

MONSANTO CO /NEW/
Form 4
October 14, 2004

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 *
GRANT HUGH

(Last) (First) (Middle)
800 N. 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)
10/12/2004

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director 10% Owner
 Officer (give title below) Other (specify below)
Chairman, President & CEO

6. Individual or Joint/Group Filing(Check Applicable Line)
 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	(A) or (D)	Price
Common Stock	10/12/2004		M ⁽¹⁾		40,000	A	\$ 20
Common Stock	10/12/2004		S ⁽¹⁾		8,800	D	\$ 38.29
Common Stock	10/12/2004		S ⁽¹⁾		13,670	D	\$ 38.28
Common Stock	10/12/2004		S ⁽¹⁾		3,400	D	\$ 38.27
Common Stock	10/12/2004		S ⁽¹⁾		3,695	D	\$ 38.32

Common Stock 9,194 I By 401(k) Plan

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)	Amount or Number of Shares
Option (right to buy)	\$ 20	10/12/2004		M ⁽¹⁾	40,000	03/15/2002 ⁽²⁾ 10/16/2010	Common Stock	40,000
Option (right to buy)	\$ 32.385					03/15/2005 ⁽³⁾ 02/26/2014	Common Stock	0 ⁽⁶⁾
Option (right to buy)	\$ 20.59					05/29/2004 ⁽⁴⁾ 05/28/2013	Common Stock	0 ⁽⁶⁾
Option (right to buy)	\$ 16.145					04/25/2004 ⁽⁵⁾ 04/24/2013	Common Stock	0 ⁽⁶⁾

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
GRANT HUGH 800 N. LINDBERGH BLVD. ST. LOUIS, MO 63167	X		Chairman, President & CEO	

Signatures

Christopher A. Martin, by Power of
Attorney

10/14/2004

__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) The sales and stock option exercise reported on this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the Reporting Person on July 14, 2004.
- (2) 50% of the options became exercisable on March 15, 2002 and 50% became exercisable on March 15, 2003.
- (3) Options are exercisable in three equal installments on each of March 15, 2005, March 15, 2006 and March 15, 2007, subject to the terms and conditions of the Monsanto Company Long Term Incentive Plan.
- (4) Options are exercisable in three equal installments on each of May 29, 2004, March 15, 2005 and March 15, 2006, subject to the terms and conditions of the Monsanto Company Long Term Incentive Plan.
- (5) One-third of the options originally granted became exercisable on April 25, 2004, one-third of the options originally granted become exercisable on March 15, 2005 and one-third of the options originally granted become exercisable on March 15, 2006, subject to the terms and conditions of the Monsanto Company Long Term Incentive Plan.
- (6) No transaction is reported on this Form 4 for these options.

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.