GRANT HUGH Form 4 October 22, 2008

FORM 4

OMB APPROVAL

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

OMB Number: 3235-0287

Check this box if no longer subject to Section 16. Form 4 or

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

Expires: January 31, 2005

section 16.

SECURITIES

orm 4 or

Estimated average burden hours per response... 0.5

Form 5 obligations may continue. *See* Instruction

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

1(b).

(Print or Type Responses)

Symbol	5. Relationship of Reporting Person(s) to Issuer		
	(Check all applicable)		
(Month/Day/Year) $10/20/2008$	_X_ Director 10% OwnerX_ Officer (give title Other (specify below)		
4. If Amendment, Date Original Filed(Month/Day/Year)	6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person		
	Form filed by More than One Reporting Person		
	Symbol MONSANTO CO /NEW/ [MON] 3. Date of Earliest Transaction (Month/Day/Year) 10/20/2008 4. If Amendment, Date Original		

(City)	(State) (A	Table	I - Non-D	erivative S	ecuriti	ies Acq	uired, Disposed o	f, or Beneficial	ly Owned
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any	3. Transaction Code	4. Securities Acquired tion(A) or Disposed of (D)		5. Amount of Securities Beneficially	6. Ownership Form: Direct (D) or	7. Nature of Indirect Beneficial	
		(Month/Day/Year)	(Instr. 8) Code V	(Instr. 3, 4) Amount	(A) or (D)) Price	Owned Following Reported Transaction(s) (Instr. 3 and 4)	Indirect (I) (Instr. 4)	Ownership (Instr. 4)
Common Stock	10/20/2008		A	66,400 (1)	A	\$0	521,114	D	
Common Stock							5,442	I	By 401(k) Plan

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

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1474

(9-02)

Edgar Filing: GRANT HUGH - Form 4

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

1. Title of	2.	3. Transaction Date	3A. Deemed	4.	5. Number of	6. Date Exercisab	le and	7. Title and A	Amount
Derivative	Conversion	(Month/Day/Year)	Execution Date, if	TransactionDerivative		Expiration Date		Underlying Securitie	
Security	or Exercise		any	Code Securities		(Month/Day/Year)		(Instr. 3 and 4)	
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8) Acquired (A) or					
	Derivative			Disposed of (D)					
	Security			(Instr. 3, 4, and					
	·				5)				
				Code V	(A) (D)	Date Exercisable	Expiration Date	Title	Amour Number Shares
Option (right to buy)	\$ 89.45	10/20/2008		A	157,220	11/15/2009(2)	10/20/2018	Common Stock	157,2

Reporting Owners

Reporting Owner Name / Address	Relationships						
• 0	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 10/22/2008 Attorney

> **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) Restricted stock unit grant pursuant to the Monsanto Company Long-Term Incentive Plan vesting on August 31, 2009.
- One-third of the options become exercisable on November 15, 2009, one-third of the options become exercisable on November 15, 2010 and one-third of the options become exercisable on November 15, 2011, subject 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.

Reporting Owners 2