

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

July 21, 2015

Via E-mail
Randal J. Kirk
Chief Executive Officer
Intrexon Corp.
20374 Seneca Meadows Parkway
Germantown, MD 20876

Re: Intrexon Corp. Form 10-K for the Fiscal Year Ended December 31, 2014 Filed March 2, 2015 File No. 1-36042

Dear Mr. Kirk:

We have completed our review of your filing. We remind you that our comment or changes to disclosure in response to our comment 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/ Jeffrey P. Riedler

Jeffrey P. Riedler Assistant Director