#### MONSANTO CO /NEW/

Form 4

August 03, 2010

### FORM 4

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

**OMB** 

Estimated average

Check this box if no longer subject to

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF **SECURITIES** 

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2005

**OMB APPROVAL** 

Section 16. Form 4 or Form 5 obligations may continue.

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

burden hours per response... 0.5

1(b).

Stock

(Print or Type Responses)

See Instruction

1. Name and Address of Reporting Person * HARPER ARTHUR H			Symbol	2. Issuer Name and Ticker or Trading Symbol MONSANTO CO /NEW/ [MON]				5. Relationship of Reporting Person(s) to Issuer			
	(Last)	(First) (M	fiddle) 3. Date of	f Earliest Tr Day/Year)		[IVIC	,,, ,,,	(Chec	k all applicable	) Owner	
800 N. LINDBERGH BLVD.				07/30/2010				Officer (give below)	titleOthe	er (specify	
		(Street)		endment, Da nth/Day/Year	_	1		6. Individual or Jo Applicable Line) _X_ Form filed by O	•		
ST. LOUIS, MO 63167								Form filed by More than One Reporting Person			
	(City)	(State) (	Zip) Tabl	e I - Non-D	erivative	Secur	ities Acq	uired, Disposed of	f, or Beneficial	ly 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. Securi on(A) or Di (Instr. 3,	spose	d of (D)	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)	
	Stock	07/30/2010		A	$22 \frac{(1)}{}$	A	φ 57.84	16,971	D		

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

Persons who respond to the collection of SEC 1474 information contained in this form are not (9-02)required to respond unless the form displays a currently valid OMB control number.

57.84

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

#### Edgar Filing: MONSANTO CO /NEW/ - Form 4

	. Title of	2.	3. Transaction Date (Month/Day/Year)		4.	5.	6. Date Exerc		7. Title and	8. Price of	9. Nu Deriv
5	Derivative Security Instr. 3)	Conversion or Exercise Price of Derivative Security	(Month/Day/Year)	Execution Date, if any (Month/Day/Year)	Transacti Code (Instr. 8)	orNumber of Derivativ Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	s I		Amount of Underlying Securities (Instr. 3 and 4	Derivative Security (Instr. 5)	Deriv Secur Bene Own Follo Repo Trans (Instr
					Code V	<i></i>	Date Exercisable	Expiration Date	Title Amour or Number of	er	

# **Reporting Owners**

Reporting Owner Name / Address	Relationships					
<b>Fg</b>	Director	10% Owner	Officer	Other		
HARPER ARTHUR H						
800 N. LINDBERGH BLVD.	X					
ST. LOUIS, MO 63167						

## **Signatures**

Jennifer L. Woods, Attorney-in-Fact 08/03/2010

\*\*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).
  - Represents dividend equivalents with respect to shares of deferred common stock deliverable upon termination as a director under the Monsanto Company Non-Employee Director Equity Incentive Compensation Plan. Shares of stock are credited in the form of
- (1) hypothetical shares to a stock unit account in installments on the last day of each plan month during the director's term and for the payment of dividends. Shares of deferred stock not credited to the stock unit account because of termination as a director before the end of the director's term are forfeited.

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.

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