

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

January 24, 2012

Via E-Mail
Mr. Pierre Courduroux
Chief Financial Officer
Monsanto Company
800 North Lindbergh Boulevard
St. Louis, Missouri 63167

Re: Monsanto Company

Amendment No. 1 to Form 10-K for Fiscal Year Ended August 31, 2011

Filed December 1, 2011 File No. 001-16167

Dear Mr. Courduroux:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or 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. 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 the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Lyn Shenk for

Linda Cvrkel Branch Chief