



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 3561

February 24, 2011

Via U.S. Mail

Ms. Nicole M. Ringenberg, Vice President and Controller  
Monsanto Company  
800 North Lindbergh Boulevard  
St. Louis, Missouri 63167

**Re: Monsanto Company**  
**Form 10-K for the fiscal year ended August 31, 2010**  
**Filed October 27, 2010**  
**Form 10-Q for the quarter ended November 30, 2010**  
**Filed January 7, 2011**  
**File No. 001-16167**

Dear Ms. Ringenberg:

We have reviewed your filings and have the following comments. Unless otherwise indicated, we think you should revise your document in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Please respond to confirm that such comments will be complied with, or, if certain of the comments are deemed inappropriate, advise the staff of your reason. Your response should be submitted in electronic form, under the label "corresp" with a copy to the staff. Please respond within ten (10) business days.

Quarterly Report on Form 10-Q for the quarter ended November 30, 2010

Financial Statements, page 3

Condensed Statements of Consolidated Financial Position, page 5

1. We see from page 38 that the company's deferred revenues increased \$1,119 million due to a change in the U.S. customer prepayment date that was shifted to the month of November. Please tell us and revise MD&A in future filings to explain the facts or circumstances responsible for the change in the prepayment date and to explain why the change in this prepayment date resulted in the significant increase in deferred revenues. Also, please explain why the increase in deferred revenue is classified in current liabilities.

Notes to the Consolidated Financial Statements – Unaudited, page 8

Note 16. Postretirement Benefits – Pensions, Health Care and Other, page 24

Employee Savings Plan, page 25

2. We note from the disclosure included in Note 16 that as of both November 30, 2010 and August 31, 2010, a liability of \$56 million is due to the Monsanto ESOP from the company and is included in other liabilities in the company's condensed statements of financial position at these dates. We also note from the company's disclosure that this payable is related to the November 2008 and 2004 ESOP enhancements. Given that this payable relates to enhancements to the ESOP plan completed in 2004 and 2008, please tell us and revise future filings to disclose when this payable from the company to the ESOP plan is required or expected to be paid.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Ms. Nicole M. Ringenberg, Controller  
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In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Heather Clark at 202-551-3624 if you have questions regarding comments on the financial statements and related matters. Please contact me at 202-551-3813 with any other questions.

Sincerely,

Linda Cvrkel  
Branch Chief