

Snively David F
Form 4
September 02, 2010

FORM 4

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

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

OMB APPROVAL

OMB
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(Print or Type Responses)

1. Name and Address of Reporting Person *
Snively David F

(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)

08/31/2010

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)

EVP, Secy & Gen. Counsel

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 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	03/08/2010		G	V 300 D \$ 0 12,182	D		
Common Stock	03/10/2010		G	V 150 D \$ 0 12,032	D		
Common Stock	08/31/2010		F	1,427 (1) D \$ 52.65 10,605	D		
Common Stock					18,766	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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(9-02)

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 of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Transaction (Instr. 10)
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares

Reporting Owners

Reporting Owner Name / Address	Relationships
	Director 10% Owner Officer Other
Snively David F 800 N. LINDBERGH BLVD. ST. LOUIS, MO 63167	EVP, Secy & Gen. Counsel

Signatures

Jennifer L. Woods,
Attorney-in-Fact 09/02/2010

__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).

(1) On August 31, 2010, 4,600 restricted stock units became fully vested for which taxes became due and payable. 1,427 restricted stock units were used for the payment of these taxes.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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