

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13D

(Amendment No.)*

Under the Securities Exchange Act of 1934

ORAGENICS, INC.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

684023-10 4

(CUSIP Number)

**Third Security, LLC
1881 Grove Avenue
Radford, Virginia 24141
Attention: Marcus E. Smith, Esq.
(540) 633-7900**

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

**Copy to:
Intrexon Corporation
Attention: Legal
20358 Seneca Meadows Parkway
Germantown, Maryland 20876
(301) 556-9809**

June 5, 2012

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(b)(3) or (4), check the following box .

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS Randal J. Kirk	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS PF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,392,425
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,392,425
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,392,425	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 26.5%	
14	TYPE OF REPORTING PERSON IN	

1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS Intrexon Corporation I.R.S. IDENTIFICATION NO.: 26-0084895	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Virginia	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,392,425
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,392,425
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,392,425	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 26.5%	
14	TYPE OF REPORTING PERSON CO	

Item 1. Security and Issuer.

The class of equity securities to which this Statement on Schedule 13D (the "Statement"), relates is the common stock, par value \$0.001 per share (the "Common Stock"), of Oragenics, Inc., a Florida corporation (the "Company"), whose principal executive offices are located at 3000 Bayport Drive, Suite 685, Tampa, Florida 33607.

Item 2. Identity and Background.

This Statement is being filed on behalf of Mr. Randal J. Kirk ("Mr. Kirk") and Intrexon Corporation, a Virginia corporation that is controlled by Mr. Kirk ("Intrexon" and, together with Mr. Kirk, the "Reporting Persons").

(a)-(c) The address of the principal business office of Mr. Kirk is The Governor Tyler, 1881 Grove Avenue, Radford, Virginia 24141. The address of the principal business office of Intrexon is 20358 Seneca Meadows Parkway, Germantown, Maryland 20876. The present principal occupation/employment of Mr. Kirk is Senior Managing Director of Third Security, LLC, an investment management firm founded by Mr. Kirk. Mr. Kirk also serves as the Chairman and CEO of Intrexon. The principal business of Intrexon is employing modular DNA control systems to enhance capabilities, improve safety and lower cost in human therapeutics, protein production, industrial products and agricultural biotechnology.

(d)-(e) During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding is or was subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Mr. Kirk is a citizen of the United States. Intrexon is a corporation organized under the laws of the Commonwealth of Virginia.

Item 3. Source and Amount of Funds or Other Consideration.

On June 5, 2012, the Company entered into an Exclusive Channel Collaboration Agreement (the "Channel Agreement") with Intrexon that governs a "channel collaboration" arrangement through which the Company intends to develop and commercialize lantibiotics, a novel class of broad spectrum antibiotics, as active pharmaceutical ingredients (API) for the treatment of infectious diseases in humans and companion animals. In connection therewith, on June 5, 2012, the Company entered into a Stock Issuance Agreement with Intrexon pursuant to which the Company agreed to issue to Intrexon 4,392,425 shares of Common Stock (the "Initial Shares") as partial consideration for the execution and delivery of the Channel Agreement. The closing of the issuance of the Initial Shares occurred on June 5, 2012.

The Company has also agreed to make certain payments to Intrexon upon the Company's achievement of designated milestones in the form of shares of Common Stock or at the Company's option make a cash payment to Intrexon (based upon the fair market value of the shares otherwise required to be issued). The milestone events and amounts payable are as follows: (i) upon filing of the first Investigational New Drug application with the U.S. Food and Drug Administration (FDA), that number of shares of Common Stock equal to the number of shares of Common Stock comprising 1.0% of the Base Shares (defined below); (ii) upon the dosing of the first patient in the first Phase 2 clinical study, that number of shares of Common Stock equal to the number of shares of Common Stock comprising 1.5% of the Base Shares; (iii) upon the dosing of the first patient in the first Phase 3 clinical study, that number of shares of Common Stock equal to the number of shares of Common Stock comprising 2% of the Base Shares; (iv) upon the filing of the first New Drug Application (NDA) or Biologics License Application (BLA) with the FDA for a product developed pursuant to the Channel Agreement, or alternatively the filing of the first equivalent regulatory filing with a foreign regulatory agency, that number of shares of Common Stock equal to the number of shares of Common Stock comprising 2.5% of the Base Shares; and (v) upon the granting of the first regulatory approval of a product developed pursuant to the Channel Agreement, that number of shares of Common Stock that are equal to the number of shares of Common Stock comprising 3% of the Base Shares.

Base Shares is defined in the Stock Issuance Agreement to mean (i) the number of shares of Common Stock together with any securities or instruments convertible or exercisable for shares of Common Stock issued and outstanding at the time of the relevant milestone event, (ii) minus any shares issuable upon conversion of Capital Inducement Securities. Capital Inducement Securities is defined in the Stock Issuance Agreement to mean warrants or other convertible securities of the Company issued to investors in connection with a debt or equity investment in the Company that are issued in addition to the primary investment securities and in an amount not to exceed 10% of the overall number of shares issued in the investment (on an as-converted to Common Stock basis).

Under the Stock Issuance Agreement, Intrexon is entitled, at its election, to participate in future securities offerings of the Company that constitute "Qualified Financings" and purchase securities equal to 30% of the number of shares of common stock or other securities sold in such offering. For this purpose, a "Qualified Financing" means a sale of common stock or equity securities convertible into Common Stock in a public or private offering, raising gross proceeds of at least \$1,000,000, where the sale of shares is either registered under the Securities Act of 1933, as amended (the "Securities Act"), at the time of issuance or the Company agrees to register the resale of such shares.

The foregoing references to and description of the Channel Agreement and the Stock Issuance Agreement do not purport to be complete and are subject to, and are qualified in their entirety by reference to, the full text of the Channel Agreement and the Stock Issuance Agreement, which are included as Exhibits 1 and 2 hereto, respectively, and are incorporated by reference to this Item 3.

Item 4. Purpose of Transaction.

The information set forth in Items 3 and 6 is incorporated herein by reference.

The Reporting Persons acquired the shares disclosed hereunder as partial consideration for the execution and delivery of the Channel Agreement. The Reporting Persons may, from time to time, depending upon market conditions and other factors deemed relevant by the Reporting Persons, acquire shares of Common Stock or other capital stock of the Company outside of those contemplated by the Stock Issuance Agreement. The Reporting Persons reserve the right to, and may in the future choose to, change their purpose with respect to the investment and take such actions as they deem appropriate in light of the circumstances including, without limitation, to dispose of, in the open market, in a privately negotiated transaction, by transfer, by exchange or by gift, all or a portion of the shares of Common Stock or other securities of the Company that they now own or may hereafter acquire. Any decision of the Reporting Persons to increase their holdings in Common Stock or securities convertible into Common Stock, will depend, however, on numerous factors including, without limitation, the price of shares of Common Stock, the terms and conditions related to their purchase and sale, the prospects and profitability of the Company, other business and investment alternatives of the Reporting Persons, tax considerations and general economic and market conditions. At any time, the Reporting Persons, or any of them, may determine to dispose of some or all of their holdings of Common Stock depending on those and other considerations.

At the date of this Statement, the Reporting Persons have plans or proposals which would result in:

- (a) The acquisition of additional securities of the Company.

Intrexon may acquire additional shares of Common Stock as set forth in Item 3 above.

Except as described above, at the date of this Statement, each of the Reporting Persons has no present plans or proposals which would result in:

- (a) The acquisition by any person of additional securities of the Company, or the disposition of securities of the Company;
 - (b) An extraordinary corporate transaction involving the Company or any of its subsidiaries;
 - (c) A sale or transfer of a material amount of assets of the Company or any of its subsidiaries;
 - (d) Any change in the present board of directors or management of the Company, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;
 - (e) Any material change in the present capitalization or dividend policy of the Company;
 - (f) Any other material change in the Company's business or corporate structure, including but not limited to, if the Company is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by Section 13 of the Investment Company Act of 1940;
 - (g) Changes in the Company's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Company by any person;
 - (h) Causing a class of securities of the Company to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
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(i) A class of equity securities of the Company becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934; or

(j) Any action similar to any of those actions enumerated above.

Item 5. Interest in Securities of the Issuer.

The information contained on the cover pages to this Statement and the information set forth or incorporated in Items 2, 3, 4 and 6 is incorporated herein by reference.

(a) and (b) See Items 11 and 13 of the cover pages to this Statement for the aggregate number of shares and percentage of issued and outstanding shares of Common Stock of the Company owned by the Reporting Persons. The percentage ownership is calculated based on 12,174,795 shares of Common Stock issued and outstanding as of the closing of the issuance of the Initial Shares pursuant to the Stock Issuance Agreement on June 5, 2012, increased by the 4,392,425 shares constituting the Initial Shares.

Reporting Person	Amount of Common Stock Beneficially Owned	Percent of Class	Sole Power to Vote or Direct the Vote	Shared Power to Vote or Direct the Vote	Sole Power to Dispose or to Direct the Disposition	Shared Power to Dispose or to Direct the Disposition
Randal J. Kirk	4,392,425	26.5%	—	4,392,425	—	4,392,425
Intrexon Corporation	4,392,425	26.5%	—	4,392,425	—	4,392,425

Mr. Kirk could be deemed to have indirect beneficial ownership of the shares of Common Stock directly beneficially owned by Intrexon.

(c) Except as set forth in this Item 5, none of the Reporting Persons have engaged in any transactions in the Common Stock in the past 60 days.

(d)-(e) Not Applicable

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

The Reporting Persons' response to Item 4 is incorporated herein by reference.

The Stock Issuance Agreement contains a standstill provision pursuant to which, among other things, Intrexon has agreed that, for a period of three years, subject to certain exceptions and unless invited in writing by the Company to do so, neither Intrexon nor its affiliates will, directly or indirectly: (i) effect or seek, initiate, offer or propose to effect, or cause or participate in any acquisition of securities or assets of the Company; any tender or exchange offer, merger, consolidation or other business combination involving the Company; any recapitalization, restructuring, liquidation, dissolution or other extraordinary transaction with respect to the Company; or any "solicitation" of "proxies" or consents to vote any voting securities of the Company, or in any way advise or assist any other person in doing so; (ii) form, join or in any way participate in a "group" with respect to any securities of the Company; (iii) otherwise act to seek to control or influence the management, Board of Directors or policies of the Company; (iv) take any action reasonably expected to force the Company to make a public announcement regarding any such matters; or (v) enter into any agreements, discussions or arrangements with any third party with respect to any of the foregoing.

If, at any time, the Company proposes to file a registration statement under the Securities Act, other than a registration relating solely to employee benefit plans or Rule 145 transactions, with respect to an underwritten offering for its own account of any class of securities of the Company (a "Registration Statement"), then each such time, the Company shall give written notice of such intention to file a Registration Statement (a "Piggyback Notice") to Intrexon at least five (5) days before the anticipated filing date. The Piggyback Notice shall describe the number of shares to be registered and the intended method of distribution and offer Intrexon the opportunity to register pursuant to such Registration Statement such shares held by Intrexon (the "Registrable Shares") as Intrexon may request in writing to the Company within five (5) days after the date Intrexon first received the Piggyback Notice (a "Piggyback Registration"). The Piggyback Registration rights shall be subject ratably to potential underwriter's limitations set forth herein. The Company shall take all reasonable steps to include in the Registration Statement the Registrable Shares which the Company has been so requested to register by Intrexon. The Company shall be entitled to suspend or withdraw a Registration Statement prior to its becoming effective. If the managing underwriter with respect to such an offering advises the Company in writing that the inclusion of all or any portion of the Registrable Shares which Intrexon has requested to be included in the Registration Statement would materially jeopardize the success of the offering, then the Company shall be required to include in the underwriting only that number of Registrable Shares which the underwriter advises the Company in writing may be sold without materially jeopardizing the offering. If Intrexon disapproves of the terms of any such underwriting it may elect to withdraw its Registrable Shares from it by written notice to the Company and the underwriter. Intrexon also agrees to be subject to any lock-up agreements reasonably requested by a managing underwriter so long as the Company shares held by the Company's largest shareholder are also subject to a similar lock-up agreement. The Company shall not grant registration rights to any other holder or prospective holder of its securities in connection with a private placement of the Company's securities unless, (i) all shares held by Intrexon are, at the time of such private placement, included on a Registration Statement, or (ii) the Company agrees, in connection with such private placement, to grant Intrexon the right to include on the Registration Statement a number of Intrexon's Registrable Shares equal to one half of the number of shares to be registered on behalf of the other holder or prospective holder.

The foregoing references to and description of the Stock Issuance Agreement do not purport to be complete and are subject to, and are qualified in their entirety by reference to, the full text of the Stock Issuance Agreement, which is included as Exhibit 2 and is incorporated by reference to this Item 6. Except as set forth herein, there are no contracts, arrangements, understandings or relationships (legal or otherwise), including, but not limited to, transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies, between the Reporting Persons, and any other person, with respect to any securities of the Company, including any securities pledged or otherwise subject to a contingency the occurrence of which would give another person voting power or investment power over such securities other than standard default and similar provisions contained in loan agreements.

Item 7. Material to be Filed as Exhibits.

Exhibit 1 Exclusive Channel Collaboration Agreement by and between the Company and Intrexon dated as of June 5, 2012 (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, dated June 5, 2012, and incorporated herein by reference)**

Exhibit 2 Stock Issuance Agreement by and between the Company and Intrexon dated as of June 5, 2012 (filed as Exhibit 10.2 to the Company's Current Report on Form 8-K, dated June 5, 2012, and incorporated herein by reference)

Exhibit 3 Joint Filing Agreement, dated as of June 12, 2012, by and between Mr. Kirk and Intrexon

**Confidential treatment has been requested as to certain portions of this exhibit pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SIGNATURES

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Date: June 12, 2012

/s/ Randal J. Kirk

Randal J. Kirk

INTREXON CORPORATION

By: /s/ Randal J. Kirk

Randal J. Kirk

Chief Executive Officer

EXHIBIT INDEX

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[Exhibit 3](#) Joint Filing Agreement, dated as of June 12, 2012, by and between Mr. Kirk and Intrexon

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Exhibit 3

Joint Filing Agreement

In accordance with Rule 13d-1(k) promulgated under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them a Statement on Schedule 13D (including amendments thereto) with regard to the common stock of Orogenics, Inc., and further agree that this Joint Filing Agreement be included as an exhibit to such joint filings. In evidence thereof, the undersigned, being duly authorized, hereby execute this agreement as of the 12th day of June, 2012.

/s/ Randal J. Kirk

Randal J. Kirk

INTREXON CORPORATION

By: /s/ Randal J. Kirk

Randal J. Kirk

Chief Executive Officer
