

PALEY ROBERT A
Form 4
January 31, 2006

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
PALEY ROBERT A

(Last) (First) (Middle)

800 NORTH LINDBERGH BLVD.

(Street)

ST. LOUIS, MO 63167

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol

MONSANTO CO /NEW/ [MON]

3. Date of Earliest Transaction (Month/Day/Year)

01/27/2006

4. If Amendment, Date Original Filed (Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

___ Director ___ 10% Owner
X Officer (give title below) ___ Other (specify below)

Vice President and Treasurer

6. Individual or Joint/Group Filing (Check Applicable Line)

X Form filed by One Reporting Person
___ Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount or Price		
Common Stock	01/27/2006		M		\$ 13,940 A 16.145	16,440	D
Common Stock	01/27/2006		S		\$ 13,940 D 81.45	2,500	D
Common Stock						3,047	I By 401(k) Plan
Common Stock						288	I By 401(k) Plan of spouse

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)
Option (right to buy)	\$ 16.145	01/27/2006		M	13,940	04/25/2004 ⁽¹⁾ 04/24/2013	Common Stock 13,940

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
PALEY ROBERT A 800 NORTH LINDBERGH BLVD. ST. LOUIS, MO 63167			Vice President and Treasurer	

Signatures

Christopher A. Martin, Attorney-in-Fact 01/31/2006

__Signature of Reporting Person Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) One-third of the options became exercisable on April 25, 2004, one-third became exercisable on March 15, 2005 and one-third becomes exercisable on March 15, 2006, pursuant to the terms and conditions of the Monsanto Company Long Term Incentive Plan..

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.