
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-A

**FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES
PURSUANT TO SECTION 12(b) OR (g) OF
THE SECURITIES EXCHANGE ACT OF 1934**

Intrexon Corporation

(Exact name of registrant as specified in its charter)

Virginia
(State of incorporation or organization)

26-0084895
(IRS Employer Identification No.)

20374 Seneca Meadows Parkway
Germantown, Maryland
(Address of principal executive offices)

20876
(Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class
to be so registered
Common Stock, no par value per share

Name of each exchange on which
each class is to be registered
The Nasdaq Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box.

If this Form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box.

If this form relates to the registration of a class of securities concurrently with a Regulation A offering, check the following box.

Securities Act registration statement file number to which this form relates: Not applicable.

Securities to be registered pursuant to Section 12(g) of the Act: None.

Item 1. Description of Registrant's Securities to Be Registered.

A description of the common stock, no par value per share, of Intrexon Corporation, a Virginia corporation (the "Registrant"), is set forth under the caption "Description of Capital Stock" contained in the prospectus, dated September 1, 2017, that constitutes a part of the Registrant's Registration Statement on Form S-3 (File No. 333-220326). Such description is incorporated herein by reference. The description of the common stock included in any form of prospectus subsequently filed by the Registrant pursuant to Section 424(b) of the Securities Act of 1933, as amended, shall also be deemed to be incorporated herein by reference.

Item 2. Exhibits.

Pursuant to the Instructions as to Exhibits with respect to Form 8-A, no exhibits are required to be filed because no other securities of the Registrant are registered on The Nasdaq Stock Market LLC and the securities registered hereby are not being registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

INTREXON CORPORATION

By: /s/ Donald P. Lehr

Name: Donald P. Lehr

Title: Chief Legal Officer

Date: September 24, 2018