



DIVISION OF
CORPORATION FINANCE

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

March 4, 2013

Via E-Mail

Mr. Pierre Courduroux
Chief Financial Officer
Monsanto Company
800 North Lindbergh Blvd.
St. Louis, Missouri

**Re: Monsanto Company
Form 10-K for the year ended August 31, 2012
Filed October 19, 2012
File No. 001-16167**

Dear Mr. Courduroux:

We have reviewed your letter dated February 15, 2013, in response to the Staff's letter dated February 5, 2013 and have the following additional comment. Please revise your disclosure in future filings in response to our comment. 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.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Results of Operations, page 21

1. We note your response and revised disclosure to our prior comment two and three; however, in addition to discussing the reasons for the change (or lack thereof), we believe you should also quantify the reasons for the change, particularly when more than one factor is attributed to the change. For example, you state in your proposed disclosure that the increase in costs of goods sold for the seeds and genomics segment "was primarily the result of increased volume in corn seed and traits and soy seed and traits. Also contributing to this increase were higher field costs, driven by inflation and commodity prices." However, no amounts have been provided to place the relative contribution of each factor in proper context. In this regard, please revise to separately quantify each significant factor contributing to the change for each of the line items (e.g. costs of sales) discussed within the results of operations section.

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You may contact Effie Simpson at (202) 551-3346, or in her absence, Jean Yu at (202) 551-3305 if you have questions regarding comments on the financial statements and related matters. Please contact the undersigned at (202) 551-3750 with any other questions.

Sincerely,

/s/ Linda Cvrkel

Linda Cvrkel
Branch Chief