

ITEM 5.02. DEPARTURE OF DIRECTORS OR CERTAIN OFFICERS; ELECTION OF DIRECTORS; APPOINTMENT OF CERTAIN OFFICERS.

Change-of-Control Employment Security Agreement.

On August 30, 2010, Monsanto Company (the “Company”) entered into new Change-of-Control Employment Security Agreements with the following named executive officers: Messrs. Begemann, Casale and Grant, and Dr. Fraley. A form of the new Change of Control Agreements is attached as Exhibit 10 and incorporated herein by reference (the “COC Agreement”). Capitalized terms used but not defined in this section have the meanings provided in the COC Agreement.

The COC Agreement generally provides that during the Protected Period, which runs from the first day following a Change of Control to the second anniversary of that date, the Executive’s position and duties shall be materially commensurate with his position and duties before the Change of Control, the location of his employment and travel requirements shall not change substantially, and the Executive’s salary, incentive opportunities and opportunities to participate in Company benefit plans shall be at least commensurate with opportunities before the Change of Control.

In the event the Executive’s employment with the Company terminates during the Protected Period, or in some cases earlier in anticipation of the Change of Control, subject to the terms of the COC Agreements:

- If the termination is by the Executive for Good Reason, or by the Company other than for Cause, death or Disability, the Executive will be entitled to:
 - o any unpaid Base Salary, a prorated Annual Incentive for the year of termination and an amount equal to the product of (i) three, and (ii) the sum of the Annual Base Salary Amount, and the Average Pre-Change-of-Control Annual Incentive Bonus;
 - o Specified Welfare Benefits for two years, provided that the Executive has not become eligible for a corresponding benefit through another employer;
 - o retiree medical benefits beginning at the end of the Severance Period, if the Executive has achieved at least 50 years of age and 10 years of service, with a combined age and Years of Service of at least 65; and
 - o benefits accrued under the Company’s pension, parity pension or similar plan, and any other benefits which the Executive is entitled to receive.
- If the Executive’s employment is terminated by reason of death or Disability, the Executive’s estate or beneficiaries, or the Executive, will be entitled to receive any unpaid Base Salary and a prorated Annual Incentive for the year of termination, as well as other benefits at least as favorable as those which would be provided to estates or beneficiaries of peer executives or disabled peer executives.
- If the Executive’s employment is terminated by the Company for Cause, the Executive will be entitled to receive unpaid Base Salary and any other benefits which the Executive is entitled to receive.

- If the Executive terminates his employment other than for Good Reason, the Executive will be entitled to receive any unpaid Base Salary, a prorated Annual Incentive for the year of termination and any other benefits which the Executive is entitled to receive.

In the event a Change of Control occurs prior to September 1, 2011, the COC Agreement provides that the Company would pay the Executive a Gross-Up Payment for any Payment subject to an Excise Tax, unless the Parachute Value of all Payments does not exceed 110% of an amount equal to three times the Executive's base amount under Section 280G(b)(3) of the Internal Revenue Code, minus \$1.00, which is the Safe Harbor Amount. However, if a Change of Control occurs after September 1, 2011, the Company will not pay a Gross-Up Payment but will reduce Payments such that the aggregate amount equals the Safe Harbor Amount, if the Executive's Net After-Tax Receipt of Payments would be greater than it would be without the reduction.

Under the COC Agreement, a Change of Control includes:

- the acquisition by a Person of 30 percent or more of the Company's outstanding stock;
- a change such that the directors who were members of the Company's Board of Directors at the time of the Company's initial public offering cease to constitute a majority of the Board;
- a Business Combination, unless following such event (1) the individuals and entities who owned the Company's securities prior to the event beneficially own at least 50 percent of the Company's outstanding shares and voting power, (2) no Person beneficially owns 30 percent of the Company's outstanding shares, and (3) the directors who were members of the Company's Board of Directors at the time of the Company's initial public offering continue to constitute a majority of the Board.

The Executive is required to devote reasonable attention and time to the Company during the Protected Period and to protect the Company's Confidential Information.

The term of the COC Agreement is one year, provided that the COC Agreement shall renew on August 31 of each successive year unless the Company gives notice of non-renewal by the preceding July 1.

The above description is qualified in its entirety by reference to the COC Agreement attached.

ITEM 9.01. FINANCIAL STATEMENTS AND EXHIBITS.

(d) Exhibits

The following exhibit is filed herewith:

Exhibit 10 Form of Change of Control Employment Security Agreement, effective Sept. 1, 2010

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: September 7, 2010

MONSANTO COMPANY

By: /s/ Jennifer L. Woods
Name: Jennifer L. Woods
Title: Assistant Secretary

EXHIBIT INDEX

Exhibit No.	Description of Exhibit
Exhibit 10	Form of Change of Control Employment Security Agreement, effective Sept. 1, 2010