

MONSANTO CO /NEW/
Form 4
September 21, 2005

FORM 4

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

OMB APPROVAL

OMB Number: 3235-0287
Expires: January 31, 2005
Estimated average burden hours per response... 0.5

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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 *
LEIDY MARK J

(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)
09/19/2005

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)

EVP-Manufacturing

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 Ownership (Instr. 4)
			Code	V Amount (A) or (D) Price			
Common Stock	09/19/2005		F	4,245 (1) \$ 63.77	23,555	D	
Common Stock					3,242	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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SEC 1474 (9-02)

