acid when a new plant at the Chocolate Bayou site in Texas becomes operational early this

year. This important preservative is currently approved for use in bakery goods, cheese, margarine, pet foods and wine. The new plant will have a capacity of ten million pounds a year.

In October, the company announced plans to produce acetaminophen, a widely-used analgesic compound, at Luling, Louisiana. Monsanto for many years has been a leading producer of bulk aspirin, and acetaminophen is expected to be an ideal companion product. The plant, with a planned capacity of eight million pounds a year, is scheduled to begin production during the second half of 1977.

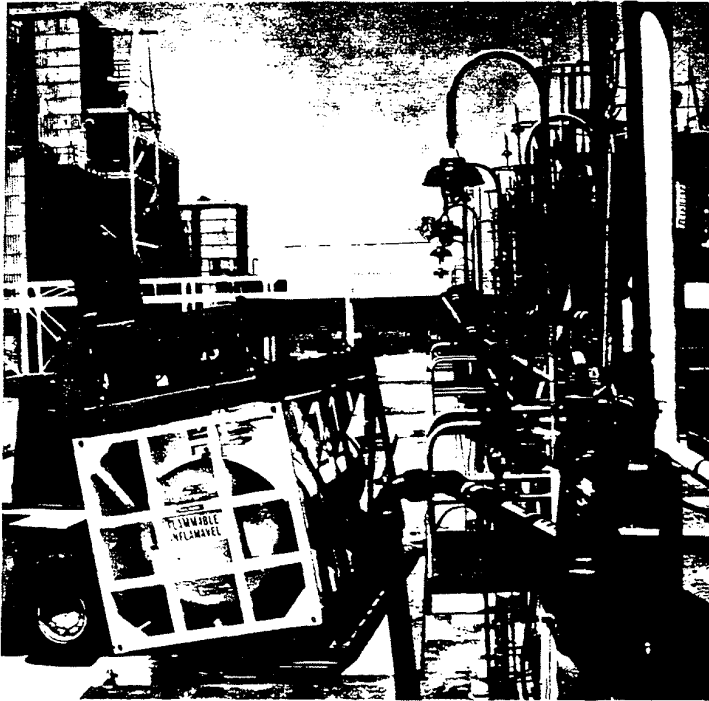
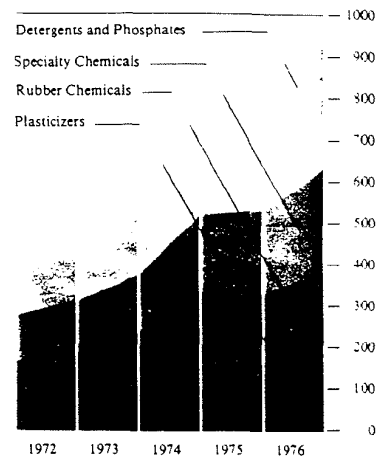
Also in October, Monsanto announced that it will terminate sales of polychlorinated biphenyls (PCB's).



Swimming pools remain free of bacteria and algae with Monsanto's *ACL* chlorine-bearing compounds. *ACL* compounds are also used in laundry bleaches and mechanical dishwashing products.

Total withdrawal from the market will be completed by October 31, 1977. The Company has been the principal supplier of PCB dielectric insulating fluids to the electrical power supply industry.

1976 HIGHLIGHTS
(Dollars in Millions)



Elemental phosphorus from the Columbia, Tennessee, plant arrives in Brazil in containers specially designed by Monsanto for ocean transport.



Monocalcium phosphate, a leavening agent used in baking, is just one of many products manufactured for the expanding Brazilian market at the Monsanto phosphate complex at Sao Jose Dos Campos.

MONSANTO PLASTICS & RESINS COMPANY

Business lines of the newly organized Plastics & Resins Company rebounded strongly from the 1975 recession environment and scored record sales and income. On a comparative basis, sales topped 1975 by 33 per cent and operating income was up 146 per cent over 1975's level.

PLASTIC SALES STRONG

Demand for many of the company's plastics and resins during 1976 was solid. Particular strength came in the first half, as consumers accelerated their purchases of products with high plastic content, such as automobiles and appliances. In the United States, expenditures for durable goods increased at an annual rate of 23

per cent during the first quarter of the year. Demand later tapered off and 1976 concluded with a 12 per cent growth rate for durable goods.

The fine recovery year in the United States and in other major consuming countries translated into net sales of plastics, resins and fabricated products that were \$250 million greater than those of 1975.

SALES OF LUSTRAN BRISK

Year-to-year growth in demand for durable goods resulted in high plant production rates for *Lustran* ABS and SAN plastics, which find extensive use in refrigerators and appliances, and for construction and automotive applications. Demand for these styrene and

(Dollars in millions)

	Sales	Operating Income
1976.....	\$1,018.7	\$95.6
1975.....	768.3	38.8
1974.....	812.6	98.4
1973.....	622.4	74.0
1972.....	529.2	38.1



Tough, resilient and optically excellent, interlayers of *Saflex* polyvinyl butyral sheet in architectural glass allowed designers of the Tokyo Tower to install wide expanses of windows.

This distinctive grille is one of a growing number of automotive uses for *Lustran* ABS plastics, which offer lighter weight for improved gas mileage and greater design flexibility.

acrylonitrile-based plastics permitted selective price increases during the year.

During March, 1976, the operating company completed start-up of a new plant for production of *Lustran* in Muscatine, Iowa, providing an additional capacity of 125 million pounds a year. The new plant brought the company's U.S. capacity for ABS and SAN plastics to over 400 million pounds.

Construction is also underway on a new plant for *Lustran* in Antwerp, Belgium, with start-up expected during the second half of 1977. The plant, with a planned capacity of 55 million pounds, will increase Monsanto's capacity of *Lustran* in Europe to about 240 million pounds annually. Further

expansions of *Lustran* are expected, based on a combination of good Monsanto cost position and anticipated market growth.

PRICING OF *LUSTREX* OFF

Weakness in pricing during most of 1976 affected the results for *Lustrex* polystyrene, a Monsanto plastic with major uses in appliances, packaging and consumer disposable goods. Physical shipments of *Lustrex* grew by more than one-third over 1975 volume. Dollar volume, however, was impaired by price attrition throughout the world. Industry capacity for polystyrene far exceeds demand—and this situation is expected to continue throughout 1977.

IMPROVED SALES OF *SAFLEX*

The resin products business of Monsanto was led during 1976 by *Saflex* polyvinyl butyral sheet. The plastic sheet is used as the interlayer in automotive windshields and windows, as well as in architectural glass. *Saflex* was produced at near capacity levels, with sales strong in all world areas. The favorable year-to-year growth was spurred in the United States by a significant increase in automobile production.

Monsanto's ability to serve these growing markets was enhanced by a new plant to produce the key raw material for *Saflex*. The plant, started up late in the year at Springfield, Massachusetts, increased by 25 per cent



Vydne R mineral-reinforced engineering plastics are used extensively by the automobile industry for body parts that reduce weight for better gas mileage without sacrificing strength or durability.

Butvar, a resin used in *Saflex* polyvinyl butyral sheet and other products, is manufactured at this new Springfield, Massachusetts, plant, which came on stream in 1976.

Monsanto's worldwide capacity for *Butvar* polyvinyl butyral resin. *Saflex* sheet capacity was also increased significantly by debottlenecking.

Sales of other resins, used in the manufacture of paints, coatings, adhesives and bonding materials rebounded well in line with the economy.

ENGINEERING THERMOPLASTICS SALES GROW

A few years ago Monsanto expanded its line of *Vydyne* engineering plastics when it became the first company to offer commercially, a mineral reinforced nylon plastic. Sales of this new family of *Vydyne* plastics grew substantially in

1976, with increased use in automotive headlight housings and grille assemblies. The plastics are also used in a variety of appliance, industrial and machinery parts.

Early in 1976, a new facility manufacturing high molecular weight nylon used to make complex extruded shapes began production. Plant expansions for both nylon and reinforced nylon plastics at Pensacola, Florida are scheduled for completion in 1977.

FABRICATED PLASTICS DEMAND REBOUNDS

The year began with a heavy backlog of orders for polyethylene bottles, which are used for household

and personal care products, and pharmaceuticals. Business continued brisk through 1976, resulting in heavy volume gains with long lead times in delivery.

Demand for *Fome-Cor* sheathing board received impetus from the increased sales of new automobiles and higher shipments of mobile homes.

Sales of plastic film for use in construction and agricultural markets remained at the somewhat depressed 1975 level, and sales of plastic packaging materials were soft.

SALES UP MODESTLY FOR ASTROTURF

Sales of *AstroTurf* recreational surfaces improved modestly during the

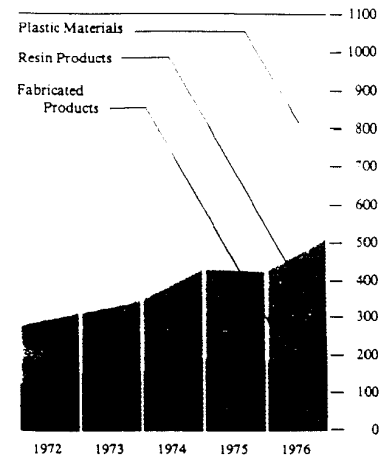


The versatility and toughness of *Lustran* ABS plastics makes possible this colorful, creative, yet functional office furniture manufactured in the United Kingdom.

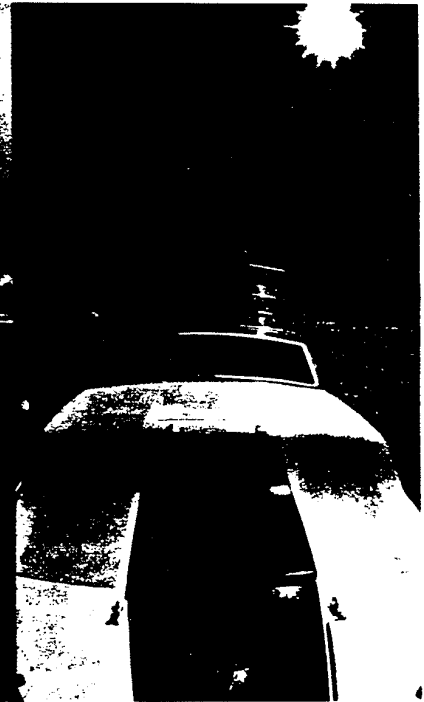
Resinox phenolic resins have good chemical resistance and form bonds stronger than wood for the manufacture of plywood used for roofing and other construction materials.

year. A contract was received to surface the Olympic Stadium in Montreal, the seventh domed or semi-enclosed stadium to select *AstroTurf* in 1976. Since the first surface was completed in 1966 at the Houston Astrodome, Monsanto has installed *AstroTurf* in more than 175 major athletic facilities throughout the world.

1976 HIGHLIGHTS
(Dollars in Millions)



Monsanto's production capacity in the United States for *Lustran* ABS/SAN plastics is more than 400 million pounds annually with the addition of this new plant at Muscatine, Iowa.



High performance plastics are used for scores of new applications. Major portions of this sleek, ocean going fishing cruiser are made out of plastic materials.

MONSANTO TEXTILES COMPANY

After entering 1976 with a degree of optimism, Monsanto Textiles Company suffered another disappointing year. Dollar sales increased 14 per cent compared with 1975, but the company incurred a pre-tax operating loss for the second consecutive year, due primarily to the depressed prices and overcapacity in the polyester filament market. The improved performance of other company fibers failed to offset these losses but did result in a substantial reduction of the level of the operating loss.

As 1976 began, the outlook for man-made fibers appeared favorable. Although prices were less than satisfactory, business continued strong throughout the first quarter, and

most fiber production was at near-capacity levels.

Signs of weakness began to develop in March, as inventories of polyester filament increased at the producer level. Early in the second quarter the entire textile distribution chain reacted to shrinking consumer purchases at retail, producing a sudden slowdown in fiber demand. As retail sales fell, inventories of finished products built up at the cutter and retail level.

Although acrylic and nylon fibers continued to do well in the second quarter, the depressed state of the polyester filament business severely impacted operating income for the quarter. A serious supply-demand imbalance in apparel-denier polyester

(Dollars in millions)

	Sales	Operating Income
1976	\$853.5	\$ (10.6)
1975	747.2	(17.2)
1974	770.0	65.2
1973	701.8	119.5
1972	532.5	48.5



Carpeting of *Ultron* nylon combines beauty with advanced static-shock control, achieved by a patented conductive filament incorporated into the fiber.



Versatile *Acrilan* acrylic fiber makes an attractive fabric for soft luggage. Monsanto enjoys a strong technological and raw material base for the production of acrylics.

filament became more noticeable as demand for conventional polyester double knit dropped, resulting in severe price reductions.

OPERATING LOSS WIDENS

The operating loss for the Textiles Company widened in the third quarter. Industry-wide shipments of nylon, acrylics and polyester fibers reached their lowest level for the year—down nine per cent from the third quarter of 1975.

Consumer demand still had not come back into the soft goods market as expected, and the prolonged tire strike in the United States resulted in low operating rates for industrial nylon. There was further price attrition

in polyester filament.

Retail sales in the fourth quarter began to perk up, and it appeared that the inventory glut in the distribution and retail network was diminishing. U.S. shipments of nylon, acrylics and polyester improved from the third quarter but were off modestly from a relatively strong fourth quarter of 1975. The polyester pricing situation continued depressed but stabilized during this period.

On December 3, Monsanto announced that it would close the Tuscaloosa, Alabama plant of its wholly-owned subsidiary, Olympia Industries, Inc. This plant, which produced dyed polyester yarn, had operated at a substantial loss for three

years because of industry overcapacity in package dyed polyesters.

Furthermore, projections showed it would be difficult to restore it to profitability in the foreseeable future. For the year, Olympia Industries incurred a pre-tax operating loss of approximately \$8 million at the Tuscaloosa plant. With the decision to close the plant, a charge-off of 20 cents per share was made in the fourth quarter.

EUROPE MORE UNCERTAIN

In Europe, where Monsanto has approximately 25 per cent of its total capacity for acrylic and nylon fibers, the man-made fiber business was even more uncertain. Business improved



Bundled up against chilly winds off the Thames, these Londoners are wearing sweaters and scarves made of *Acrilan* acrylic fiber, which offers warmth without weight, rich color and ease of care.

during the early part of 1976, but at a slower rate than anticipated. Plants were operated at about 75 per cent of capacity, an improvement over the 50-60 per cent rates of 1975—but it was evident that the industry in general was operating at a loss.

Selective price increases were put into effect, but business worsened in the second half of the year. Inventories grew, along with pricing pressures, and some manufacturers began to close plants. The supply-demand imbalance in Europe is expected to persist for some time.

PROGRESS DESPITE LOSSES

Despite the continued operating losses in the man-made fibers area, the

operating company was able to achieve positive, quantitative developments during the extended business trough, resulting in a substantial reduction in year-to-year operating loss.

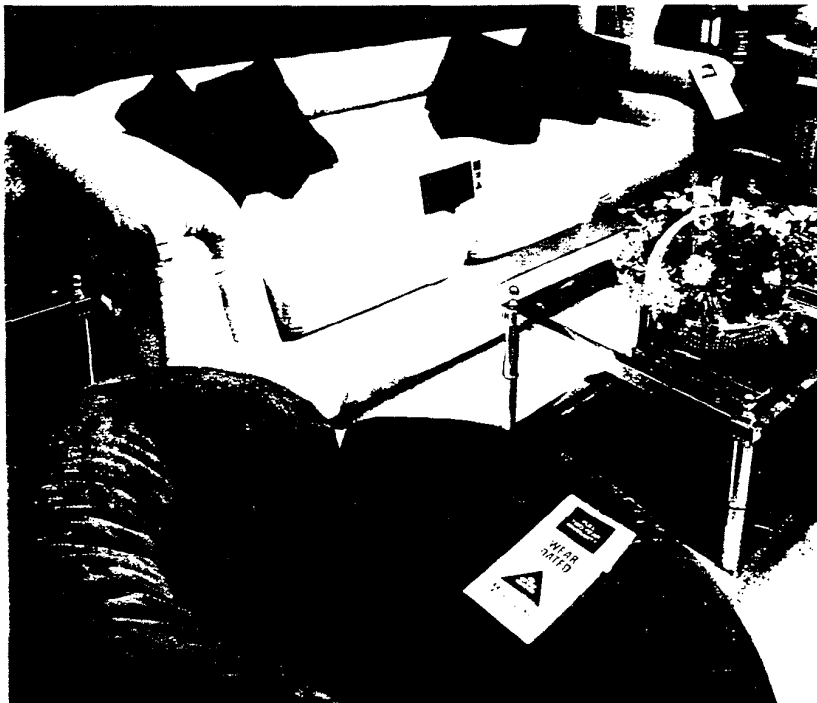
The total nylon fiber business in the United States improved in 1976 despite the extended strike in the tire industry and nylon fiber imports affecting the apparel market. Nylon carpet business was strong throughout the year, with record shipments being made. To maintain this improved position, Monsanto continues to expand its raw material base in Pensacola, Florida and Decatur, Alabama.

In the third quarter of 1976, *Ultron* continuous filament nylon carpet yarn

was commercialized. *Ultron* yarn combines the ability to hide soil with improved resistance to static build-up. This improved static performance is a result of a patented conductive carbon stripe filament, specifically designed to have a pleasing effect on the appearance of the carpet.

There was good demand for acrylic fibers in both apparel and home furnishing areas throughout the year, which resulted in a price increase in apparel fibers in July. Year-to-year volume in acrylic fibers was up significantly.

During 1976 a new finer denier acrylic fiber called *Fina* was commercialized, which is designed to improve Monsanto's ability to



Forty furniture manufacturers now feature upholstery carrying the Monsanto *Wear-Dated* warranty, which certifies that the fabric will withstand two year's normal wear or will be replaced or repaired by Monsanto.

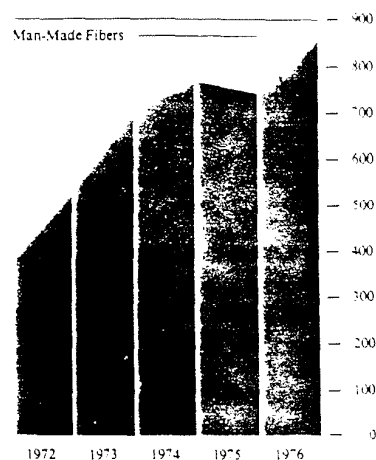


Elegance, style and easy care make fabrics of Monsanto polyester fiber popular additions to the 1977 spring fashions.

participate in spring and summer light weight fabrics.

The company continues to direct significant technical effort toward the development of new and improved nonwoven fabrics. *Cerex*, the first nonwoven fabric commercialized by the Textiles Company, has had good acceptance in end uses where esthetics are secondary, such as carpet underlay, filtration systems and quilting.

1976 HIGHLIGHTS
(Dollars in Millions)



Erosion was a serious problem at this Texarkana, Texas, park before the U. S. Army Corps of Engineers covered banks with *Bidim*, a nonwoven polyester fabric that allows water to pass through while trapping the soil.



Tall ships from many nations, each flying an official Op Sail '76 pennant made of *Acrilan* acrylic fiber, sailed into New York harbor on July 4 to celebrate the United States' 200th birthday.

MONSANTO INTERNATIONAL

Monsanto's international operations benefited from improved worldwide business conditions. In many countries abroad, however, the recovery from 1975's recession was less robust than in the United States and lagged the U.S. recovery by several months.

Despite these challenging conditions, Monsanto was able to achieve record 1976 sales and a meaningful improvement in operating income as compared with 1975. For 1976, sales outside of the United States, which included U.S. exports, were \$1.292 billion, a 21 per cent increase over the \$1.067 billion reported for 1975. Operating income also improved and was \$105.5 million, compared with \$81.4 million for 1975.

Monsanto's operating companies generally have worldwide responsibility for product lines. Worldwide sales and income have been included, therefore, in the operating company sections. The international presentation is aimed at providing shareowners with another perspective of Monsanto's operations.

EUROPEAN RESULTS

In Europe, management was faced with high rates of inflation, price controls in many countries, and sluggish economic growth in the United Kingdom, Spain and Italy. Nevertheless, European sales increased 18 per cent to \$697.3 million and operating income reached \$37.4 million compared with \$13.4 million for 1975.



Extensive field testing in the Far East ensures that *Machete* herbicide meets the needs of this Japanese farmer and thousands of others in the rice growing nations of the Pacific Basin.

Sales include U.S. exports.

European drought conditions reduced sales of *Avadex* herbicides, but these reduced sales were offset by increased demand for *Roundup* herbicide, particularly for control of couchgrass in the United Kingdom and on the Continent. Demand for rubber chemicals continued strong throughout the year, and sales of rubber chemicals to Russia and other Eastern European countries improved.

Sales of *Saflex* continued to grow as more European automobile manufacturers specified Monsanto's plastic windshield interlayer for safety reasons. Demand for *Lustran* ABS plastics also registered significant gains during the year, as did demand for

resins and petrochemicals.

As in the United States, demand for man-made fibers and polystyrene plastics improved measurably but industry over-capacity caused selling prices to be depressed. These factors had a severe negative impact on European operating income.

Monsanto's Spanish affiliate, Aiscondel, S. A., a major producer and fabricator of plastic products, had a difficult year. In addition to operating in the sluggish economic environment of Spain, Aiscondel's profitability was penalized by significantly higher raw material costs and higher plant start-up costs associated with a new vinyl chloride monomer plant.

CANADA AND LATIN AMERICA

Sales in Canada and Latin America reached a record \$431.0 million in 1976—a 27 per cent increase from the \$340.0 million reported for 1975. Sales include exports from the United States. Operating income for Canada and Latin America was \$63.0 million in 1976 compared with \$61.0 million in 1975.

The Canadian economic recovery pattern closely paralleled that of the United States but did not initially exhibit the same degree of strength. The Company recorded substantial increases in sales of *Avadex* herbicides, used to control wild oats in small grains in Canada. Demand increased for rubber chemicals, food and fine



Monsanto's long-established rubber chemicals business was expanded here at Ruabon, North Wales, where production began at a new facility for *Santogard* PVI.

Safety standards around the world increasingly require vehicles, such as London's double-decker buses, to use shatter-resistant glass. Monsanto produces *Saflex* an interlayer for laminated safety glass.

chemicals, detergents and phosphates, and functional fluids.

In Latin America, the Company was faced with severe inflation and the very real national concerns of large balance of payments deficits for those countries dependent on petroleum imports.

However, significant gains were made in sales of herbicides, phosphates and rubber chemicals. Early in 1976, a Monsanto subsidiary in Brazil purchased the holdings of the Koppers Company in that country. The acquisition included partial ownership of entities engaged in the production and sale of styrene monomer and polystyrene plastics.

In Mexico, the government devalued the peso, which resulted in a charge of

28 cents per share.

In addition, shipments of phosphorus to Mexico were affected by a weaker detergent market in that country and a government program aimed at greater self-sufficiency in phosphorus production.

Monsanto's Mexican affiliate, Industrias Resistol, S. A., recorded increased sales across virtually all of its product lines.

ASIA-PACIFIC

For 1976, sales for Asia-Pacific increased 20 per cent to \$163.7 million and operating income was \$5.1 million, compared with \$7.0 million in 1975. Sales include U.S. exports.

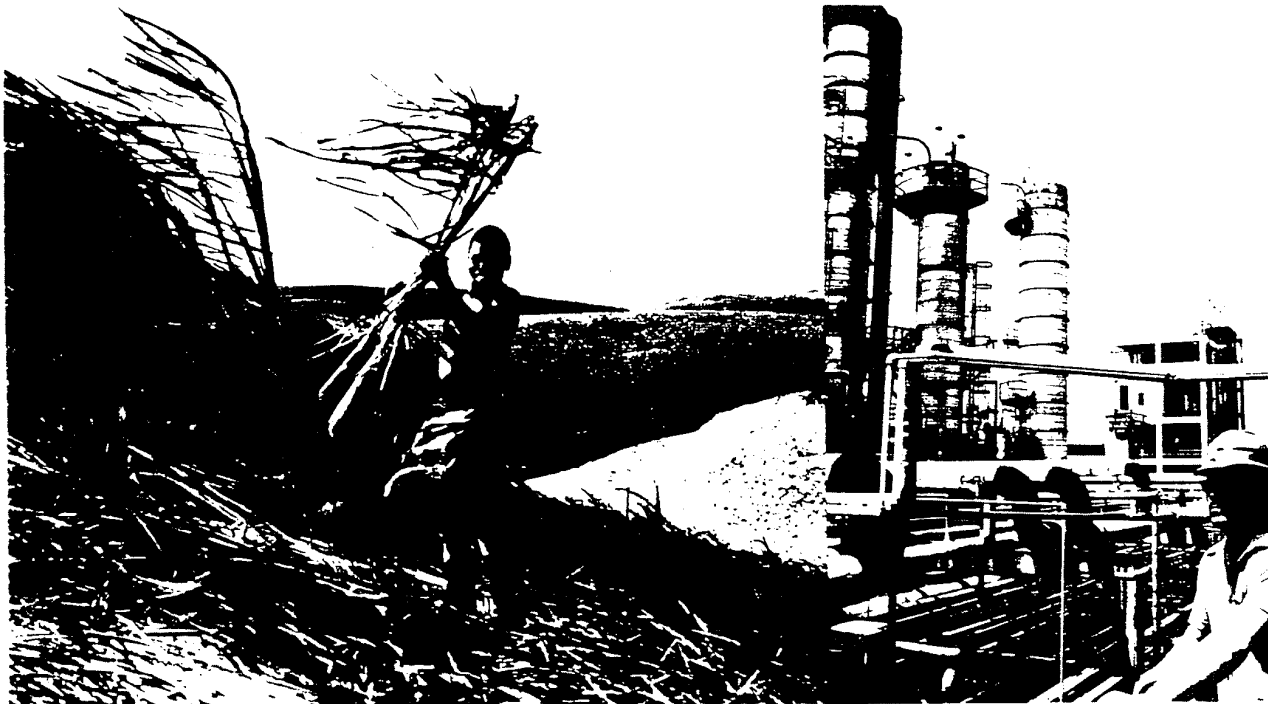
Monsanto has a relatively small, but

increasingly important, position in the Asia-Pacific area and during 1976 defined long-range strategies to improve its sales penetration and product distribution.

Sales of *Machete* herbicide, used to control weeds in rice fields, gained market share in Japan and were the clear market leader in other major rice-producing countries including the Republic of Korea and Taiwan.

Monsanto's position in Australia was further solidified as construction continued on a world-scale styrene monomer plant at West Footscray.

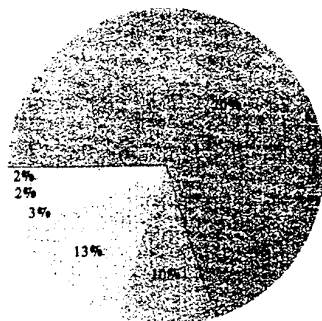
In Japan, sales and income of Monsanto's affiliate, Mitsubishi Monsanto Chemical Company, rebounded strongly.



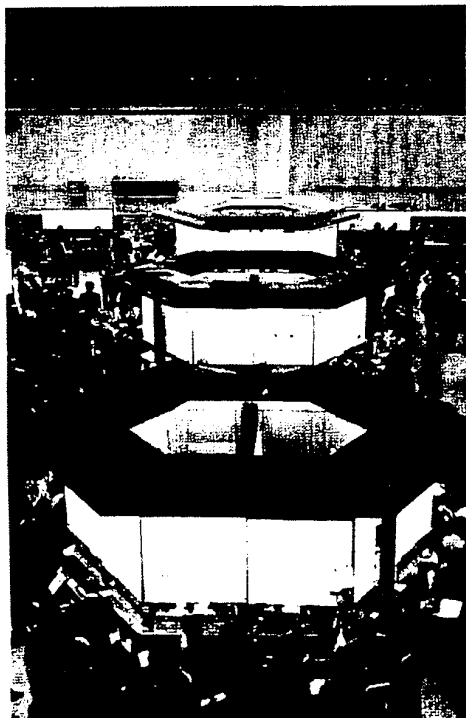
After the harvest of this African sugarcane crop, *Roundup* herbicide will be applied to the field to kill root systems, eliminating serious erosion problems caused by traditional plowing.

During 1976, Monsanto strengthened its position in the Brazilian plastics market with the purchase of partial ownership in two polystyrene plants and this styrene monomer plant at Cubatao.

SALES BY WORLD AREA-1976



45 United States
24 Exports from U.S.
24 Europe-Africa
2 Canada
3 Latin America
Asia-Pacific



Monsanto's common stock is traded on the New York Stock Exchange and other major exchanges including London, shown here, and Paris, Amsterdam and certain Swiss, German and Belgian exchanges.

Worldwide Interests

Included among Monsanto's member companies around the world are those appearing in the following list. Per cent ownerships are noted parenthetically. In addition, there are a number of other member companies not listed, many of which have been established for marketing or investment purposes.

NORTH AMERICA

United States

Farmers Hybrid Companies, Inc. (100%) produces hybrid breeding swine.

Fisher Controls Company, Inc. (100%) manufactures and markets process measurement and control equipment.

Monsanto Enviro-Chem Systems, Inc. (100%) develops and markets engineered chemical facilities and pollution-abatement systems.

Monsanto Flavor/Essence, Inc. (100%) manufactures essential oils, aroma chemicals, flavors and fragrances.

Monsanto International Finance Company (100%) obtains funds abroad to help finance overseas expansion.

Monsanto Research Corporation (100%) conducts research for government agencies and for Monsanto; produces nuclear sources; operates a government-owned laboratory.

United Systems Corporation (100%) manufactures electronic test and measurement instruments.

Canada

Monsanto Canada Limited (100%) manufactures chemicals and plastics.

EUROPE-AFRICA

Belgium

Monsanto Europe, S.A. (100%) area headquarters and coordinating office for Monsanto's manufacturing, marketing and research in Europe (chemicals, plastics, man-made fibers).

France

Societe Monsanto, S.A. (100%) manufactures plastics.

Israel

Israel Chemical Fibres Limited (53%) manufactures acrylic fiber.

Luxembourg

Monsanto Cie. S.A. (100%) manufactures nylon 6,6 yarns.

Spain

Aiscondel, S.A. (50%) makes consumer plastic products. A subsidiary produces chemicals and plastics.

United Kingdom

Monsanto Limited (100%) manufactures and markets chemicals, plastics, acrylic fiber and nylon 6,6 yarns.

West Germany

Monsanto (Deutschland) GmbH (100%) manufactures acrylic fiber and markets Monsanto products.

LATIN AMERICA

Argentina

Monsanto Argentina S.A.I.C. (100%) manufactures plastics and chemicals.

Brazil

Industrias Monsanto, S.A. (100%) manufactures rubber chemicals and phosphates and process control equipment.

Cia. Brasileira de Plasticos Monsanto (57%) manufactures polystyrene.

Goyana, S.A. Industrias Brasileiras de Materias Plasticas (44%) manufactures and markets plastic products.

Mexico

Industrias Resistol, S.A. (39%) produces chemicals and plastics.

Compania Industrial de Plasticos, S.A. (100%) fabricates plastic consumer products.

ASIA-PACIFIC

Australia

Monsanto Australia Limited (100%) manufactures chemicals and plastics. Affiliate companies produce fluorocarbons and synthetic latex products.

Hong Kong

Monsanto Far East Limited (100%) supervises marketing of Monsanto products in the Asia-Pacific area outside Japan and Australia.

Indonesia

P.T. Monsanto Pan Electronics (83%) assembles light emitting diodes.

Japan

Mitsubishi Monsanto Chemical Company (49%) manufactures and markets chemicals and plastics.

Malaysia

Monsanto Electronics Sendirian Berhad (100%) assembles light emitting diodes.

RESEARCH AND DEVELOPMENT

Monsanto's research and development efforts are multi-faceted. They are concerned with finding new products to meet current and future societal needs. They are concerned with the development of new uses and new markets for existing products. And they are concerned with the optimization of production at the lowest possible costs.

Today's most vivid example of Monsanto's results-oriented research is found in the Company's broad line of agricultural herbicides. The length of time required to develop and commercialize a new agricultural chemical is such that our research must be targeted one to two decades in the future, since it takes nearly seven years from the time we discover an active

chemical before we are ready to sell it in the marketplace.

In the typical development of a single herbicide, Monsanto researchers examine and reject about 20,000 separate compounds. Products such as *Lasso*, *Ramrod*, *Avadex*, *Machete* and *Roundup* herbicides involved the testing of some 100,000 chemical compounds; and each product with commercial potential requires years of environmental testing, including at least two years of feeding tests, before U.S. label clearance can be granted. Success can be spectacular, but the probabilities are extremely small.

Beyond the continuing work in herbicides, a major agricultural research program continues in the development of plant growth regulators—chemicals which modify



Climate control chambers at St. Louis agricultural laboratories allow scientists to monitor plant growth in carefully controlled conditions to test reactions to specific environments. These tests help develop more effective products.

Equipment simulating sewage treatment plants test the biodegradability of new detergent ingredients. Successful candidates will produce high performance detergent products.

the ways in which crops grow, with the end result being more yield. The first commercial product out of this program, *Polaris*, has already gained wide acceptance for use on sugarcane. New candidates for products to enhance the growth of other crops are now in the early stages of testing.

Looking further to the future in agriculture is a fundamental research program aimed at the discovery of entirely new ways to improve yields of the major food crops. Products from this cell biology program may either supplement, or perhaps compete with, the output of plant geneticists as they attempt to breed higher yielding crop varieties.

PRODUCT IMPROVEMENTS

New product uses, to fill specific

needs, are initiated with older products such as nylon. Indicative of this developmental approach was the introduction in 1976 of *Ultron* continuous filament nylon yarn which has the ability to hide soil and reduce unpleasant shocks caused by static electricity. *Ultron* incorporates in the fiber a patented conductive carbon stripe filament that virtually eliminates shock.

Monsanto's electronics business provides another example of expanding the market potential of existing products, in the continued development of green, yellow and orange light emitting diodes. Red has been the traditional color for use in calculators, watches and instruments; the new colors will lead to broader applications. Work also continues

toward improving the brightness and uniformity of all colors.

A leading producer of rubber chemicals, Monsanto has been able to achieve success in the development of new testing instruments for the rubber industry with the introduction of a new line of mixing control instruments called power integrators. These instruments improve the quality of rubber products by increasing the uniformity of rubber processing.

Applications research continued during 1976 on Monsanto's line of engineering plastics; basic research is also underway to develop more plastics for high performance end-uses.

PROCESS DEVELOPMENT

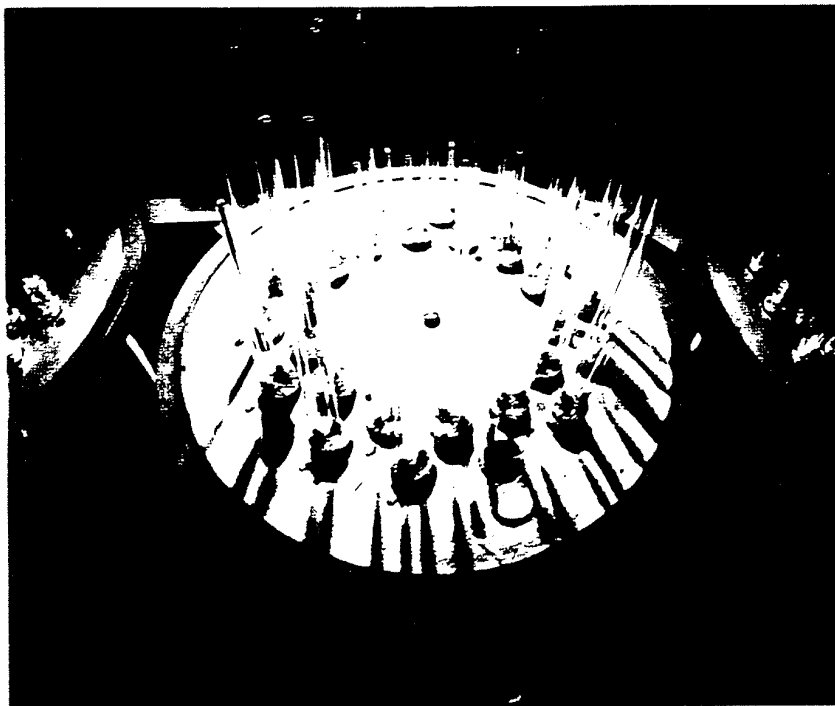
A great deal of effort—unheralded but vital for Monsanto's continued success—involves process development. Finding new and better ways to produce Monsanto's existing products is a never ending challenge.

Advanced computer technology has been integrated into polymer processes across the Company's plastics product line, strengthening process and quality control. New technology in styrene plastics manufacturing improved this entire family of products while reducing air and water emissions.

Another recent success is the development of proprietary technology that enables Monsanto to use butane, rather than less abundant benzene, as a raw material for the production of maleic anhydride—an intermediate chemical used in the manufacture of plastics, paints and other products.

The Company's research effort in basic raw materials emphasizes the development of innovative, alternative methods of manufacture, the evolution of improvements in existing processes, and the recovery of products from plant waste streams.

Monsanto's overall research and development activities encompass all phases of the Company's activities—from products to pollution control to energy conservation to environmental concerns.



Rubber compounds made with Monsanto rubber chemicals are heated at the Akron, Ohio, laboratories to test resistance to oxidation and thermal aging. Monsanto is a leading producer of chemicals used in the manufacture of natural and synthetic rubber.

DSW 021041

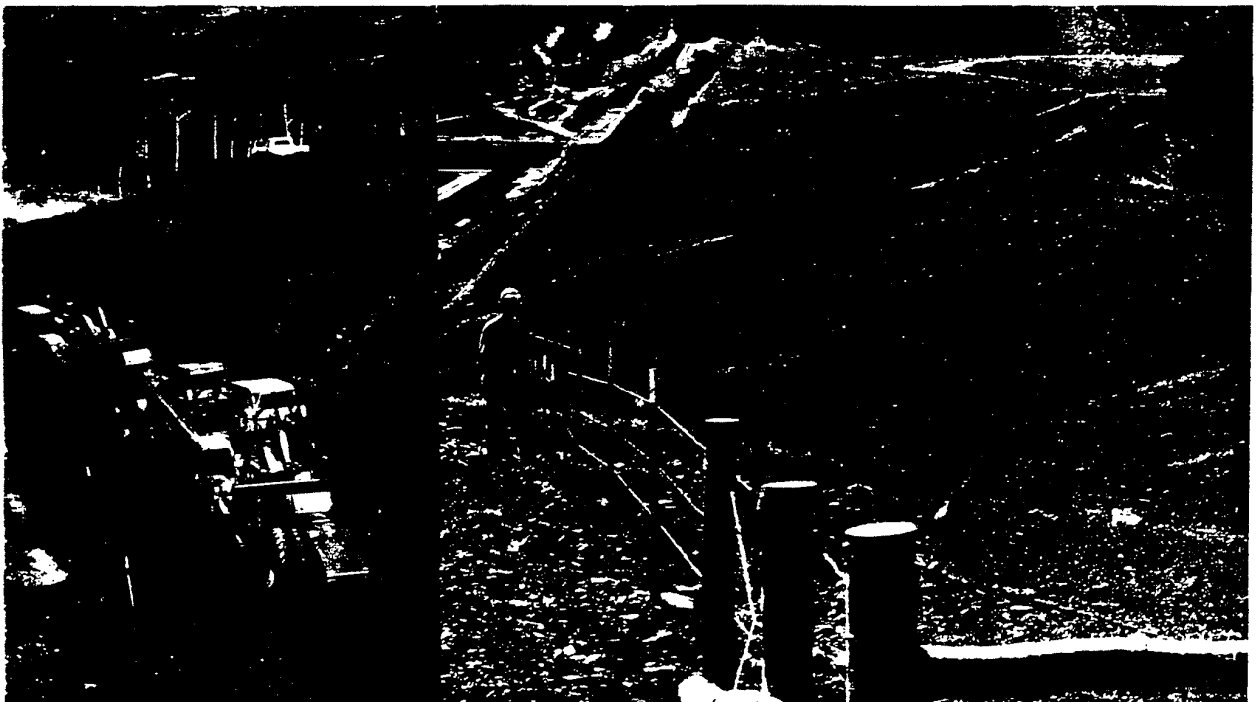
SOCIAL RESPONSIBILITY

Corporate social responsibility touches a kaleidoscope of issues—equal employment opportunity, ethical behavior, energy conservation, employee and product safety and many more. Patterns and emphases change, but each reflects changing attitudes toward corporate responsibility.

For years, Monsanto has initiated programs and policies that recognize its responsibilities beyond the traditional business activities of making and selling products, earning a profit and paying dividends to its shareowners. But as public demands for social accountability increased, and as laws set stricter guidelines for business operations and reporting, it became clear that Monsanto needed to

reexamine how it defines its overall social goals and to improve coordination of existing programs.

Late in 1976, Chairman John W. Hanley announced the formation of a Social Responsibility Committee made up of top executives. The committee has the job of identifying social responsibility problems and opportunities within Monsanto by assessing the consequences of corporate actions in light of the legitimate demands of society. In the process, it will be seeking to promote a heightened sensitivity on the part of Monsanto's management personnel with respect to the social consequences of their actions.



Land reclamation at Monsanto's phosphate mine near Soda Springs, Idaho, begins as overburden that covers the ore is carefully removed, then stored in specially-designed piles that reduce erosion and promote revegetation.

38

After mining, overburden is returned to the pit, graded into the contours of the surrounding land, and reseeded with trees and grasses that retain the natural beauty of the area and provide forage for wildlife.

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COMMUNITY SUPPORT

Monsanto's support of community activities is administered by its philanthropic arm, the Monsanto Fund. Annually, the Fund makes grants to more than 500 organizations and groups which have received necessary tax-exempt status from the federal government. During 1976, the Fund distributed \$2.7 million to private colleges and universities, the arts, community organizations, the United Way programs across the country and other groups. Other corporate donations totaled some \$1.3 million for projects outside the tax guidelines of the Fund.

PRODUCT SAFETY

Monsanto does not knowingly sell

products without regard to their potential impact, even with proper use, on employee, customer or consumer health or the environment in which we live. To this end, the Company has followed a rigorous product-testing program. As has been the general practice in the chemical industry, this testing has been subcontracted to private laboratories, and the extent of the attention paid to this important matter is best reflected by the fact that the Company's product-testing budget has increased fifteen-fold over the past eight years.

During 1976, steps were taken to add additional testing capability. First is Monsanto's active support of and participation in the Chemical Industry

Institute of Toxicology (CIIT) located in North Carolina. CIIT is an independent laboratory for the scientific study of toxicological issues involved in the manufacture, handling, use and disposal of commodity chemicals—the building blocks of the industry.

The second was the decision to develop a substantially enlarged "in-house" capability in toxicology. To this end, the Company is planning to build a multimillion dollar biological research and testing laboratory in the Washington University Medical School complex in St. Louis. This "in-house" effort will supplement subcontracted testing activity in that it will increase our capability for testing the medical and environmental effects of present



Successful equal employment opportunity programs are measured by the ability to remove all artificial barriers in attracting outstanding people. Here, Reuben Young works on soybean research at Monsanto's agricultural laboratories.

Dr. Virginia Menikheim, a senior research specialist and author of 11 patents, last year was named a Monsanto Fellow. The Monsanto Fellow program recognizes the top one per cent of the Company's technical people.

Job safety requires well designed facilities and processes, strict rules about personal safety gear such as hard hats and glasses, and intensive training. Monsanto plants are among the safest workplaces in the United States.

39

DSW 021043

and future products, raw materials and chemical intermediates.

As discussed earlier in the Annual Report, massive doses of acrylonitrile fed to laboratory animals in drinking water were found to cause abnormalities. These preliminary findings, reported half way through a two-year industry-sponsored study, were transmitted to various governmental agencies. Monsanto has initiated its own long-term feeding studies to determine the level at which acrylonitrile monomer can be fed in drinking water to laboratory animals without effect.

Also as discussed earlier, Monsanto will completely withdraw from the production and sale of polychlorinated biphenyls which have been found to be persistent in the environment.

EQUAL EMPLOYMENT OPPORTUNITY

Monsanto has long made determined and sustained efforts to provide career opportunities for minorities and females, particularly in nontraditional jobs. Emphasis is not only on hiring, but also on training, development, upgrading and promoting qualified people. Monsanto employs women and minorities as financial managers; chemical, mechanical and structural engineers; plant superintendents, and chemical operators.

Women and minorities classified as managers and supervisors increased from 123 in 1971 to 310 in 1975. When 1976 figures are compiled, that number should exceed 400. In professional jobs, women and minorities held 655 positions in 1975 compared to 243 in 1971. In white-collar jobs, excluding office and clerical work, women and minority representation increased from 786 to 1,667 between 1971 and 1975.

EMPLOYEE SAFETY

Monsanto plants and locations consistently have been among the

safest workplaces in the United States. During 1976, Monsanto's worldwide disabling injury frequency rate was well below that of the chemical industry and significantly under the average for all U.S. industry. Seventy-eight company locations received special recognition during the year for safety achievements.

Aggressive programs for safety instruction and monitoring of the environment in plants are the most effective means for continuing the Company's safety record.

ENVIRONMENTAL PROTECTION

Protecting the environment takes advanced technology and large amounts of capital. In 1976, Monsanto spent \$85 million on environmental projects worldwide.

Operating costs for pollution control totaled some \$47 million worldwide, and more than 400 full-time employees were needed for environmental control work.

ENERGY CONSERVATION

Energy conservation has had top priority at all Monsanto facilities since 1973. In the first years, strict policing of existing operations reduced energy requirements per pound of product by five to eight per cent. New technology and more efficient plant designs now being used will result in larger savings. The voluntary goal of the U.S. chemical industry, including Monsanto, is to reduce energy use per pound of product 15 per cent by 1980.

During 1976, Company-wide conservation programs were highlighted by projects at the Texas City and Chocolate Bayou, Texas, plants.

IMPROPER PAYMENTS

Late in 1976, the Company reported to the Securities and Exchange Commission that a detailed investiga-

tion of worldwide operations had disclosed some instances of questionable or improper commercial and governmental payments abroad during the previous five and a half years. None of the questionable payments were made in the United States, and no illegal corporate political contributions were made in either the United States or in any foreign country.

These questionable or improper payments were and are contrary to Monsanto's policies and the Company deplores them. They have been stopped, and appropriate internal steps have been taken to assure that such practices are not repeated and to reinforce Company policy against all improper payments.

DEFINING MONSANTO'S RESPONSE

Monsanto fully recognizes that it must operate within the bounds established by the public it serves. The Company's continued success depends not only on how well it conducts its business activities, but also on how successfully it responds to the needs of society.

The Social Responsibility Committee will aid in defining those needs and provide leadership in developing an improved framework for management decision-making on the corporation's future role in our total society.

Involving people from throughout the Company is an important part of the Social Responsibility Committee's work. Not only will the widespread participation make available the expertise of people already involved in programs, but it also will ensure that the committee continues as an integral part of the Company's many business activities. The committee's main function is to create an environment in which responsibility for the social consequences of Monsanto's actions is accepted by managers at all levels.

FINANCIAL STATEMENTS

Contents

Financial Review	42
Responsibilities for Preparation of Financial Statements	49
Accountants' Opinion	49
Summary of Significant Accounting Policies	50
Statement of Consolidated Income ..	51
Statement of Consolidated Financial Position	52
Statement of Changes in Consolidated Financial Position	54
Statement of Consolidated Shareowners' Equity	55
Notes to Financial Statements	56
Ten-Year Summary	64

DSW 021045

FINANCIAL REVIEW

(Dollars in millions, except per share)

Operating Results

Monsanto's consolidated sales for 1976 were the highest in the history of the Company. Benefiting from economic recoveries around the world, sales were \$4.270 billion, \$645 million, or 17.8 per cent higher than the sales level attained for 1975.

Net income for the year was also a record at \$366.3 million—an improvement of \$60.0 million or 19.6 per cent over 1975.

Primary earnings per common share were \$10.05 and fully diluted earnings were \$9.77 per share. For 1975, primary earnings were \$8.63 and fully diluted earnings were \$8.22.

The table below sets forth sales, net income and net income per common share for 1976 and 1975 by quarters.

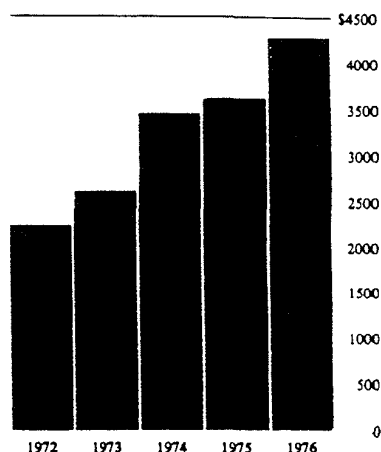
		Net Income per Share		
	Net Sales	Net Income	Primary	Fully Diluted
1976:				
First Quarter	\$1,173.6	\$156.9	\$ 4.40	\$4.19
Second Quarter	1,063.4	98.4	2.69	2.62
Third Quarter	998.4	63.4	1.69	1.69
Fourth Quarter	1,034.8	47.6	1.27	1.27
Year	<u>\$4,270.2</u>	<u>\$366.3</u>	<u>\$10.05</u>	<u>\$9.77</u>
1975:				
First Quarter	\$ 912.7	\$ 97.4	\$ 2.79	\$2.62
Second Quarter	884.7	74.1	2.08	1.98
Third Quarter	884.8	56.1	1.56	1.51
Fourth Quarter	942.5	78.7	2.20	2.11
Year	<u>\$3,624.7</u>	<u>\$306.3</u>	<u>\$ 8.63</u>	<u>\$8.22</u>

The year-to-year improvement in sales and net income for 1976 resulted from increased demand for virtually all products produced by the Company. The pattern of growth in sales over 1975 closely paralleled the strength of the economic recovery from the recession that began with the fourth quarter of 1974. For the first quarter, sales were 28.6 per cent higher than those of the first three months of 1975. For the second quarter, reflecting the moderating pace of industrial growth around the world, the year-to-year increase was 20.2 per cent. A still smaller gain was recorded for the third quarter, and the year-to-year gain for the last three months of the year was only 9.8 per cent.

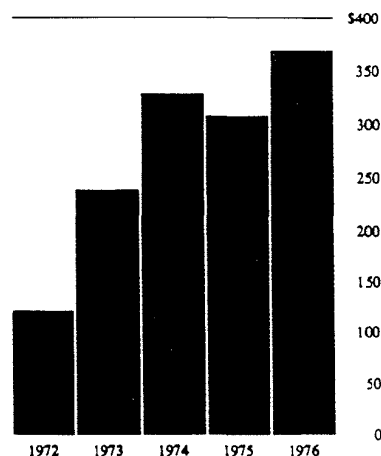
On a year-to-year basis, net income for each of the first three quarters of the year was an improvement over 1975. For the fourth quarter, net income fell below that of the last three months of 1975—the highest fourth quarter earnings period that the Company had ever enjoyed. The results for the last three months of 1976 reflected worldwide economic conditions. In addition, fourth quarter earnings were affected by several nonoperating factors which are discussed under the caption "Analysis of Change in Primary Earnings" on page 46.

The year-to-year sales gain of 17.8 per cent was represented primarily by increased product shipments and, to a smaller extent, higher selling prices. The combined impact of improved sales volume and product mix and somewhat higher selling prices was sufficient to offset higher dollar manufacturing costs—including raw materials, energy and utilities, and start-up expenses. However, gross profit margin, as a per cent of sales, declined slightly from that attained in 1975.

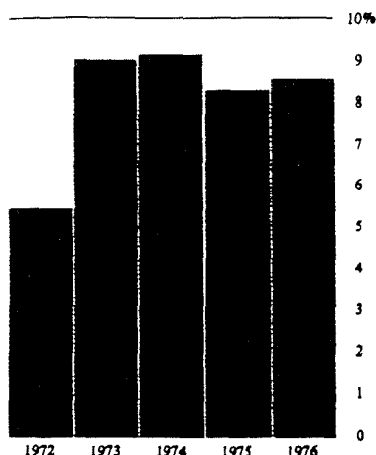
NET SALES



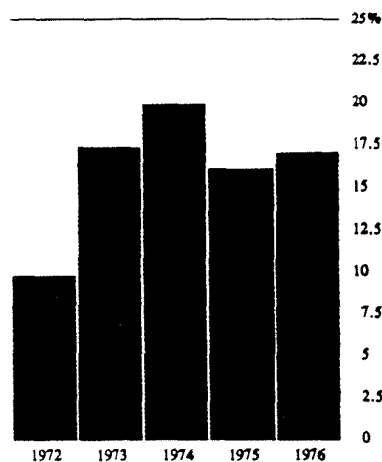
NET INCOME



NET INCOME
(as a per cent of net sales)



NET INCOME
(as a per cent of average
shareowners' equity)



Sales and operating income—defined as income before interest expense, other income charges and credits and the provision for income taxes—by lines of business for 1976 were:

Sales

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
Agricultural Products	\$ 277.3	\$ 115.6	\$ 89.2	\$ 91.1	\$ 573.2
Chemical Intermediates	110.6	128.4	117.9	119.3	476.2
Commercial Products	95.5	103.7	99.7	99.3	398.2
Industrial Chemicals	243.2	234.0	231.5	241.7	950.4
Plastics & Resins	230.2	264.5	259.7	264.3	1,018.7
Textiles	216.8	217.2	200.4	219.1	853.5
Total Company	\$1,173.6	\$1,063.4	\$998.4	\$1,034.8	\$4,270.2

Operating Income

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
Agricultural Products	\$ 134.0	\$ 50.5	\$ 29.8	\$ 21.8	\$ 236.1
Chemical Intermediates	35.3	43.7	36.2	33.2	148.4
Commercial Products	0.5	0.4	2.1	(5.5)	(2.5)
Industrial Chemicals	60.7	53.9	42.4	43.8	200.8
Plastics & Resins	24.9	33.1	24.7	12.9	95.6
Textiles	16.5	0.6	(10.5)	(17.2)	(10.6)
Total Company	\$ 271.9	\$ 182.2	\$124.7	\$ 89.0	\$ 667.8

Quarterly sales and operating income data by lines of business have been restated to reflect the formation of a sixth operating unit and management's decision to transfer between operating units at cost—rather than at market price—certain major "building block" chemicals.

The decision to change from a market price to a cost transfer basis is a result of the formation of the Chemical Intermediates Company which centralizes the manufacture of all of the major chemical "building blocks"—whether sold on the merchant market or moved internally—in this unit. The "building block" chemicals that will be transferred at cost, between the operating units of the Company, include acrylonitrile, ammonia, styrene monomer and nylon salt.

The restated data for 1972 through 1976 reflect management's best judgment as to the amounts that would have been reported for sales and operating income if the cost transfer basis had been used in those years.

The sales and operating income of the Company have a noticeable seasonal pattern reflecting the herbicide sales of agricultural products. The herbicide sales of this unit in the United States are concentrated in the early months of the year and, particularly, in the first quarter.

In terms of relative size of contribution, Plastics & Resins is the largest operating unit in sales and Agricultural Products continued to provide the most substantial contribution to operating income. Sales and operating income for the last five years—on the six operating company basis using cost transfers for certain major chemicals—are included in the sections of the Annual Report dealing with the individual operating units.

FINANCIAL REVIEW

(Dollars in millions, except per share)

Sales by Product Group

Sales of all major product groups, with the exception of Detergents & Phosphates, recorded increases over 1975. The biggest year-to-year percentage increases were recorded by Plastic Materials, Resin Products and Chemical & Environmental Systems. Significant year-to-year gains were also scored by Specialty Chemicals, Process Chemicals, Petrochemicals, and Process Controls & Electronics.

The demand for phosphates and other phosphorus derivatives was not sufficient to offset the lower sales volume of detergent-grade phosphates and phosphorus exports; consequently, Detergent & Phosphate sales were slightly down from 1975.

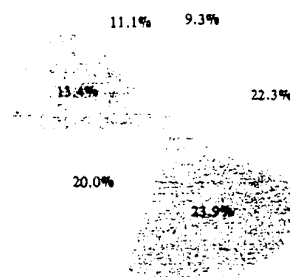
Even though the herbicide business was up substantially, Agricultural Products ended the year with only a modest sales increase as a result of price attrition in nitrogen-based products and a lower volume of insecticide sales.

Sales by Product Group	1976	1975	1974	1973	1972
Agricultural Products:					
Herbicides, Insecticides & Other Products	\$ 573.2	\$ 547.4	\$ 410.7	\$ 283.4	\$ 222.3
Chemical Intermediates:					
Petrochemicals	284.0	230.5	258.1	143.6	121.6
Process Chemicals	125.2	101.3	107.9	74.2	63.0
Oil & Gas Production and Exploration	67.0	58.5	50.8	29.5	27.8
Commercial Products:					
Process Controls & Electronics ..	286.3	237.9	212.4	194.3	137.3
Chemical & Environmental Systems and Other Products ...	111.9	80.8	86.6	45.0	48.4
Industrial Chemicals:					
Detergents & Phosphates	310.5	315.4	254.5	173.9	161.5
Specialty Chemicals	254.9	206.3	196.5	143.8	120.5
Rubber Chemicals	199.0	172.4	169.7	127.2	103.2
Plasticizers	186.0	158.7	168.1	108.6	88.3
Plastics & Resins:					
Plastic Materials	499.6	351.1	385.9	278.5	222.4
Resin Products	291.5	223.5	227.9	184.2	151.4
Fabricated Products	227.6	193.7	198.8	159.7	155.4
Textiles:					
Man-Made Fibers	853.5	747.2	770.0	701.8	532.5
Sales from Continuing Operations	4,270.2	3,624.7	3,497.9	2,647.7	2,155.6
Sales from Discontinued Operations					69.8
Total Company	\$4,270.2	\$3,624.7	\$3,497.9	\$2,647.7	\$2,225.4

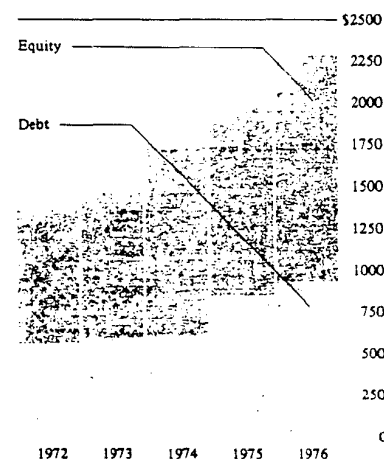
Worldwide Operations

In 1976, businesses in all world areas improved over the recession year of 1975. Sales made outside of the United States, that is, sales of products manufactured in the United States and exported plus the sales of products manufactured outside of the United States, amounted to \$1.292 billion, an improvement of \$225 million or 21.1 per cent over the \$1.067 billion sales of 1975.

NET SALES-1976



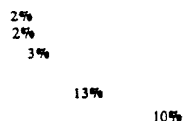
SHAREOWNERS' EQUITY AND LONG-TERM DEBT



SALES BY WORLD AREA-1976

Sales by World Area

	1976	1975	1976 Over 1975		Per Cent of 1976 Sales
			Amount	Per Cent	
United States	\$2,978.2	\$2,557.3	\$420.9	16%	70%
Exports from U.S.	427.2	355.7	71.5	20	10
Europe-Africa	557.0	480.9	76.1	16	13
Canada	126.6	104.3	22.3	21	3
Latin America	93.8	55.2	38.6	70	2
Asia-Pacific	87.4	71.3	16.1	23	2
Total Company	\$4,270.2	\$3,624.7	\$645.5	18%	100%



As a result of this sales increase, operating income of subsidiaries outside of the United States improved as compared with 1975. The same was true of the profit results of the affiliate companies that are not consolidated. In addition, royalty income from nonconsolidated affiliates and other licensees outside of the United States increased over 1975.

	1976	1975
Operating income of Ex-U.S. subsidiaries	\$64.0	\$32.0
Equity in net income (loss) of nonconsolidated Ex-U.S. affiliates	6.7	(2.4)
Royalty income	12.7	8.0

Financial Position

Monsanto's financial position continues strong. At December 31, 1976, cash, short-term securities and time deposits totaled \$320.2 million, down \$105.4 million compared with year-end 1975 due primarily to the size of the capital expenditure program.

At December 31, 1976, net working capital was \$1,105.9 million. The current ratio was 2.9:1.

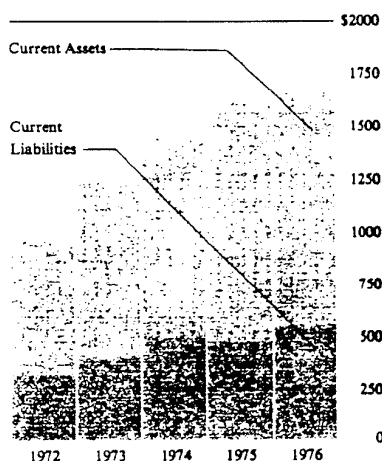
Accounts receivable at December 31, 1976 increased \$51.7 million over 1975 as a result of higher sales volume, but the level of days outstanding was exactly the same as that of the prior year. Inventories at the end of 1976 were \$631.8 million, an increase of \$105.7 million over 1975, but days of inventory supply were actually down from the prior year.

Financing

Monsanto did not raise any major amounts of new funds in U. S. debt markets during 1976. It did, however, continue to issue Industrial Development Bonds to finance pollution control facilities at its U. S. plant sites. In addition, when available, it continued to make long-term financing arrangements in countries outside of the United States.

At December 31, 1976, Monsanto's long-term debt was \$915.4 million and represented 28.9 per cent of its total capitalization. Debt retirements during 1976 were \$33.6 million and will continue at approximately the same level for the next five years with scheduled debt retirements during the 1977-1981 period totaling \$148.5 million.

WORKING CAPITAL



FINANCIAL REVIEW

(Dollars in millions, except per share)

Analysis of Change in Primary Earnings

The year-to-year gain in sales volume was the most significant factor contributing to the earnings improvement for 1976. The improvement was also helped by somewhat higher selling prices. On a dollar basis, these factors were more than enough to offset higher raw material costs, higher start-up costs and increases in all other manufacturing costs. Included in the higher year-to-year manufacturing costs was a nonrecurring charge of 20 cents per share resulting from the decision to close the Tuscaloosa, Alabama plant of Monsanto's wholly-owned subsidiary, Olympia Industries, Inc. In addition, management's decision to provide for obsolescence for certain machinery and equipment of the Commercial Products Company added another 15 cents per share to manufacturing costs.

Marketing, administrative and technological expenses for 1976 were \$505.6 million and, on a year-to-year basis, affected earnings negatively by 73 cents per share.

The year's results were aided by a lower effective tax rate and higher income from nonoperating sources. On the negative side, 1976 was adversely affected by higher interest expense, higher foreign currency exchange and translation losses and an increase in the number of common shares outstanding.

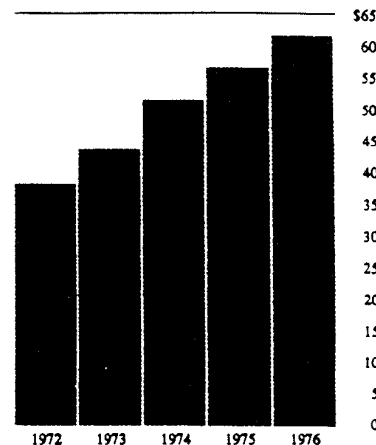
The most significant factor affecting earnings for 1975 compared to 1974 was lower sales volume and product mix. Earnings in 1975 were also adversely affected by an increase in marketing, administrative and technological expenses as a result of higher developmental expenses related to *Cycle-Safe* containers and the impact of inflation on salaries and other costs.

Although Monsanto was able to increase selling prices to offset higher other manufacturing and start-up costs, the effect of these factors did not offset the impact of lower volume and mix. Earnings were also affected by higher interest expense resulting primarily from the issuance of new debt securities in the principal amount of \$275 million, lower interest income, lower income from affiliates and lower income taxes resulting primarily from higher investment tax credits.

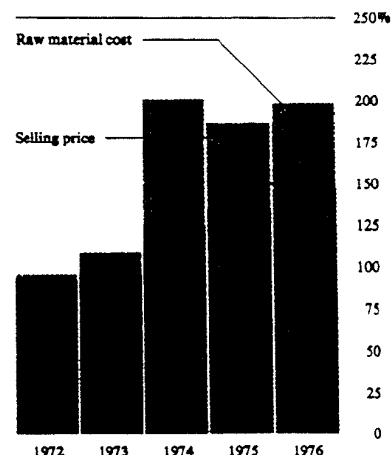
A summary of operating results for the years 1967 through 1976 is included on pages 64 and 65.

Analysis of Change in Earnings per Share	1976	1975
	vs.	vs.
	1975	1974
Operating Income:		
Higher Selling Prices	\$ 1.97	\$ 5.44
Sales Volume and Product Mix	3.70	(2.63)
Higher Raw Material Prices	(1.20)	1.07
Higher Other Manufacturing Costs	(1.46)	(2.61)
Higher Start-up Costs	(0.31)	(0.31)
Higher Nonmanufacturing Expenses	(0.73)	(1.01)
Increase (Decrease) in Operating Income	\$ 1.97	\$ (0.05)
Other Causes:		
Higher Interest Expense	\$ (0.38)	\$ (0.22)
Higher Exchange and Translation Losses	(0.46)	0.14
Higher Other Income Credits—Net	0.20	(0.50)
Lower Tax Rate	0.39	0.13
Increased Shares Outstanding	(0.30)	(0.12)
Decrease from Other Causes	\$ (0.55)	\$ (0.57)
Net Increase (Decrease)	\$ 1.42	\$ (0.62)

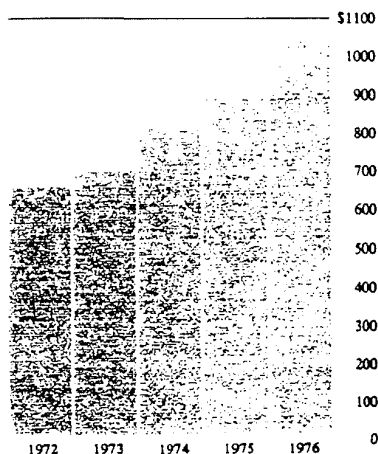
SHAREOWNERS' EQUITY
(per common share)



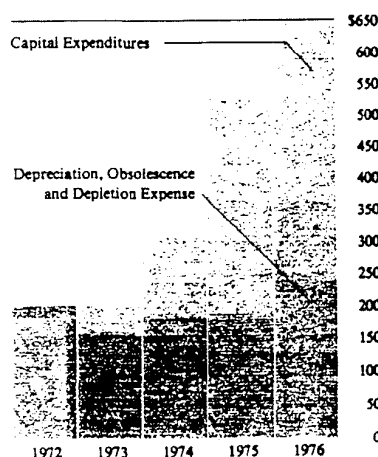
COST/PRICE INDEX
(Domestic and Export)
(Year 1967 = 100%)



WAGES, SALARIES AND EMPLOYE BENEFITS



CAPITAL EXPENDITURES AND DEPRECIATION EXPENSE



Major Operating Expenditures

During 1976, major operating expenditures increased.

	1976	1975
Purchased Raw Materials	\$1,317.9	\$1,018.7
Energy and Utilities	290.8	252.1
Wages, Salaries and Employee Benefits	1,041.6	892.7

In 1976, the price of domestic raw materials and energy and utilities increased at rates of approximately 6 per cent and 11 per cent, respectively. Wages, salaries and employee benefit costs increased 16.7 per cent in 1976 over 1975.

Research and Development Expenditures

Research and development expenditures decreased 3.9 per cent—from \$115.7 million in 1975 to \$111.2 million in 1976.

By Lines of Business

	1976	1975
Agricultural Products	\$ 10.4	\$ 7.5
Chemical Intermediates	10.6	10.4
Commercial Products	27.1	40.8
Industrial Chemicals	18.8	15.6
Plastics & Resins	15.2	13.0
Textiles	20.1	19.5
Other	9.0	8.9
Total Company	\$111.2	\$115.7

Capital Expenditures

Capital expenditures in 1976 of \$646.8 million surpassed 1975's record of \$527.7 million by 22.6 per cent. Major expenditures during 1976 were directed toward increased or new production capacity for herbicides, ammonia, plastic and resin materials, acrylonitrile—an important raw material for many of Monsanto's products—and other product lines where additional capacity was required. Expenditures for environmental control projects amounted to approximately 13 per cent of the total. Capital expenditures for 1977 are expected to approximate \$500 million.

By Lines of Business

	1976	1975	1974	1973	1972
Agricultural Products	\$135.1	\$ 90.2	\$ 31.0	\$ 12.6	\$ 15.2
Chemical Intermediates	268.6	144.5	57.5	48.0	27.4
Commercial Products	23.4	32.6	45.3	28.7	7.1
Industrial Chemicals	55.5	54.8	26.6	12.7	13.8
Plastics & Resins	61.9	58.9	35.1	37.5	27.9
Textiles	75.1	128.9	94.6	61.9	74.6
Other	27.2	17.8	23.3	3.9	2.3
Total Company	\$646.8	\$527.7	\$313.4	\$205.3	\$168.3

By World Area

	1976	1975	1974	1973	1972
United States	\$476.2	\$399.2	\$253.3	\$165.6	\$114.2
Europe-Africa	143.3	101.1	44.5	25.8	47.1
Canada	2.4	2.5	5.6	6.2	3.7
Latin America	16.4	14.8	5.9	1.8	1.8
Asia-Pacific	8.5	10.1	4.1	5.9	1.5
Total Company	\$646.8	\$527.7	\$313.4	\$205.3	\$168.3

FINANCIAL REVIEW

(Dollars in millions, except per share)

Dividend Payments

Common stock dividends paid in 1976 amounted to \$98.7 million, equivalent to \$2.75 per share. Effective with the second quarter payments in 1976, the Board of Directors increased the quarterly dividend from \$0.65 to \$0.70 per share. The dividend has been increased in each of the past four years and a regular cash dividend has been paid quarterly without interruption or reduction since 1928.

Common Stock Dividends

	1976	1975	1974	1973	1972
Dividend Payments:					
First Quarter	\$ 0.65	\$0.60	\$0.50	\$0.45	\$0.45
Second Quarter	0.70	0.65	0.60	0.45	0.45
Third Quarter	0.70	0.65	0.60	0.50	0.45
Fourth Quarter	0.70	0.65	0.60	0.50	0.45
	<u>\$ 2.75</u>	<u>\$2.35</u>	<u>\$2.30</u>	<u>\$1.90</u>	<u>\$1.80</u>
Primary Earnings	<u>\$10.05</u>	<u>\$8.63</u>	<u>\$9.25</u>	<u>\$6.90</u>	<u>\$3.49</u>

Preferred stock dividends amounted to \$2.2 million in 1976 or \$2.75 per share. Quarterly dividends of \$0.6875 per share have been paid regularly since issuance of the preferred shares in 1969.

Shareowners' Equity

Shareowners' equity was \$2.25 billion at December 31, 1976 — up 13.6 per cent from \$1.98 billion at the end of 1975. Shareowners' equity increased to \$61.79 per common share at the end of 1976 from \$56.62 at December 31, 1975.

For 1976, net income was 8.6 per cent of sales, compared with 8.4 per cent in 1975. Net income as a per cent of return on average shareowners' equity was 17.3 per cent in 1976 as compared with 16.4 per cent in 1975.

Capital Stock

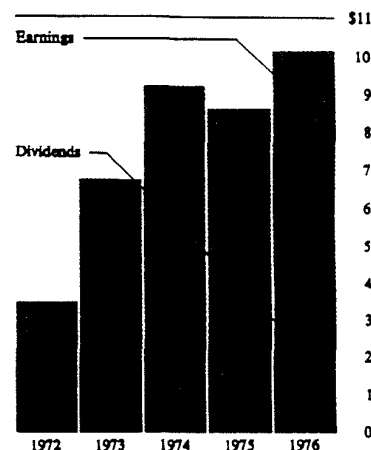
Monsanto's common stock is traded on the New York Stock Exchange and certain other major exchanges throughout the world, including the London, Frankfurt, Paris, Amsterdam exchanges and certain Swiss, German and Belgian stock exchanges. During 1976, the Company listed its common stock on the Frankfurt and Dusseldorf exchanges in recognition of the interest that has been shown in its common stock by German investors. The Company's preferred stock is traded on the New York Stock Exchange.

The high and low market prices on the New York Stock Exchange, by quarter, for 1976 and 1975 were:

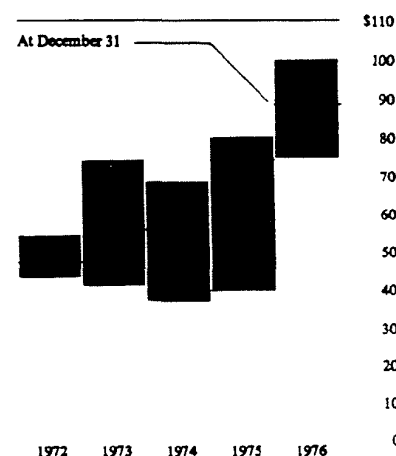
	1976		1975	
	High	Low	High	Low
First Quarter	98 ³ / ₄	76	57 ³ / ₄	41
Second Quarter	100	86 ¹ / ₂	73	53 ¹ / ₂
Third Quarter	93 ³ / ₄	84 ³ / ₄	74 ¹ / ₂	66 ¹ / ₂
Fourth Quarter	88 ¹ / ₂	78 ¹ / ₂	80 ¹ / ₂	67 ³ / ₄

	1976		1975	
	High	Low	High	Low
First Quarter	108 ³ / ₄	84 ³ / ₄	62 ¹ / ₂	48
Second Quarter	110 ¹ / ₂	98	81 ¹ / ₂	60 ¹ / ₂
Third Quarter	102 ¹ / ₂	95 ¹ / ₄	83	74 ³ / ₄
Fourth Quarter	96	89	90	77 ¹ / ₄

EARNINGS AND DIVIDENDS
(per share)



COMMON STOCK PRICE RANGE



Responsibilities for Preparation of Financial Statements

The management of Monsanto Company is responsible for the integrity of the financial statements of Monsanto and its subsidiaries. Fulfilling this responsibility requires preparing financial statements in accordance with generally accepted accounting principles and reporting data which objectively reflect the assets, liabilities, revenues and expenses of the Company and its subsidiaries.

To gather and control financial data, Monsanto establishes and maintains accounting systems adequately supported by internal controls. Management believes a high level of internal control is maintained by the selection and training of qualified personnel, by the establishment and communication of accounting and business policies and by internal audits. In establishing internal controls, management weighs the cost of such systems against the benefits derived. Management believes the internal control systems in use are adequate to prevent significant misuse of Company assets or misstatement of financial reports.

Haskins & Sells, our independent public accountants, are engaged to render an opinion on our consolidated financial statements. This opinion, which appears below, is based on an examination of our financial statements in accordance with generally accepted auditing standards. These standards include a review of our internal control systems and tests of a limited number of transactions.

The Board of Directors, through its Audit Subcommittee consisting of four outside directors, is responsible for seeing that management fulfills its responsibilities in the preparation of financial statements. The Audit Subcommittee discusses audit and financial reporting matters with both management and Haskins & Sells. To ensure complete independence, the public accountants have full and free access to meet with the Audit Subcommittee, with or without the presence of management representatives.

Accountants' Opinion

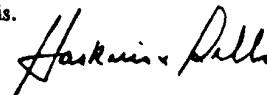
HASKINS & SELLS
CERTIFIED PUBLIC ACCOUNTANTS

TEN BROADWAY
SAINT LOUIS 63102

Monsanto Company:

We have examined the accompanying consolidated financial statements (pages 50 through 63) of Monsanto Company and Subsidiaries for the years ended December 31, 1976 and 1975. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, such financial statements present fairly the consolidated financial position of Monsanto Company and Subsidiaries at December 31, 1976 and 1975 and the results of their operations and changes in their financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.



February 11, 1977, except for the Subsequent Event Note as to which the date is February 18, 1977.

DSW 021053

49

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis in all material respects.

Where acceptable alternative accounting principles exist, Monsanto Company (the Company) has selected the method it believes to be preferable in the circumstances. A summary of the significant alternative accounting principles selected follows.

Basis of Consolidation

The consolidated financial statements include the Company and its majority-owned subsidiaries. All significant intercompany transactions have been eliminated.

Investments in the common stock of certain affiliates, considered joint ventures, in which the Company has 20 per cent but not more than 50 per cent interest, are accounted for by the equity method.

Depreciation and Depletion

The Company and its subsidiaries generally use the straight line method of computing depreciation on assets; however, the sum of the years digits method is used on most domestic assets placed in service prior to January 1, 1972. Depreciation rates are based on the estimated useful lives of the individual assets. Depreciation and depletion of mineral rights and oil and gas properties are computed by the unit of production method based upon estimated recoverable reserves.

Income Taxes

The Company follows the "flow through" method of accounting for investment tax credits. Under this method available credits are used to reduce the provision for income taxes in the year in which they reduce income taxes payable.

Income taxes on a substantial portion of the undistributed earnings of foreign subsidiaries have not been provided as the Company intends to indefinitely invest these earnings in the foreign subsidiaries. Any tax on dividends which may be received would be substantially offset by foreign tax credits.

Inventory Valuation

Inventories are stated at the lower of cost or market. The method of determining cost for substantially all domestic inventories is the last-in, first-out (LIFO) basis. The cost for other inventories is determined generally on the first-in, first-out (FIFO) basis.

Pension Plans

Pension costs include charges applicable to current service and amortization of unfunded prior service costs over periods ranging from 15 to 30 years. The policy is to fund pension costs accrued.

STATEMENT OF CONSOLIDATED INCOME

(Dollars in millions, except per share)

	Year 1976	Year 1975
Net Sales	\$4,270.2	\$3,624.7
Cost of Goods Sold	3,096.8	2,616.4
Marketing and Administrative Expenses	350.7	308.0
Technological Expenses	154.9	152.9
	<u>3,602.4</u>	<u>3,077.3</u>
Operating Income	<u>667.8</u>	<u>547.4</u>
Income Charges (Credits):		
Interest expense	79.8	56.4
Other—net	(29.7)	(45.3)
	<u>50.1</u>	<u>11.1</u>
Income Before Income Taxes	617.7	536.3
Provision for Income Taxes	<u>251.4</u>	<u>230.0</u>
Net Income	<u>\$ 366.3</u>	<u>\$ 306.3</u>
Earnings per Common Share:		
Primary	\$ 10.05	\$ 8.63
Fully diluted	9.77	8.22

The above statement should be read in conjunction with page 50 and pages 56 through 63 of this report.

DSW 021055

STATEMENT OF CONSOLIDATED FINANCIAL POSITION

(Dollars in millions, except per share)

ASSETS	Dec. 31, 1976	Dec. 31, 1975
Current Assets:		
Cash	\$ 37.3	\$ 35.3
Short-term securities and time deposits, at cost which approximates market	282.9	390.3
Receivables, net of allowances of \$18.6 in 1976 and \$19.0 in 1975	731.1	679.4
Inventories	631.8	526.1
	<u>1,683.1</u>	<u>1,631.1</u>
Investments and Miscellaneous Assets:		
Investments in affiliates, at equity	111.1	82.3
Miscellaneous investments and receivables, at cost or less	29.6	35.6
	<u>140.7</u>	<u>117.9</u>
Property, Plant and Equipment, at Cost:		
Land	44.5	41.7
Buildings	541.8	500.3
Machinery and equipment	3,439.2	2,908.6
Mineral rights and oil and gas properties	182.8	169.3
	<u>4,208.3</u>	<u>3,619.9</u>
Less accumulated depreciation and depletion, etc.	2,118.5	1,959.8
Net property	<u>2,089.8</u>	<u>1,660.1</u>
Deferred Charges	<u>45.5</u>	<u>41.8</u>
	<u>\$3,959.1</u>	<u>\$3,450.9</u>

The above statement should be read in conjunction with page 50 and pages 56 through 63 of this report.

LIABILITIES AND SHAREOWNERS' EQUITY	Dec. 31, 1976	Dec. 31, 1975
Current Liabilities:		
Accounts payable and accruals	\$ 517.6	\$ 427.7
Income taxes	34.3	32.5
Current portion of long-term debt	25.3	21.3
	<u>577.2</u>	<u>481.5</u>
Long-Term Debt	<u>915.4</u>	<u>845.3</u>
Other Liabilities and Deferred Credits:		
Deferred income taxes	181.3	119.8
Miscellaneous	32.7	27.6
	<u>214.0</u>	<u>147.4</u>
Shareowners' Equity:		
Preferred stock—authorized, 10,000,000 shares without par value, issuable in series; outstanding, 382,587 shares in 1976 and 1,666,184 shares in 1975; involuntary liquidation preference, \$35 per share, or an aggregate of \$13.4 and \$58.3 at December 31, 1976 and 1975, respectively	0.8	3.7
Common stock—authorized, 100,000,000 shares, par value \$2 each; issued, 36,708,144 shares in 1976 and 35,116,300 shares in 1975	73.4	70.2
Additional contributed capital	648.2	638.1
Reinvested earnings	<u>1,541.1</u>	<u>1,275.7</u>
	2,263.5	1,987.7
Less common stock in treasury, at cost (268,903 shares in 1976 and 1975)	11.0	11.0
	<u>2,252.5</u>	<u>1,976.7</u>
	<u>\$3,959.1</u>	<u>\$3,450.9</u>

STATEMENT OF CHANGES IN CONSOLIDATED FINANCIAL POSITION

(Dollars in millions)

	Year 1976	Year 1975
Source of Working Capital:		
Net income	\$ 366.3	\$ 306.3
Charges not affecting working capital:		
Depreciation, obsolescence and depletion	226.0	172.7
Deferred income taxes	61.5	66.1
Other—net	14.3	6.7
Working capital from operations	668.1	551.8
Outside financing—net of unexpended funds from industrial development bonds	81.7	296.0
Property disposals	20.3	12.2
Proceeds from issuance of capital stock	8.8	5.8
	<u>778.9</u>	<u>865.8</u>
Application of Working Capital:		
Property, plant and equipment additions	646.8	527.7
Dividends	100.9	93.1
Debt reduction	33.6	31.6
Other—net	41.3	31.6
	<u>822.6</u>	<u>684.0</u>
Increase (Decrease) in Working Capital	\$ (43.7)	\$ 181.8
Changes in Elements of Working Capital:		
Increase (decrease) in current assets:		
Cash, short-term securities and time deposits	\$ (105.4)	\$ 101.5
Net receivables	51.7	158.6
Inventories	105.7	(110.7)
	<u>52.0</u>	<u>149.4</u>
(Increase) decrease in current liabilities:		
Accounts payable and accruals	(89.9)	(19.1)
Income taxes	(1.8)	58.5
Current portion of long-term debt	(4.0)	(7.0)
	<u>(95.7)</u>	<u>32.4</u>
Increase (Decrease) in Working Capital	\$ (43.7)	\$ 181.8

The above statement should be read in conjunction with page 50 and pages 56 through 63 of this report.

DSW 021058

STATEMENT OF CONSOLIDATED SHAREOWNERS' EQUITY

(Dollars in millions, except per share)

	Preferred Stock	Common Stock	Additional Contributed Capital	Reinvested Earnings	Treasury Stock
Balance, January 1, 1975	\$ 5.0	\$68.7	\$631.4	\$1,062.5	\$(12.6)
Net income				306.3	
Dividends:					
Preferred—\$2.75 per share				(5.1)	
Common—\$2.55 per share				(88.0)	
Conversion of \$2.75 Preferred Stock to common stock	(1.3)	1.3	—		
Shares issued under stock option plans		0.1	3.9		
Shares issued upon conversion of Monsanto Limited convertible loan stock		0.1	1.7		
Other			1.1		1.6
Balance, December 31, 1975	3.7	70.2	638.1	1,275.7	(11.0)
Net income				366.3	
Dividends:					
Preferred—\$2.75 per share				(2.2)	
Common—\$2.75 per share				(98.7)	
Conversion of \$2.75 Preferred Stock to common stock	(2.9)	2.9	—		
Shares issued under stock option plans		0.2	4.8		
Shares issued upon conversion of Monsanto Limited convertible loan stock		0.1	1.9		
Shares issued upon conversion of Monsanto International Finance Company convertible debentures . . .		—	1.8		
Other			1.6		
Balance, December 31, 1976	\$ 0.8	\$73.4	\$648.2	\$1,541.1	\$(11.0)

The above statement should be read in conjunction with page 50 and pages 56 through 63 of this report.

DSW 021059

55

NOTES TO FINANCIAL STATEMENTS

(Dollars in millions, except per share)

Bank Credit Agreements

At December 31, 1976, the Company has \$115.0 of domestic unsecured short-term lines of credit with nineteen banks. These lines of credit are renewable annually and provide that any loans thereunder bear interest at the prime commercial rate of the various banks. No borrowings were made under these lines of credit through February 11, 1977.

In addition, certain foreign subsidiaries have short-term loan facilities aggregating approximately \$99.9. Short-term loans outstanding as of December 31, 1976 totaled \$65.6. Interest is related to the various bank rates, primarily the London interbank sterling market rate.

Capital Stock

The outstanding preferred stock is stated at \$2.24 per share and has a cumulative dividend of \$2.75 per share. The preferred stock is convertible into Company common stock at the rate of 1.12 shares of common for each share of preferred, subject to adjustment in certain events under antidilution provisions. During 1976, 1,283,597 preferred shares were converted into 1,437,537 common shares; in 1975, 567,885 preferred shares were converted into 635,933 common shares. Of 2,330,510 total preferred shares originally issued in the period 1969 through 1974, 1,947,923 preferred shares have been converted to 2,181,472 shares of common stock through December 31, 1976. The preferred stock may be redeemed at the Company's option at \$73 per share, which amount is also the voluntary liquidation preference.

In April, 1976, the Company's Certificate of Incorporation was amended to increase the authorized shares of the \$2 par value Common Stock from 50,000,000 shares to 100,000,000 shares.

The Company issued 34,471 and 34,970 shares of common stock in 1976 and 1975, respectively, to holders of convertible loan stock issued by Monsanto Limited, a United Kingdom subsidiary, upon exercise of their conversion rights.

The Company also issued 21,458 shares of common stock in 1976 to holders of convertible debentures issued by Monsanto International Finance Company upon exercise of their conversion rights.

The Company held 22,826 shares of its common stock for specific purposes which are included in Miscellaneous Investments in the accompanying statement of financial position at December 31, 1976.

There were 2,024,808 shares of common stock reserved for the following purposes at December 31, 1976:

	Shares
Conversion of \$2.75 Preferred Stock	428,497
Stock option plans	1,074,507
Conversion of convertible loan stock of Monsanto Limited	260,409
Conversion of debentures of Monsanto International Finance Company	261,395
	<u>2,024,808</u>

Depreciation, Obsolescence and Repairs

Charges to expense were:

	1976	1975
Depreciation, amortization and depletion	\$189.3	\$161.5
Obsolescence	36.7	11.2
	<u>\$226.0</u>	<u>\$172.7</u>
Repairs and maintenance	<u>\$222.7</u>	<u>\$180.9</u>

Earnings per Common Share

Income and the number of shares used in the computation of earnings per common and common equivalent share were determined as follows:

Income	1976		1975	
	Primary	Fully Diluted	Primary	Fully Diluted
Net income	\$366.3	\$366.3	\$306.3	\$306.3
Preferred dividends	(2.2)		(5.1)	
Interest (less tax) on:				
Loan stock of Monsanto Limited	0.3	0.3	0.4	0.4
Debentures of Monsanto International Finance Company		0.5		0.6
	<u>\$364.4</u>	<u>\$367.1</u>	<u>\$301.6</u>	<u>\$307.3</u>
Number of Shares (In thousands)				
Weighted average shares:				
Outstanding	35,835	35,835	34,528	34,528
Incremental shares for outstanding stock options	161	167	93	146
Shares issuable upon conversion:				
Loan stock of Monsanto Limited	276	276	316	316
Debentures of Monsanto International Finance Company		269		286
\$2.75 Preferred Stock		983		2,113
	<u>36,272</u>	<u>37,530</u>	<u>34,937</u>	<u>37,389</u>

Employee Stock Options

The status of the authorized common shares for the stock option plans and the changes occurring during 1976 were:

	1974 Plan		1969 Plan
	Outstanding	Authorized Not Granted	Outstanding
At January 1, 1976	318,155	624,300	230,430
Granted	227,650	(227,650)	
Exercised	(25,401)		(72,977)
Terminated	(10,803)	10,803	
At December 31, 1976	<u>509,601</u>	<u>407,453</u>	<u>157,453</u>

Under the above plans, options for 667,054 shares were outstanding at December 31, 1976 at prices ranging from \$32.50 to \$95.25 per share, or a weighted average of \$69.06 per share. During the year, options for 98,378 shares were exercised at prices ranging from \$32.50 to \$73.19 per share.

Equity in Affiliates and Foreign Subsidiaries

The equity of the Company and its subsidiaries in the unaudited net income of affiliates totaled \$6.8 in 1976 and is included in other income. For 1975, the affiliated companies incurred a net loss; the Company and its subsidiaries' share of this loss was \$2.4.

The Company's equity in the net income (loss) of foreign subsidiaries was \$(14.2) in 1976 and \$8.0 in 1975. The Company's equity in the net assets of these companies at December 31, 1976 and 1975 was \$492.1 and \$437.1, respectively. Consolidated reinvested earnings at December 31, 1976 included \$226.9 of the undistributed earnings of foreign subsidiaries.

Foreign Exchange

Aggregate net exchange losses resulting from foreign currency transactions and translation of foreign currency financial statements were \$29.4 in 1976. Exchange gains and losses in 1975 were not significant.

NOTES TO FINANCIAL STATEMENTS

(Dollars in millions, except per share)

Income Taxes

The components of the provision for income taxes were:

	1976	1975
Current:		
Federal (after investment tax credits of \$47.6 in 1976 and \$22.1 in 1975)	\$157.6	\$147.1
State	15.4	14.6
Foreign	16.9	2.2
	<u>189.9</u>	<u>163.9</u>
Deferred:		
Federal	43.4	46.3
Foreign	18.1	19.8
	<u>61.5</u>	<u>66.1</u>
	<u>\$251.4</u>	<u>\$230.0</u>

The source of timing differences in the recognition of revenue and expense for tax and financial statement purposes in 1976 and 1975 and the tax effect of each were:

	1976	1975
Excess of depreciation for tax purposes over book	\$47.2	\$35.8
Net construction contract losses deductible for income tax purposes	1.4	12.1
Intangible drilling and development costs	3.3	11.3
Other items—net	9.6	6.9
	<u>\$61.5</u>	<u>\$66.1</u>

The provision for income taxes in 1976 and 1975 was less than the federal statutory rate because of the factors indicated below:

	1976	1975
Statutory corporate tax rate	48.0%	48.0%
Investment tax credit	(7.7)	(4.1)
Tax treatment afforded earnings of domestic international sales corporations (DISC)	(2.6)	(2.3)
Excess of statutory over cost depletion	(0.8)	(1.4)
Foreign, state and local income taxes	4.4	2.0
Provision for timing difference on prior years' intangible drilling costs		1.6
Other	<u>(0.6)</u>	<u>(0.9)</u>
	<u>40.7%</u>	<u>42.9%</u>

Inventory Valuation

Inventories at December 31, 1976 and 1975 would have been \$201.0 and \$167.1, respectively, higher than reported if the first-in, first-out (FIFO) basis of inventory valuation (which approximates replacement cost) had been used for all inventories.

Key Employee Bonus

Data relating to the Monsanto Management Incentive Plan of 1974 are:

	1976	1975
Maximum allowable addition to bonus reserve	\$25.9	\$22.3
Actual charge to expense (and addition to bonus reserve) as determined by the Executive Compensation and Development Committee	\$ 9.6	\$ 6.0
Bonus awards:		
Number of directors and officers	20	18
Number of other key employees	426	395
Amount	\$ 6.6	\$ 5.0
Balance in bonus reserve at year-end	\$ 6.9	\$ 4.2

DSW 021062

Leases and Contingent Liabilities

The Company and its subsidiaries were contingently liable as guarantors of bank loans and for customers' receivables discounted aggregating approximately \$40.8 and \$31.8 at December 31, 1976 and 1975, respectively.

Commitments in connection with uncompleted additions to property aggregated approximately \$133.0 and \$201.9 at December 31, 1976 and 1975, respectively.

Rent expense under leases with a remaining term of more than one month was approximately \$41.1 in 1976 and \$39.3 in 1975.

Minimum rental commitments under noncancelable leases are:

1977	\$14.7	1982—1986	\$22.1
1978	10.8	1987—1991	18.7
1979	8.7	1992—1996	14.8
1980	7.5	After 1996	0.6
1981	6.4		

Legal Proceedings

The Company and its subsidiaries are parties to a number of lawsuits arising in the normal course of business. The more significant lawsuits are described below.

In February of 1974, a suit was filed against the Company in federal court in New York alleging, among other things, an attempt to monopolize the impact polystyrene market in the southeastern United States in violation of the Sherman Act. Damages claimed are \$40.2, which trebled would be \$120.6, plus punitive damages in an unspecified amount and attorney's fees. The plaintiff also sought a declaratory judgment that the Company had violated Section 2 of the Sherman Act and an injunction against further violations. The Company is vigorously defending this suit.

Several lawsuits filed in the form of class actions claiming damages from alleged environmental contamination from products containing polychlorinated biphenyls (PCB's) have been filed against the Company and other defendants. Among those suits is one, filed on December 29, 1976 in the federal court in Alabama, alleging damages of \$1,000.0. The plaintiffs charge that the Company failed to warn of the alleged dangers of PCB's. The State of Alabama has moved to intervene as a plaintiff in this case seeking \$100.0 in compensatory and \$0.1 in punitive damages. In two other suits, filed respectively in a federal court and a state court in Georgia on September 20, 1976 and on September 24, 1976, damages of \$500.0 plus attorney's fees are claimed by essentially the same plaintiffs for substantially the same alleged losses. Neither of these suits is clear as to the basis for the claims made against the Company, but presumably the claims are similar to those alleged in the Alabama suit. The Company will vigorously defend each of these lawsuits.

While the results of litigation cannot be predicted with certainty, management, based upon advice of Company counsel, believes that the final outcome of such litigation will not have a materially adverse effect on the consolidated financial statements of the Company and its subsidiaries.

NOTES TO FINANCIAL STATEMENTS

(Dollars in millions, except per share)

Long-Term Debt

At December 31, 1976 and 1975, the long-term debt of the Company and its subsidiaries exclusive of current maturities, and repayable in U. S. dollars, except where parenthetically indicated, was as follows:

	1976	1975
Parent Company:		
6 1/2%-8 1/2% bank loan due 1977/1979 (West German deutsche mark)	\$ 11.4	\$ 15.1
8% notes due 1985	100.0	100.0
4 1/2% promissory notes due 1993	72.0	76.6
8 1/2% sinking fund debentures due 2000	175.0	172.0
9 1/2% sinking fund debentures due 2000	138.0	143.3
3 1/2% income debentures due 2002	91.0	91.0
4 1/2% income debentures due 2008	50.0	50.0
5 1/2%-7 1/2% industrial development bond obligations due 1983/2006	66.4	20.3
Monsanto International Finance Company:		
4 1/2% guaranteed sinking fund debentures due 1985 (a)	20.0	22.5
Monsanto International N.V. (Netherlands Antilles subsidiary):		
8 1/2% guaranteed sinking fund debentures due 1985	10.2	11.6
5 1/2% guaranteed bonds due 1987 (Swiss franc)	32.0	30.4
Monsanto Limited (United Kingdom subsidiary) (British pound):		
5% guaranteed loan stock due 1982/1986 (b)	10.1	13.5
Monsanto (Suisse) S.A. (Swiss subsidiary) (Swiss franc):		
6 7/8% guaranteed sinking fund debentures due 1985	12.0	11.4
6 1/2% guaranteed sinking fund debentures due 1986	20.0	19.0
Monsanto Europe, S.A. (Belgian subsidiary) (Belgian franc):		
9% guaranteed bank loan due 1977/1986	16.9	18.8
11.15% guaranteed bank loan due 1980/1986 (c)	12.5	
9 3/4% guaranteed bonds due 1982/1991	10.0	
Monsanto (Deutschland) GmbH (West German subsidiary) (West German deutsche mark):		
8 1/2% guaranteed bank loan due 1980	17.2	9.0
Other	50.7	40.8
Total (d)	<u>\$915.4</u>	<u>\$845.3</u>

Notes:

(a) These debentures are guaranteed by the Company and are currently convertible into Monsanto common stock at \$86 per share, subject to adjustment under certain conditions.

(b) This loan stock is guaranteed by the Company and is convertible into Monsanto common stock at the approximate rate of one share per 22 pounds 92 new pence (\$39 at December 31, 1976 exchange rate), subject to adjustment under certain conditions.

Of the \$25.9 total loan stock originally issued in 1969, \$15.8 has been retired through December 31, 1976 by conversion into 210,863 shares of common stock.

(c) The interest rate on this bank loan will be reduced by a government subsidy ranging from 4.0%-2.8%, which expires in 1980. The Company has the option of repaying this loan in 1981.

(d) Maturities and sinking fund requirements on long-term debt are \$25.3, \$34.6, \$28.4, \$30.2, and \$30.0 for the five years ending December 31, 1977 through 1981, respectively.

(e) Covenants of certain loan agreements restrict maximum borrowings of the Company. It is not anticipated that additional future borrowing will be affected by these restrictions.

(f) Under various parallel loan agreements entered into in 1976, the Company and a subsidiary have borrowed \$76.2 in pounds sterling from United Kingdom (U.K.) companies and have made United States (U.S.) dollar loans to the U.K. companies or their subsidiaries aggregating \$49.8. These agreements require the Company to make additional U.S. dollar loans of \$24.9, which amount is reflected as a current liability. As both parties to the agreements have the legal right to offset in case of default by the other party, only the net current liability is reflected in the

accompanying financial statements. Interest rates on the sterling loans are 2 1/4% to 2 1/2% higher than the interest rates on the corresponding dollar loans. Maturity dates of the loans range from 1982 through 1986.

Pension Plans

Several noncontributory pension plans provide retirement benefits for substantially all employees of the Company and its subsidiaries. The expense related to these pension plans was \$70.7 in 1976 and \$57.3 in 1975. Included in 1975 expense is \$10.5 related to the recognition of decreased equity market values in the plans' assets.

Certain changes in the actuarial cost factors for the Company's major plans were approved in 1975 and became effective on December 31, 1975. These changes were adopted in order to keep the underlying cost factors of the plans realistic with respect to expected future events and conditions. The major cost factors changed, where applicable, were investment return, salary increases, Social Security wage base, retirement age and method of valuing pension assets. The effect of these changes was to increase pension cost in 1976 by \$3.1. In addition, benefit levels under the plans were increased, resulting in a \$19.5 increase in pension cost in 1976.

The estimated actuarially computed value of vested benefits of the major plans exceeded the market value of the plans' assets by \$18.0 as of December 31, 1976.

Research and Development

Research and development expenses for new products or processes or for significant improvements to existing products or processes amounted to \$111.2 in 1976 and \$115.7 in 1975.

Replacement Cost Data (Unaudited)

As indicated in the Summary of Significant Accounting Policies, the financial statements for Monsanto Company and its subsidiaries are prepared in accordance with "generally accepted accounting principles." These accounting principles include the concept of historical cost. Under this concept, assets generally are recorded and reported at the amounts originally paid despite subsequent changes in (1) the purchasing power of the dollar, (2) the amount for which the asset could be sold—its market value—or (3) the current cost of replacing the asset. Liabilities are stated at the amount originally incurred even though the current cost of discharging the liability might differ from the liability originally incurred.

For example, a machine acquired in 1972 for \$10 is reflected in Monsanto's financial statements under the caption "Machinery and Equipment" at the original purchase price of \$10. Assuming this machine has an estimated life of 10 years, the accumulated depreciation applicable to this asset is \$5. This amount would be reported in "Accumulated Depreciation and Depletion." The reported amounts are not impacted by any of the following factors:

- The cost of living has increased approximately 36% between 1972 and 1976,
- The current market value of the asset, which might be higher or lower than the net book value of \$5, and
- The current replacement cost of the asset which, in all likelihood, would be higher than \$10.

NOTES TO FINANCIAL STATEMENTS

(Dollars in millions, except per share)

One alternative to the concept of historical cost currently being discussed is "Current Value" accounting. As the term implies, current value accounting attempts to value assets and liabilities at some measure of "current value." As yet, however, there is no agreement as to how asset values under current value accounting should be determined. Among the alternatives being considered are the amount at which assets could be sold and the amount which would have to be paid to replace existing assets. Regardless of the specific technique selected to determine current value, proponents of current value accounting purport that its use would provide readers of financial statements with better information as to the "current economics" of a business.

In an attempt to begin providing readers of financial statements with information as to the "current economics" of businesses, in 1976 the Securities and Exchange Commission established rules that require some companies—Monsanto is one—to estimate and report certain replacement cost data. These rules require disclosure for 1976 of the estimated impact of replacement cost on inventories and property, plant and equipment, cost of goods sold, and depreciation expense. These disclosures do not take into account the impact of replacement cost of other assets and liabilities.

Based on the best estimates of management, use of the replacement cost basis would impact the amounts reported in our financial statements for 1976 in the following manner:

- Inventories at the end of the year as determined on a first-in, first-out (FIFO) basis (\$832.8) would have approximated inventories on a replacement cost basis.
- Buildings and machinery and equipment would have been approximately \$1,440 more than reported in the historical cost financial statements. After adjusting for accumulated depreciation, the net buildings and machinery and equipment would have been approximately \$970 higher than reported on a historical cost basis.
- Depreciation expense would have been approximately \$95 higher than the reported historical cost depreciation.
- Cost of goods sold, excluding the impact of replacement cost depreciation, would have been approximately the same as on a historical cost basis.

A statement of the procedures used to estimate the replacement cost data and management's concerns with respect to the reliability of such data, as well as certain other information with respect to the replacement cost data, is contained in Monsanto Company's Form 10-K Report filed with the Securities and Exchange Commission for 1976. A copy of this report is available on request.

Selected Quarterly Financial Data (Unaudited)

Selected unaudited quarterly financial data for 1976 and 1975 follow:

				Earnings per Common Share	
	Net Sales	Cost of Goods Sold	Net Income	Primary	Fully Diluted
1976:					
First Quarter	\$1,173.6	\$ 769.8	\$156.9	\$ 4.40	\$4.19
Second Quarter	1,063.4	760.8	98.4	2.69	2.62
Third Quarter	998.4	753.8	63.4	1.69	1.69
Fourth Quarter	1,034.8	812.4	47.6	1.27	1.27
Year	<u>\$4,270.2</u>	<u>\$3,096.8</u>	<u>\$366.3</u>	<u>\$10.05</u>	<u>\$9.77</u>
1975:					
First Quarter	\$ 912.7	\$ 625.8	\$ 97.4	\$ 2.79	\$2.62
Second Quarter	884.7	638.3	74.1	2.08	1.98
Third Quarter	884.8	657.8	56.1	1.56	1.51
Fourth Quarter	942.5	694.5	78.7	2.20	2.11
Year	<u>\$3,624.7</u>	<u>\$2,616.4</u>	<u>\$306.3</u>	<u>\$ 8.63</u>	<u>\$8.22</u>

The 1976 third quarter operating results include a \$10.3, \$0.28 per primary share, charge due to the devaluation of the Mexican peso.

The 1976 fourth quarter operating results include two unusual charges aggregating \$12.9 or \$0.35 per primary share. One charge of \$7.3, \$0.20 per primary share, results from the closing of the Olympia Industries, Inc. plant at Tuscaloosa, Alabama. The other charge of \$5.6, \$0.15 per primary share, results from acceleration of provisions for obsolescence of certain machinery and equipment of the Commercial Products Company.

Subsequent Event

Following a February, 1977, 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, Monsanto temporarily suspended production of its acrylonitrile/styrene copolymer *Cycle-Safe* container.

Data produced by the most sensitive validated test methods acceptable to the FDA show no detectable migration of acrylonitrile from the *Cycle-Safe* container into the container's contents under normal conditions of use. Management continues to believe that no health hazard exists in the use of the *Cycle-Safe* container and is taking all appropriate steps to demonstrate the safety of the container to the FDA. As of December 31, 1976, the Company had net investment of approximately \$55 million in working capital, building and equipment related to the *Cycle-Safe* container. In management's opinion, the ultimate resolution of the current uncertainties surrounding the *Cycle-Safe* container, whatever that resolution may be, will not have a materially adverse effect on the accompanying financial statements.

TEN-YEAR SUMMARY

(In millions, except per share and where italicized)

	1976	1975
Operating Results		
Net sales	\$4,270	\$3,625
Operating income	668	547
Interest expense	80	56
Provision for income taxes	251	230
Income before extraordinary items	366	306
Extraordinary charges (credits)—net		
Net income	366	306
Per cent of net sales	8.6%	8.4%
Per cent of average shareowners' equity	17.3%	16.4%
Earnings per common share:		
Primary:		
Before extraordinary items	\$10.05	\$8.63
After extraordinary items	10.05	8.63
Fully diluted:		
Before extraordinary items	9.77	8.22
After extraordinary items	9.77	8.22
Note: Refer to the management analysis of the results of operations which is included under the caption "Analysis of Change in Primary Earnings" on page 46 of this report.		
Year-End Financial Position		
Total assets	\$3,959	\$3,451
Working capital	1,106	1,150
Property, plant and equipment—gross	4,208	3,620
Property, plant and equipment—net	2,090	1,660
Long-term debt	915	845
Shareowners' equity	2,253	1,977
Other Data		
Per common share:		
Dividends	\$ 2.75	\$ 2.55
Shareowners' equity	61.79	56.62
Property, plant and equipment additions	\$ 647	\$ 528
Depreciation, obsolescence and depletion	226	173
Year-end:		
Shareowners:		
Common	84,647	91,725
Preferred	1,956	2,836
Common shares outstanding	36.4	34.8
Employees	61,903	59,242

(1) As of January 1, 1974, the Company and certain of its domestic subsidiaries changed their method of inventory valuation for substantially all United States inventories from the FIFO basis to the LIFO basis. The effect of this change was to decrease 1974 income by \$77.5 or \$2.26 per primary share.

(2) Excludes \$16.0 applicable to extraordinary charges.

DSW 021068

1974	1973	1972	1971	1970	1969	1968	1967
\$3,498	\$2,648	\$2,225	\$2,087	\$1,972	\$1,939	\$1,865	\$1,705
550	406	216	178	128	191	214	186
43	39	37	39	33	22	21	23
251	173	81	66	35	73	88	71
323(1)	238	122	94	78	109	116	105
				11	(7)		(6)
323(1)	238	122	94	67	116	116	111
9.2%	9.0%	5.5%	4.5%	3.4%	6.0%	6.2%	6.6%
20.0%	17.2%	9.7%	7.8%	5.6%	9.8%	10.3%	10.3%
\$9.25	\$6.90	\$3.49	\$2.65	\$2.17	\$3.08	\$3.26	\$2.96
9.25	6.90	3.49	2.65	1.83	3.28	3.26	3.15
8.73	6.54	3.40	2.63	2.17	3.03	3.20	2.92
8.73	6.54	3.40	2.63	1.83	3.21	3.20	3.10
\$2,938	\$2,545	\$2,237	\$2,154	\$2,145	\$2,012	\$1,957	\$1,908
968	855	677	547	538	510	520	434
3,157	2,852	2,765	2,735	2,637	2,471	2,345	2,293
1,312	1,152	1,133	1,170	1,170	1,071	1,047	1,098
587	579	576	558	589	454	473	492
1,755	1,484	1,294	1,226	1,194	1,205	1,154	1,103
\$ 2.30	\$ 1.90	\$ 1.80	\$ 1.80	\$ 1.80	\$ 1.80	\$ 1.65	\$ 1.60
51.39	44.26	39.05	37.16	36.27	36.25	34.74	33.31
\$ 313	\$ 205	\$ 168	\$ 205	\$ 301	\$ 220	\$ 135	\$ 166
172	170	194	187	170(2)	164	174	165
98,542	98,964	104,369	110,490	121,399	118,156	111,538	111,363
3,709	3,855	3,939	3,897	3,941	3,621		
34.1	33.4	33.0	32.8	32.8	33.1	33.1	33.0
60,926	58,277	57,891	59,271	62,940	64,604	62,815	62,073

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Monsanto Company
800 North Lindbergh Boulevard
St. Louis, Missouri 63166

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