

Madere Consuelo E.
Form 4
August 04, 2010

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 *
Madere Consuelo E.

2. Issuer Name and Ticker or Trading Symbol
MONSANTO CO /NEW/ [MON]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)
800 N. LINDBERGH BLVD.

(Street)

3. Date of Earliest Transaction (Month/Day/Year)
07/31/2010

____ Director _____ 10% Owner
 Officer (give title below) _____ Other (specify below)
VP, Vegetable Business

ST. LOUIS, MO 63167

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

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

(City) (State) (Zip)

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 Ownership (Instr. 4)
			Code	V Amount (A) or (D) Price			
Common Stock	07/31/2010		M	636 A \$ 6,656		D	
Common Stock	07/31/2010		S	636 D \$ 57.88 (1)	6,020	D	
Common Stock					1,055	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)	8. Price or Value of Underlying Securities (Instr. 3 and 4)
Phantom Share Units	(1)	07/31/2010		M	636	07/31/2010 07/31/2010	Common Stock	636

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Madere Consuelo E. 800 N. LINDBERGH BLVD. ST. LOUIS, MO 63167			VP, Vegetable Business	

Signatures

Jennifer L. Woods,
Attorney-in-Fact

08/04/2010

__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).

Each phantom share unit was the economic equivalent of one share of Monsanto Company common stock. In accordance with the terms (1) and conditions the phantom share units were settled for cash based on the average of the high and low prices of Monsanto's common stock the day before vesting, which was \$57.88.

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.