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

FORM 10-QSB

(Mark One)

☒ **Quarterly Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the quarterly period ended September 30, 2004

o **Transition Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the transition period from to

Commission File No. 001-31326

SENESCO TECHNOLOGIES, INC.
(Exact Name of Small Business Issuer as Specified in Its Charter)

Delaware	**84-1368850**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

303 George Street, Suite 420, New Brunswick, New Jersey 08901
(Address of Principal Executive Offices)

(732) 296-8400
(Issuer's Telephone Number, Including Area Code)

Check whether the Issuer: (1) filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the past 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes: ☒ No: o

State the number of shares outstanding of each of the Issuer's classes of common stock, as of October 29, 2004:

Class	Number of Shares
Common Stock, $0.01 par value	13,789,750

Transitional Small Business Disclosure Format (check one):

Yes: o No: ☒

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

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PART I. FINANCIAL INFORMATION.

Item 1. Financial Statements.

Certain information and footnote disclosures required under generally accepted accounting principles have been condensed or omitted from the following consolidated financial statements pursuant to the rules and regulations of the Securities and Exchange Commission. However, Senesco Technologies, Inc., a Delaware corporation, and its wholly owned subsidiary, Senesco, Inc., a New Jersey corporation (collectively, "Senesco" or the "Company"), believe that the disclosures are adequate to assure that the information presented is not misleading in any material respect.

The results of operations for the interim periods presented herein are not necessarily indicative of the results to be expected for the entire fiscal year.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY
(A DEVELOPMENT STAGE COMPANY)
CONDENSED CONSOLIDATED BALANCE SHEET

	September 30, 2004 (unaudited)	June 30, 2004
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 119,294	$ 186,248
Short-term investments	3,348,358	3,949,774
Prepaid expenses and other current assets	59,816	93,967
Total Current Assets	3,527,468	4,229,989
Property and equipment, net	46,707	51,702
Intangibles, net	1,088,852	922,214
Security deposit	7,187	7,187
TOTAL ASSETS	$ 4,670,214	$ 5,211,092
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 148,852	$ 69,008
Accrued expenses	227,659	287,626
Deferred revenue	20,835	33,333
Total Current Liabilities	397,346	389,967
Grant payable	90,150	90,150
TOTAL LIABILITIES	487,496	480,117

STOCKHOLDERS' EQUITY:		
Preferred stock, $0.01 par value; authorized 5,000,000 shares, no shares issued	—	—
Common stock, $0.01 par value; authorized 30,000,000 shares, issued and outstanding 13,789,750 and 13,787,250 shares, respectively	137,898	137,873
Capital in excess of par	17,173,143	17,168,043
Deficit accumulated during the development stage	(13,128,323)	(12,574,941)
Total Stockholders' Equity	4,182,718	4,730,975
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 4,670,214	$ 5,211,092

See Notes to Condensed Consolidated Financial Statements.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY
(A DEVELOPMENT STAGE COMPANY)
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)

	For the Three Months Ended September 30, 2004	For the Three Months Ended September 30, 2003	From Inception on July 1, 1998 through September 30, 2004
Revenue	$ 12,498	$ —	$ 239,165
Operating Expenses:			
General and administrative	327,763	1,139,392	10,237,166
Research and development	245,985	272,001	3,909,101
Total Operating Expenses	573,748	1,411,393	14,146,267
Loss From Operations	(561,250)	(1,411,393)	(13,907,102)
Sale of state income tax loss	—	—	433,282
Other noncash income	—	—	185,627
Interest income, net	7,868	10,911	159,870
Net Loss	$ (553,382)	$ (1,400,482)	$ (13,128,323)
Basic and Diluted Net Loss Per Common Share	$ (0.04)	$ (0.12)	
Basic and Diluted Weighted Average Number of Common Shares Outstanding	13,787,848	11,880,045	

See Notes to Condensed Consolidated Financial Statements.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY
(A DEVELOPMENT STAGE COMPANY)
CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
FROM INCEPTION ON JULY 1, 1998 THROUGH SEPTEMBER 30, 2004
(unaudited)

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Total
	Shares	Amount			
Common stock outstanding	2,000,462	$ 20,005	$ (20,005)	—	—
Contribution of capital	—	—	85,179	—	$ 85,179
Issuance of common stock in reverse merger on January 22, 1999 at $0.01 per share	3,400,000	34,000	(34,000)	—	—
Issuance of common stock for cash on May 21, 1999 at $2.63437 per share	759,194	7,592	1,988,390	—	1,995,982
Issuance of common stock for placement fees on May 21, 1999 at $0.01 per share	53,144	531	(531)	—	—
Issuance of common stock for cash on January 26, 2000 at $2.867647 per share	17,436	174	49,826	—	50,000

Issuance of common stock for cash on January 31, 2000 at $2.87875 per share	34,737	347	99,653	—	100,000
Issuance of common stock for cash on February 4, 2000 at $2.934582 per share	85,191	852	249,148	—	250,000
Issuance of common stock for cash on March 15, 2000 at $2.527875 per share	51,428	514	129,486	—	130,000
Issuance of common stock for cash on June 22, 2000 at $1.50 per share	1,471,700	14,718	2,192,833	—	2,207,551

(continued)

See Notes to Condensed Consolidated Financial Statements.

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Total
	Shares	Amount			
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2000	—	—	$ (260,595)	—	$ (260,595)
Fair market value of options and warrants vested during the year ended June 30, 2000	—	—	873,779	—	873,779
Fair market value of options granted on October 2, 2000	—	—	80,700	—	80,700
Issuance of common stock and warrants for cash from November 30, 2001 through April 17, 2002 at $1.75 per unit	3,701,430	$ 37,014	6,440,486	—	6,477,500
Issuance of common stock and warrants associated with bridge loan conversion on December 3, 2001	305,323	3,053	531,263	—	534,316
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2002	—	—	(846,444)	—	(846,444)
Fair market value of options and warrants vested during the year ended June 30, 2002	—	—	577,708	—	577,708
Fair market value of options and warrants vested during the year ended June 30, 2003	—	—	97,497	—	97,497

(continued)

See Notes to Condensed Consolidated Financial Statements.

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Total
	Shares	Amount			
Issuance of common stock and warrants for cash from January 15, 2004 through February 12, 2004 at $2.37 per unit	1,536,922	$ 15,369	$ 3,627,131	—	$ 3,642,500
Allocation of proceeds to warrants	—	—	(2,099,090)	—	(2,099,090)
Reclassification of warrants	—	—	1,913,463	—	1,913,463
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2004	—	—	(378,624)	—	(378,624)
Fair market value of options and warrants vested during the year ended June 30, 2004	—	—	1,177,845	—	1,177,845

Options and warrants exercised during the year ended June 30, 2004 at exercise prices ranging from $1.00 - $3.25	370,283	3,704	692,945	—	696,649
Options exercised during the three months ended September 30, 2004 at an exercise price of $2.05	2,500	25	5,100	—	5,125
Net loss	—	—	—	$ (13,128,323)	(13,128,323)
Balance at September 30, 2004	13,789,750	$ 137,898	$ 17,173,143	$ (13,128,323)	$ 4,182,718

See Notes to Condensed Consolidated Financial Statements.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY
(A DEVELOPMENT STAGE COMPANY)
CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS
(unaudited)

	For the Three Months Ended September 30, 2004	2003	From Inception on July 1, 1998 through September 30, 2004
Cash flows from operating activities:			
Net loss	$ (553,382)	$ (1,400,482)	$ (13,128,323)
Adjustments to reconcile net loss to net cash used in operating activities:			
Noncash capital contribution	—	—	85,179
Noncash conversion of accrued expenses into equity	—	—	131,250
Noncash income related to change in fair value of warrant liability	—	—	(185,827)
Issuance of common stock and warrants for interest	—	—	9,316
Issuance of stock options and warrants for services	—	843,480	2,676,280
Depreciation and amortization	10,004	7,553	123,841
(Increase) decrease in operating assets:			
Prepaid expense and other current assets	34,151	32,994	(59,816)
Security deposit	—	—	(7,187)
Increase (decrease) in operating liabilities:			
Accounts payable	79,844	(22,039)	148,852
Accrued expenses	(59,967)	107,110	227,659
Deferred revenue	(12,498)	—	20,835
Net cash used in operating activities	(501,848)	(431,384)	(9,957,941)
Cash flows from investing activities:			
Patent costs	(169,963)	(57,748)	(1,095,761)
Redemption (purchase) of investments, net	601,416	447,733	(3,348,358)
Purchase of property and equipment	(1,684)	—	(163,640)
Net cash provided by (used in) investing activities	429,769	389,985	(4,607,759)
Cash flows from financing activities:			
Proceeds from grant	—	—	90,150
Proceeds from issuance of bridge notes	—	—	525,000
Proceeds from issuance of common stock	5,125	—	14,069,844
Cash provided by financing activities	5,125	—	14,684,994
Net increase (decrease) in cash and cash equivalents	(66,954)	(41,399)	119,294
Cash and cash equivalents at beginning of period	186,248	319,930	—
Cash and cash equivalents at end of period	$ 119,294	$ 278,531	$ 119,294
Supplemental disclosure of cash flow information:			
Cash paid during the period for interest	$ —	$ —	$ 22,317
Supplemental schedule of noncash financing activity:			
Conversion of bridge notes into stock	$ —	$ —	$ 534,316

See Notes to Condensed Consolidated Financial Statements.

Note 1 - Basis of Presentation:

The financial statements included herein have been prepared by the Company, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-KSB for the fiscal year ended June 30, 2004.

In the opinion of the Company's management, the accompanying unaudited condensed consolidated financial statements contain all adjustments, consisting solely of those which are of a normal recurring nature, necessary to present fairly its financial position as of September 30, 2004, the results of its operations, stockholders equity and cash flows for the three-month periods ended September 30, 2004 and 2003, the results of its operations and cash flows for the period from inception on July 1, 1998 through September 30, 2004.

Interim results are not necessarily indicative of results for the full fiscal year.

Note 2 - Loss Per Share:

Net loss per common share is computed by dividing the loss by the weighted average number of common shares outstanding during the period. As of September 30, 2004 and 2003, shares to be issued upon the exercise of options and warrants aggregating 6,849,586 and 6,235,753, respectively, at an average exercise price of $2.83 and $2.64, respectively, are not included in the computation of diluted loss per share as the effect is anti-dilutive.

Note 3 - Stock Options and Warrants:

The Company applies APB Opinion No. 25 and related interpretations in accounting for its stock option plan. Options to purchase Common Stock have been granted at or above the fair market value of the stock as of the date of grant. Accordingly, no compensation costs have been recognized for the stock option plan. Had compensation cost been determined based on the fair value at the grant dates for those awards consistent with the method of FASB No. 123, the Company's net loss and net loss per share would have been increased to the pro forma amounts indicated below:

Three month periods ended September 30,	2004	2003
Net loss:		
As reported	$ (553,382)	$ (1,400,482)
Stock-based employee compensation costs	(170,239)	(143,501)
Pro forma	$ (723,621)	$ (1,543,983)
Loss per share:		
As reported	$ (0.04)	$ (0.12)
Pro forma	$ (0.05)	$ (0.13)

The estimated grant date present value reflected in the above table is determined using the Black-Scholes model. The material factors incorporated in the Black-Scholes model in estimating the value of the options reflected in the above table for the three-month periods ended September 30, 2004 and 2003 include the following: (i) an estimated life of 5 and 10 years; (ii) a risk-free rate range of 3.30% to 4.27% and 3.00% to 4.22%, respectively, that represents the interest rate on a U.S. Treasury security with a maturity date corresponding to that of the option term; (iii) volatility of 147.83%; and (iv) no annualized dividends paid with respect to a share of Common Stock at the date of grant. The ultimate values of the options will depend on the future price of the Company's Common Stock, which cannot be forecast with reasonable accuracy.

Note 4 – Revenue Recognition:

The Company receives certain nonrefundable upfront fees in exchange for the transfer of its technology to licensees. Upon delivery of the technology, the Company has no further obligations to the licensee with respect to the basic technology transferred and, accordingly, recognizes revenue at that time. The Company may, however, receive additional payments from its licensees in the event such licensees achieve certain development or commercialization milestones in their particular field of use. Other nonrefundable upfront fees and milestone payments, where the milestone payments are a function of time as opposed to achievement of specific achievement-based milestones, are deferred and amortized ratably over the estimated research period of the license.

Note 5 – Significant Events:

On October 19, 2004, the Company entered into a license agreement with the Broin Companies ("Broin") to license the Company's proprietary gene technology to Broin to improve aspects of Broin's ethanol production capabilities. The Company will receive an annual payment for each Broin facility that incorporates the Company's technology.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis should be read in conjunction with our condensed consolidated financial statements and the related notes thereto included in the Quarterly Report on Form 10-QSB. The discussion and analysis may contain forward-looking statements that are based upon current expectations and entail various risks and uncertainties. Our actual results and the timing of events could differ materially from those anticipated in the

forward-looking statements as a result of various factors, including those set forth under "Factors That May Affect Our Business, Future Operating Results and Financial Condition" and elsewhere in this report.

Overview

Our Business

We are a development stage biotechnology company whose mission is to utilize its patented and patent-pending genes (primarily DHS, Factor 5A and Lipase) to:

- enhance the quality and productivity of fruits, flowers, vegetables and agronomic crops through the control of cell death in plants (senescence);
- develop novel approaches to treat programmed cell death diseases in humans (apoptosis) (*e.g.*, rheumatoid arthritis, Crohn's disease, glaucoma, or heart disease), which are the result of premature cell death; and
- develop novel approaches to treat cancer, a group of diseases in which apoptosis is blocked.

Agricultural results to date include longer shelf life of perishable produce, increased seed and biomass yield and greater tolerance to environmental stress. Human health results to date include: determining the expression of our patent-pending genes in both ischemic and non-ischemic heart tissue; correlating such genes to certain key immune regulators known as cytokines that have been found to be involved in apoptosis; reducing cytokine induced apoptosis in human optic nerve cell lines and in epithelial cells of the intestine; and inducing apoptosis, while retarding cell proliferation, in both human cancer cell lines derived from tumors and in mice which have the same genetic defect that causes lung cancer in humans.

Our preliminary research reveals that DHS and Factor 5A genes regulate apoptosis in human cells. We have shown that Factor 5A encodes for proteins with similar structures but that serve different functions (isoforms). In humans, there are two different isoforms of Factor 5A: the apoptosis isoform, which causes cell death and the growth isoform, which causes cell proliferation. We believe that our Factor 5A technology may have potential application as a means for controlling a broad range of apoptotic diseases, both inflammatory/ischemic diseases and cancers. We have commenced preclinical *in-vivo* and *in-vitro* research to determine Factor 5A's ability to regulate key execution genes, inflammatory cytokines, receptors, and transcription factors which are implicated in numerous apoptotic diseases.

We believe that our technology downregulating the apoptosis isoforms of Factor 5A may have potential application as a means for controlling a broad range of diseases that are attributable to premature apoptosis. Apoptotic diseases include neurodegenerative diseases, retinal diseases, such as glaucoma, heart disease, stroke, Crohn's disease and rheumatoid

arthritis, among others. We have commenced preclinical research. Using siRNAs against the apoptosis isoform, we have reduced formation of the receptors for LPS, interferon gamma and TNF alpha. *In-vitro* experiments have shown that siRNAs against Factor 5A protected human lamina cribrosa (optic nerve) and colon epithelial (HT 29) cells from TNF alpha induced apoptosis. *In-vivo* mouse studies have shown that the siRNAs protect thymocyte cells from apoptosis and decreases formation of myeloperoxidase in the lungs of mice challenged with LPS. We have also determined that inhibiting the apoptosis isoform of Factor 5A downregulates NFkB and JAK1 and decreases the inflammatory cytokines formed through the NFkB and JAK/STAT pathways. The siRNAs are currently being tested in several preclinical *in-vivo* inflammatory disease models.

We have established in preclinical studies that upregulation of the apoptosis Factor 5A isoform is able to kill cancer cells through both the p53 (intrinsic) and cell death receptor (extrinsic) immune pathways. Tumors arise when cells that have been targeted by the immune system to undergo apoptosis are unable to do so because of an inability to activate the apoptotic pathways. Because the Factor 5A gene appears to function at the initiation point of the apoptotic pathways, we believe that our gene technology may have potential application as a means of combating a broad range of cancers and have initiated studies with *in-vivo* cancer models to determine Factor 5A's ability to shrink human tumors grafted onto mice. We have found that upregulating the apoptosis isoform results in upregulation of p53 and inflammatory cytokine production and increased cell death receptor formation and caspase activity coupled with a simultaneous downregulation of bcl-2 and telomerase. In addition, we have also shown that inhibition of the growth isoform of Factor 5A in cancer cells reduces proliferation of cancer cells. This will allow us to pursue research of cancer treatments which simultaneously cause cancer cells to die and not allow them to divide further.

Human Health Applications

Most recently, a preclinical study has shown that Factor 5A induced cell death in lung cancer tumors of mice, while healthy tissue remained unaffected. We conducted this study using mice with the same genetic defect that causes lung cancer in humans. The mice spontaneously develop lung tumors due to this defect. Factor 5A, without any targeted delivery technologies, was injected into the blood stream of the mice, and the lung tissue was subsequently analyzed for apoptosis. There was no evidence of systemic toxicity in the mice as evidenced by no weight loss, mortality or any signs of abnormal apoptosis in any of the vital organs.

Agricultural Applications

We are currently working with lettuce, melon, turfgrass, tomato, canola, Arabidopsis (a model plant that is similar to canola), banana, alfalfa, and certain species of trees and bedding plants, and we have obtained proof of concept for the lipase, DHS and Factor 5A genes in several of these plants. We have ongoing field trials of lettuce and bananas with our respective partners, and are poised to commence field trials with our partner in forestry products. The first round of lettuce field trials showed that our technology effectively reduces browning in cut lettuce. The first and second round of banana field trials have shown that our technology extends the shelf life of banana fruit by 100%. In addition to the shelf life benefits, field trials are being conducted in a tropical location through this winter to generate disease resistance data for banana plants. Our near-term research and development initiatives include silencing or reducing the expression of

DHS and Factor 5A genes in these plants and propagation and testing of plants with our silenced genes.

Research Program

We do not expect to generate significant revenues for approximately the next one to two years, during which time we will engage in significant research and development efforts. We expect to spend significant amounts on the research and development of our technology. We also expect our research and development costs to increase as we continue to develop and ultimately commercialize our technology. However, the successful development and commercialization of our technology is highly uncertain. We cannot reasonably estimate or know the nature, timing and expenses of the efforts necessary to complete the development of our technology, or the period in which material net cash inflows may commence from the commercialization of our technology, including the uncertainty of:

- the scope, rate of progress and expense of our research activities;
- the interim results of our research;
- the expense of additional research that may be required after review of the interim results;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the expense and timing of regulatory approvals;
- the effect of competing technological and market developments; and
- the expense of filing, prosecuting, defending and enforcing any patent claims or other intellectual property rights.

Patent and Patent Applications

We have been granted two patents by the United States Patent and Trademark Office, or PTO. Most recently, on August 10, 2004, we were granted Patent No.6,774,284, entitled “DNA Encoding A Plant Lipase, Transgenic Plants and A Method For Controlling Senescence in Plants”, from the PTO.

In addition to our two patents, we have a wide variety of patent applications, including divisional applications and continuations-in-part, in process with the PTO and internationally. We intend to continue our strategy of enhancing these new patent applications through the addition of data as it is collected.

Commercialization Strategy

We presently license our technology to agricultural companies capable of incorporating our technology into crops grown for commercial agriculture. We anticipate revenues from these relationships in the form of licensing fees and royalties from our partners, or in sharing gross profits in the case of the joint venture with Rahan Meristem. In addition, we anticipate payments from our partners upon our achievement of certain research and development benchmarks. This commercialization strategy allows us to generate revenues at various stages of product

development, while ensuring that our technology is incorporated into a wide variety of crops. Our optimal partners combine the technological know-how to incorporate our technology into their product line along with the ability to successfully market the enhanced final product, thereby eliminating the need for us to develop and maintain a sales force. Through September 30, 2004 we have entered into four license and development agreements and one joint venture. Most recently, on October 19, 2004, we entered into a License Agreement with The Broin Companies to license our proprietary Factor 5A and DHS technology to improve aspects of Broin’s ethanol production capabilities. The agreement provides for an annual payment for each Broin facility that incorporates the Company’s technology. If our technology is incorporated at all of Broin’s facilities, we would receive annual payments in excess of one million dollars.

In October 2002, we entered into a non-exclusive sales representative agreement to market and promote our technology in the People’s Republic of China. Under the terms of the agreement, we will pay a commission to the sales representative based on a percentage of any gross license fees we may receive. With the assistance of the sales representative, in November 2002, we executed a non-binding letter of intent with the Tianjin Academy of Agricultural Sciences for the exclusive use of our technology in a large variety of fruit and vegetable crops in China. Discussions have been held with representatives of the Academy as well as government representatives from the city of Tianjin and from the central government of China. We have also initiated discussions with several Asian biotechnology companies. Such a company would be necessary to secure the financing for the proposed agreement with the Academy and to commercialize the seeds developed with our technology under the proposed license. Because of the number of crops the Academy has expressed interest in, the letter of intent called for significant licensing and milestone fees to be paid to us by a commercial partner if the project were successful. The size of the proposed financial terms in the letter of intent have made attracting such a commercial partner difficult. As such, ongoing discussions with the Academy have been focused on possibly reducing the number of crops selected so that financial terms may be restructured. Additionally, discussions with some of these companies and certain central government agencies have focused on direct licensing opportunities that would not include the Academy.

We plan to employ the same partnering strategy in both the human health and agricultural target markets. Our preclinical research has yielded data that we have presented to various biopharmaceutical companies that may be prospective licensees for the development and marketing of potential applications of our technology. Consistent with our commercialization strategy, we intend to attract other companies interested in strategic partnerships or licensing our technology, which may result in additional license fees, revenues from contract research and other related revenues. Successful future operations will depend on our ability to transform our research and development activities into commercializable technology.

Factors That May Affect Our Business, Future Operating Results and Financial Condition

The more prominent risks and uncertainties inherent in our business are described below. However, additional risks and uncertainties may also impair our business operations. If any of the following risks actually occur, our business, financial condition or results of operations may suffer.

Risks Related to our Business

We have a limited operating history and have incurred substantial losses and expect future losses.

We are a developmental stage biotechnology company with a limited operating history and limited assets and capital. We have incurred losses each year since inception and have an accumulated deficit of $13,128,323 at September 30, 2004. We have generated minimal revenues by licensing certain of our technology to companies willing to share in our development costs. However, our technology may not be ready for widespread commercialization for several years. We expect to continue to incur losses over the next two to three years because we anticipate that our expenditures on research and development, commercialization and administrative activities will significantly exceed our revenues during that period. We cannot predict when, if ever, we will become profitable.

We depend on a single principal technology and, if our technology is not commercially successful, we will have no alternative source of revenue.

Our primary business is the development and commercial exploitation of technology to identify, isolate, characterize and silence genes which control the death of cells in plants and humans. Our future revenue and profitability critically depend upon our ability to successfully develop senescence and apoptosis gene technology and later market and license such technology at a profit. We have conducted experiments on certain crops with favorable results and have conducted certain preliminary cell-line and animal experiments, which have provided us with data upon which we have designed additional research programs. However, we cannot give any assurance that our technology will be commercially successful or economically viable for all crops or human health applications.

In addition, no assurance can be given that adverse consequences might not result from the use of our technology such as the development of negative effects on plants or humans or reduced benefits in terms of crop yield or protection. Our failure to obtain market acceptance of our technology or to successfully commercialize such technology or develop a commercially viable product would have a material adverse effect on our business.

We outsource all of our research and development activities and, if we are unsuccessful in maintaining our alliances with these third parties, our research and development efforts may be delayed or curtailed.

We rely on third parties to perform all of our research and development activities. Our primary research and development efforts take place at the University of Waterloo in Ontario, Canada, where our technology was discovered, at the University of Colorado, at two research hospitals in Canada, and with our commercial partners. At this time, we do not have the internal capabilities to perform our research and development activities. Accordingly, the failure of third-party research partners, such as the University of Waterloo, to perform under agreements entered into with us, or our failure to renew important research agreements with these third parties, may delay or curtail our research and development efforts.

We have significant future capital needs and may be unable to raise capital when needed, which could force us to delay or reduce our research and development efforts.

As of September 30, 2004, we had cash and highly-liquid investments valued at $3,467,652 and working capital of $3,130,122. Using our available reserves as of September 30, 2004, we believe that we can operate according to our current business plan for at least the next twelve months. To date, we have generated minimal revenues and anticipate that our operating

costs will exceed any revenues generated over the next several years. Therefore, we may be required to raise additional capital in the future in order to operate according to our current business plan, and this funding may not be available on favorable terms, if at all. In addition, in connection with any funding, if we need to issue more equity securities than our certificate of incorporation currently authorizes, or more than 20% of the shares of our common stock outstanding, we may need stockholder approval. If stockholder approval is not obtained or if adequate funds are not available, we may be required to curtail operations significantly or to obtain funds through arrangements with collaborative partners or others that may require us to relinquish rights to certain of our technologies, product candidates, products or potential markets. Investors may experience dilution in their investment from future offerings of our common stock. For example, if we raise additional capital by issuing equity securities, such an issuance would reduce the percentage ownership of existing stockholders. In addition, assuming the exercise of all options and warrants outstanding, as of September 30, 2004, we had 9,360,664 shares of common stock authorized but unissued, which may be issued from time to time by our board of directors without stockholder approval. Furthermore, we may need to issue securities that have rights, preferences and privileges senior to our common stock. Failure to obtain financing on acceptable terms would have a material adverse effect on our liquidity.

Since our inception, we have financed all of our operations through private equity financings. Our future capital requirements depend on numerous factors, including:

- the scope of our research and development;
- our ability to attract business partners willing to share in our development costs;
- our ability to successfully commercialize our technology;
- competing technological and market developments;
- our ability to enter into collaborative arrangements for the development, regulatory approval and commercialization of other products; and
- the cost of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights.

Our business depends upon our patents and proprietary rights and the enforcement of these rights. Our failure to obtain and maintain patent protection may increase competition and reduce demand for our technology.

As a result of the substantial length of time and expense associated with developing products and bringing them to the marketplace in the agricultural and biotechnology industries, obtaining and maintaining patent and trade secret protection for technologies, products and processes is of vital importance. Our success will depend in part on several factors, including, without limitation:

- our ability to obtain patent protection for our technologies and processes;
- our ability to preserve our trade secrets; and
- our ability to operate without infringing the proprietary rights of other parties both in the United States and in foreign countries.

We have been issued two patents by the U.S. Patent and Trademark Office, or PTO. We have also filed patent applications for our technology in the United States and in several foreign countries, which technology is vital to our primary business, as well as several Continuations in Part on these patent applications. Our success depends in part upon the grant of patents from our pending patent applications.

Although we believe that our technology is unique and will not violate or infringe upon the proprietary rights of any third party, we cannot assure you that these claims will not be made or if made, could be successfully defended against. If we do not obtain and maintain patent protection, we may face increased competition in the United States and internationally, which would have a material adverse effect on our business.

Since patent applications in the United States are maintained in secrecy until patents are issued, and since publication of discoveries in the scientific and patent literature tend to lag behind actual discoveries by several months, we cannot be certain that we were the first creator of the inventions covered by our pending patent applications or that we were the first to file patent applications for these inventions.

In addition, among other things, we cannot assure you that:

- our patent applications will result in the issuance of patents;
- any patents issued or licensed to us will be free from challenge and that if challenged, would be held to be valid;
- any patents issued or licensed to us will provide commercially significant protection for our technology, products and processes;
- other companies will not independently develop substantially equivalent proprietary information which is not covered by our patent rights;
- other companies will not obtain access to our know-how;
- other companies will not be granted patents that may prevent the commercialization of our technology; or
- we will not require licensing and the payment of significant fees or royalties to third parties for the use of their intellectual property in order to enable us to conduct our business.

Our competitors may allege that we are infringing upon their intellectual property rights, forcing us to incur substantial costs and expenses in resulting litigation, the outcome of which would be uncertain.

Patent law is still evolving relative to the scope and enforceability of claims in the fields in which we operate. We are like most biotechnology companies in that our patent protection is highly uncertain and involves complex legal and technical questions for which legal principles are not yet firmly established. In addition, if issued, our patents may not contain claims sufficiently broad to protect us against third parties with similar technologies or products, or provide us with any competitive advantage.

The PTO and the courts have not established a consistent policy regarding the breadth of claims allowed in biotechnology patents. The allowance of broader claims may increase the incidence and cost of patent interference proceedings and the risk of infringement litigation. On the other hand, the allowance of narrower claims may limit the value of our proprietary rights.

The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant problems and costs in protecting their proprietary rights in these foreign countries.

We could become involved in infringement actions to enforce and/or protect our patents. Regardless of the outcome, patent litigation is expensive and time consuming and would distract our management from other activities. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively that we could because they have substantially

greater resources. Uncertainties resulting from the initiation and continuation of any patent litigation could limit our ability to continue our operations.

If our technology infringes the intellectual property of our competitors or other third parties, we may be required to pay license fees or damages.

If any relevant claims of third-party patents that are adverse to us are upheld as valid and enforceable, we could be prevented from commercializing our technology or could be required to obtain licenses from the owners of such patents. We cannot assure you that such licenses would be available or, if available, would be on acceptable terms. Some licenses may be non-exclusive and, therefore, our competitors may have access to the same technology licensed to us. In addition, if any parties successfully claim that the creation or use of our technology infringes upon their intellectual property rights, we may be forced to pay damages, including treble damages.

Our security measures may not adequately protect our unpatented technology and, if we are unable to protect the confidentiality of our proprietary information and know-how, the value of our technology may be adversely affected.

Our success depends upon know-how, unpatentable trade secrets, and the skills, knowledge and experience of our scientific and technical personnel. As a result, we require all employees to agree to a confidentiality provision that prohibits the disclosure of confidential information to anyone outside of our company, during the term of employment and thereafter. We also require all employees to disclose and assign to us the rights to their ideas, developments,

discoveries and inventions. We also attempt to enter into similar agreements with our consultants, advisors and research collaborators. We cannot assure you that adequate protection for our trade secrets, know-how or other proprietary information against unauthorized use or disclosure will be available.

We occasionally provide information to research collaborators in academic institutions and request the collaborators to conduct certain tests. We cannot assure you that the academic institutions will not assert intellectual property rights in the results of the tests conducted by the research collaborators, or that the academic institutions will grant licenses under such intellectual property rights to us on acceptable terms, if at all. If the assertion of intellectual property rights by an academic institution is substantiated, and the academic institution does not grant intellectual property rights to us, these events could limit our ability to commercialize our technology.

As we evolve from a company primarily involved in the research and development of our technology into one that is also involved in the commercialization of our technology, we may have difficulty managing our growth and expanding our operations.

As our business grows, we may need to add employees and enhance our management, systems and procedures. We will need to successfully integrate our internal operations with the operations of our marketing partners, manufacturers, distributors and suppliers to produce and market commercially viable products. We may also need to manage additional relationships with various collaborative partners, suppliers and other organizations. Although we do not presently intend to conduct research and development activities in-house, we may undertake those activities in the future. Expanding our business will place a significant burden on our management and operations. We may not be able to implement improvements to our management information and control systems in an efficient and timely manner and we may

discover deficiencies in our existing systems and controls. Our failure to effectively respond to changes may make it difficult for us to manage our growth and expand our operations.

We have no marketing or sales history and depend on third-party marketing partners. Any failure of these parties to perform would delay or limit our commercialization efforts.

We have no history of marketing, distributing or selling biotechnology products and we are relying on our ability to successfully establish marketing partners or other arrangements with third parties to market, distribute and sell a commercially viable product both here and abroad. Our business plan also envisions creating strategic alliances to access needed commercialization and marketing expertise. We may not be able to attract qualified sub-licensees, distributors or marketing partners, and even if qualified, these marketing partners may not be able to successfully market agricultural products or human health applications developed with our technology. If we fail to successfully establish distribution channels, or if our marketing partners fail to provide adequate levels of sales, our commercialization efforts will be delayed or limited and we will not be able to generate revenue.

We will depend on joint ventures and strategic alliances to develop and market our technology and, if these arrangements are not successful, our technology may not be developed and the expenses to commercialize our technology will increase.

In its current state of development, our technology is not ready to be marketed to consumers. We intend to follow a multi-faceted commercialization strategy that involves the licensing of our technology to business partners for the purpose of further technological development, marketing and distribution. We are seeking business partners who will share the burden of our development costs while our technology is still being developed, and who will pay us royalties when they market and distribute products incorporating our technology upon commercialization. The establishment of joint ventures and strategic alliances may create future competitors, especially in certain regions abroad where we do not pursue patent protection. If we fail to establish beneficial business partners and strategic alliances, our growth will suffer and the continued development of our technology may be harmed.

Competition in the agricultural and human health biotechnology industries is intense and technology is changing rapidly. If our competitors market their technology faster than we do, we may not be able to generate revenues from the commercialization of our technology.

Many agricultural and human health biotechnology companies are engaged in research and development activities relating to senescence and apoptosis. The market for plant protection and yield enhancement products is intensely competitive, rapidly changing and undergoing consolidation. We may be unable to compete successfully against our current and future competitors, which may result in price reductions, reduced margins and the inability to achieve market acceptance for products containing our technology. Our competitors in the field of plant senescence gene technology are companies that develop and produce transgenic plants and include major international agricultural companies, specialized biotechnology companies, research and academic institutions and, potentially, our joint venture and strategic alliance partners. These companies include: Paradigm Genetics; Aventis Crop Science; Mendel Biotechnology; Renessen LLC; Exelixis Plant Sciences, Inc.; PlantGenix, Inc.; and Eden Bioscience, among others. Some of our competitors that are involved in apoptosis research include: Amgen; Centocor; Genzyme; OSI Pharmaceuticals, Inc.; Idun Pharmaceuticals; Novartis; Introgen Therapeutics, Inc.; Genta, Inc.; and Vertex Pharmaceuticals, Inc. Many of these competitors have substantially greater financial, marketing, sales, distribution and technical

resources than us and have more experience in research and development, clinical trials, regulatory matters, manufacturing and marketing. We anticipate increased competition in the future as new companies enter the market and new technologies become available. Our technology may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors, which will prevent or limit our ability to generate revenues from the commercialization of our technology.

Our business is subject to various government regulations and, if we are unable to obtain regulatory approval, we may not be able to continue our operations.

At present, the U.S. federal government regulation of biotechnology is divided among three agencies:

- the USDA regulates the import, field testing and interstate movement of specific types of genetic engineering that may be used in the creation of transgenic plants;
- the EPA regulates activity related to the invention of plant pesticides and herbicides, which may include certain kinds of transgenic plants; and

- the FDA regulates foods derived from new plant varieties.

The FDA requires that transgenic plants meet the same standards for safety that are required for all other plants and foods in general. Except in the case of additives that significantly alter a food's structure, the FDA does not require any additional standards or specific approval for genetically engineered foods, but expects transgenic plant developers to consult the FDA before introducing a new food into the marketplace.

Use of our technology, if developed for human health applications, will also be subject to FDA regulation. The FDA must approve any drug or biologic product before it can be marketed in the United States. In addition, prior to being sold outside of the U.S., any products resulting from the application of our human health technology must be approved by the regulatory agencies of foreign governments. Prior to filing a new drug application or biologics license application with the FDA, we would have to perform extensive clinical trials, and prior to beginning any clinical trial, we need to perform extensive preclinical testing which could take several years and may require substantial expenditures.

We believe that our current activities, which to date have been confined to research and development efforts, do not require licensing or approval by any governmental regulatory agency. However, federal, state and foreign regulations relating to crop protection products and human health applications developed through biotechnology are subject to public concerns and political circumstances, and, as a result, regulations have changed and may change substantially in the future. Accordingly, we may become subject to governmental regulations or approvals or become subject to licensing requirements in connection with our research and development efforts. We may also be required to obtain such licensing or approval from the governmental regulatory agencies described above, or from state agencies, prior to the commercialization of our genetically transformed plants and human health technology. In addition, our marketing partners who utilize our technology or sell products grown with our technology may be subject to government regulations. If unfavorable governmental regulations are imposed on our technology or if we fail to obtain licenses or approvals in a timely manner, we may not be able to continue our operations.

Pre-clinical studies and clinical trials of our human health applications may be unsuccessful, which could delay or prevent regulatory approval.

Pre-clinical studies may reveal that our human health technology is ineffective or harmful, and/or clinical trials may be unsuccessful in demonstrating efficacy and safety of our human health technology, which would significantly limit the possibility of obtaining regulatory approval for any drug or biologic product manufactured with our technology. The FDA requires submission of extensive preclinical, clinical and manufacturing data to assess the efficacy and safety of potential products. Furthermore, the success of preliminary studies does not ensure commercial success, and later-stage clinical trials may fail to confirm the results of the preliminary studies.

Even if we receive regulatory approval, consumers may not accept our technology, which will prevent us from being profitable since we have no other source of revenue.

We cannot guarantee that consumers will accept products containing our technology. Recently, there has been consumer concern and consumer advocate activism with respect to genetically engineered consumer products. The adverse consequences from heightened consumer concern in this regard could affect the markets for products developed with our technology and could also result in increased government regulation in response to that concern. If the public or potential customers perceive our technology to be genetic modification or genetic engineering, agricultural products grown with our technology may not gain market acceptance.

We depend on our key personnel and, if we are not able to attract and retain qualified scientific and business personnel, we may not be able to grow our business or develop and commercialize our technology.

We are highly dependent on our scientific advisors, consultants and third-party research partners. Our success will also depend in part on the continued service of our key employees and our ability to identify, hire and retain additional qualified personnel in an intensely competitive market. Although we have employment agreements with several of our key employees and a research agreement with Dr. Thompson, these agreements may be terminated upon no or short notice. We do not maintain key person life insurance on any member of management. The failure to attract and retain key personnel could limit our growth and hinder our research and development efforts.

Certain provisions of our charter, by-laws and Delaware law could make a takeover difficult.

Certain provisions of our certificate of incorporation and by-laws could make it more difficult for a third party to acquire control of us, even if the change in control would be beneficial to stockholders. Our certificate of incorporation authorizes our board of directors to issue, without stockholder approval, except as may be required by the rules of the American Stock Exchange, 5,000,000 shares of preferred stock with voting, conversion and other rights and preferences that could adversely affect the voting power or other rights of the holders of our common stock. Similarly, our by-laws do not restrict our board of directors from issuing preferred stock without stockholder approval.

In addition, we are subject to the Business Combination Act of the Delaware General Corporation Law which, subject to certain exceptions, restricts certain transactions and business combinations between a corporation and a stockholder owning 15% or more of the corporation's outstanding voting stock for a period of three years from the date such stockholder becomes a 15% owner. These provisions may have the effect of delaying or preventing a change of control

of us without action by our stockholders and, therefore, could adversely affect the value of our common stock.

Furthermore, in the event of our merger or consolidation with or into another corporation, or the sale of all or substantially all of our assets in which the successor corporation does not assume outstanding options or issue equivalent options, our board of directors is required to provide accelerated vesting of outstanding options.

Increasing political and social turmoil, such as terrorist and military actions, increase the difficulty for us and our strategic partners to forecast accurately and plan future business activities.

Recent political and social turmoil, including the conflict in Iraq and the current crisis in the Middle East, can be expected to put further pressure on economic conditions in the United States and worldwide. These political, social and economic conditions may make it difficult for us to plan future business activities. Specifically, if the current crisis in Israel continues to escalate, our joint venture with Rahan Meristem Ltd. could be adversely affected.

Risks Related to Our Common Stock

Our management and other affiliates have significant control of our common stock and could significantly influence our actions in a manner that conflicts with our interests and the interests of other stockholders.

As of September 30, 2004, our executive officers, directors and affiliated entities together beneficially own approximately 44.2% of the outstanding shares of our common stock, assuming the exercise of options and warrants which are currently exercisable, held by these stockholders. As a result, these stockholders, acting together, will be able to exercise significant influence over matters requiring approval by our stockholders, including the election of directors, and may not always act in the best interests of other stockholders. Such a concentration of ownership may have the effect of delaying or preventing a change in control of us, including transactions in which our stockholders might otherwise receive a premium for their shares over then current market prices.

Our stockholders may experience substantial dilution as a result of the exercise of outstanding options and warrants to purchase our common stock.

As of September 30, 2004, we have granted options outside of our stock option plan to purchase 10,000 shares of our common stock and outstanding warrants to purchase 5,003,586 shares of our common stock. In addition, as of September 30, 2004, we have reserved 3,000,000 shares of our common stock for issuance upon the exercise of options granted pursuant to our stock option plan, 1,946,000 of which have been granted and 1,054,000 of which may be granted in the future. The exercise of these options and warrants will result in dilution to our existing stockholders and could have a material adverse effect on our stock price.

A significant portion of our total outstanding shares of common stock may be sold in the market in the near future, which could cause the market price of our common stock to drop significantly.

As of September 30, 2004, we had 13,789,750 shares of our common stock issued and outstanding, of which approximately 1,536,922 shares are registered pursuant to a registration statement on Form S-3, which was declared effective on May 14, 2004, and the remainder of

which are either eligible to be sold under SEC Rule 144 or are in the public float. In addition, we have registered 1,114,741 shares of our Common Stock underlying warrants previously issued on the Form S-3 registration statement that was declared effective on May 14, 2004, and we registered 3,000,000 shares of our common stock underlying options granted or to be granted under our stock option plan. Consequently, sales of substantial amounts of our common stock in the public market, or the perception that such sales could occur, may have a material adverse effect on our stock price.

Our common stock has a limited trading market, which could limit your ability to resell your shares of common stock at or above your purchase price.

Our common stock is quoted on the American Stock Exchange and currently has a limited trading market. We cannot assure you that an active trading market will develop or, if developed, will be maintained. As a result, our stockholders may find it difficult to dispose of shares of our common stock and, as a result, may suffer a loss of all or a substantial portion of their investment.

The market price of our common stock may fluctuate and may drop below the price you paid.

We cannot assure you that you will be able to resell the shares of our common stock at or above your purchase price. The market price of our common stock may fluctuate significantly in response to a number of factors, some of which are beyond our control. These factors include:

- quarterly variations in operating results;
- the progress or perceived progress of our research and development efforts;
- changes in accounting treatments or principles;
- announcements by us or our competitors of new technology, product and service offerings, significant contracts, acquisitions or strategic relationships;
- additions or departures of key personnel;
- future offerings or resales of our common stock or other securities;
- stock market price and volume fluctuations of publicly-traded companies in general and development companies in particular; and
- general political, economic and market conditions.

Because we do not intend to pay, and have not paid, any cash dividends on our shares of common stock, our stockholders will not be able to receive a return on their shares unless the value of our common stock appreciates and they sell their shares.

We have never paid or declared any cash dividends on our common stock and we intend to retain any future earnings to finance the development and expansion of our business. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. Therefore, our stockholders will not be able to receive a return on their investment unless the value of our common stock appreciates and they sell their shares.

If our common stock is delisted from the American Stock Exchange, it may be subject to the "penny stock" regulations which may affect the ability of our stockholders to sell their shares.

In general, regulations of the SEC define a "penny stock" to be an equity security that is not listed on a national securities exchange or the NASDAQ Stock Market and that has a market price of less than $5.00 per share or with an exercise price of less than $5.00 per share, subject to certain exceptions. If

the American Stock Exchange delists our common stock, it could be deemed a penny stock, which imposes additional sales practice requirements on broker-dealers

that sell such securities to persons other than certain qualified investors. For transactions involving a penny stock, unless exempt, a broker-dealer must make a special suitability determination for the purchaser and receive the purchaser's written consent to the transaction prior to the sale. In addition, the rules on penny stocks require delivery, prior to and after any penny stock transaction, of disclosures required by the SEC.

If our common stock were subject to the rules on penny stocks, the market liquidity for our common stock could be severely and adversely affected. Accordingly, the ability of holders of our common stock to sell their shares in the secondary market may also be adversely affected

Liquidity and Capital Resources

Overview

As of September 30, 2004, our cash balance and investments totaled $3,467,652, and we had working capital of $3,130,122. As of September 30, 2004, we had a federal tax loss carry-forward of approximately $10,100,000 and a state tax loss carry-forward of approximately $4,800,000 to offset future taxable income. There can be no assurance, however, that we will be able to take advantage of any or all of such tax loss carry-forwards, if at all, in future fiscal years.

Contractual Obligations

The following table lists our cash contractual obligations as of September 30, 2004:

	Payments Due by Period				
Contractual Obligations	**Total**	**Less than 1 year**	**1 - 3 years**	**4 - 5 years**	**More than 5 years**
Research and Development Agreements (1)	$ 1,215,517	$ 654,726	$ 560,791	$ —	$ —
Facility, Rent and Operating Leases (2)	$ 53,922	$ 34,056	$ 19,866	$ —	$ —
Employment, Consulting and Scientific Advisory Board Agreements (3)	$ 1,027,146	$ 607,417	$ 419,729	$ —	$ —
Total Contractual Cash Obligations	$ 2,296,585	$ 1,296,199	$ 1,000,386	$ —	$ —

(1) Certain of our research and development agreements disclosed herein provide that payment is to be made in Canadian dollars and, therefore, the contractual obligations are subject to fluctuations in the exchange rate.

(2) The lease for our office space in New Brunswick, New Jersey is subject to certain escalations for our proportionate share of increases in the building's operating costs.

(3) Certain of our employment and consulting agreements provide for automatic renewal (which is not reflected in the table), unless terminated earlier by the parties to the respective agreements.

We expect our capital requirements to increase significantly over the next several years as we commence new research and development efforts, increase our business and administrative infrastructure and embark on developing in-house business capabilities and facilities. Our future liquidity and capital funding requirements will depend on numerous factors, including, but not limited to, the levels and costs of our research and development initiatives and the cost and timing of the expansion of our business development and administrative staff.

Capital Resources

Since inception, we have generated revenues of $239,165 in connection with the initial fees received under our license and development agreements. We have not been profitable since inception, we will continue to incur additional operating losses in the future, and we will require additional financing to continue the development and subsequent commercialization of our technology. While we do not expect to generate significant revenues from the licensing of our technology in the near future, we may enter into additional licensing or other agreements with marketing and distribution partners that may result in additional license fees. We may also receive revenues from contract research, or other related revenue.

We anticipate that, based upon our current cash and investments, we will be able to fund operations for at least the next twelve months. Over the next twelve months, we plan to fund our research and development and commercialization activities by (i) utilizing our current cash balance and investments, (ii) achieving some of the milestones set forth in our current licensing agreements, and (iii) through the execution of additional licensing agreements for our technology.

Changes to Critical Accounting Policies and Estimates

Our critical accounting policies and estimates are set forth in our Annual Report on Form 10-KSB for the fiscal year ended June 30, 2004. There have been no changes to such critical accounting policies and estimates.

Results of Operations

Three Months Ended September 30, 2004 and Three Months Ended September 30, 2003

The net loss for the three-month periods ended September 30, 2004 and September 30, 2003 was $553,382 and $1,400,482, respectively, a decrease of $847,100, or 60.5%. This decrease was primarily the result of a decrease in general and administrative expenses and research and development expenses.

We had revenue of $12,498 during the three-month period ended September 30, 2004 from the amortized portion of the initial fee on a development and license agreement. We had no revenue during the three-month period ended September 30, 2003.

Operating expenses consist of general and administrative expenses, research and development expenses and stock-based compensation. Operating expenses for the three-month periods ended September 30, 2004 and September 30, 2003 were $573,748 and $1,411,393, respectively, a decrease of $837,645, or 59.3%. This decrease in operating expenses was

primarily the result of a decrease in stock-based compensation and research and development expenses, which was partially offset by an increase in other general and administrative expenses. We expect operating expenses to increase over the next twelve months as we continue to expand our research and development activities.

General and administrative expenses consist primarily of stock-based compensation and other general and administrative costs, which include payroll and benefits, professional services, investor relations, office rent and corporate insurance. General and administrative expenses for the three-month periods ended September 30, 2004 and September 30, 2003 were $327,763 and $1,139,392, respectively, a decrease of $811,629, or 71.2%.

	Three months ended September 30,	
	2004	2003
Stock-based compensation	$ —	$ 843,480
Other general and administrative expenses	327,763	295,912
Total general and administrative expenses	$ 327,763	$ 1,139,392

The decrease in stock-based compensation was primarily the result of a warrant being granted, in connection with a financial advisory agreement, to a financial advisor during the three-month period ended September 30, 2003. The increase in other general and administrative expenses was primarily the result of an increase in payroll and benefits and investor relations expenses. Payroll and benefits increased during the three-month period ended September 30, 2004, primarily as a result of salary increases. Investor relations increased during the three-month period ended September 30, 2004 primarily as a result of additional fees incurred in connection with a financial advisory agreement We expect general and administrative expenses to modestly increase over the next twelve months as several of the above mentioned costs will probably increase primarily due to inflation.

Research and development expenses are incurred in connection with our agricultural and human health research programs and consist primarily of fees associated with a research and development agreement with the University of Waterloo, costs associated with the research being performed at the University of Colorado and other institutions, amortization of the initial fee in connection with a research agreement with Anawah, Inc., consulting fees to the Scientific Advisory Board and other consultants and stock-based compensation. Research and development expenses for the three-month periods ended September 30, 2004 and September 30, 2003 were $245,985 and $272,001, respectively, a decrease of $26,016, or 9.6%. This decrease was primarily the result of a decrease in costs related to certain human health research projects that were completed during the year ended June 30, 2004. The decrease in costs related to certain human health research projects were partially offset by an increase in the research and development costs incurred in connection with the expanded research undertaken by the University of Waterloo and other institutions as well as the addition of a Vice President – Research in July, 2004.

	Three months ended September 30,	
	2004	2003
Stock-based compensation	$ —	$ —
Other research and development expenses	245,985	272,001
Total research and development expenses	$ 245,985	$ 272,001

The breakdown of our research and development expenses between our agricultural and human research programs are as follows:

	Three months ended September 30,	
	2004	2003
Agricultural research programs	$ 113,896	$ 115,181
Human health research programs	132,089	156,820
Total research and development expenses	$ 245,985	$ 272,001

Period From Inception on July 1, 1998 through September 30, 2004

From inception of operations on July 1, 1998 through September 30, 2004, we had revenues of $239,165, which consisted of the initial license fees in connection with our various development and license agreements.

We have incurred losses each year since inception and have an accumulated deficit of $13,128,323 at September 30, 2004. We expect to continue to incur losses as a result of expenditures on research, product development and administrative activities.

Item 3. Controls and Procedures.

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of September 30, 2004. Based on this evaluation, our chief executive officer and chief financial officer concluded that as of September 30, 2004, our disclosure controls and procedures were (1) designed to ensure that material information relating to us, including our consolidated subsidiaries, is made known to our chief executive officer and chief financial officer by others within those entities, particularly during the period in which this report was being prepared and (2) effective, in that they provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

No change in our internal controls over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the three months ended September 30, 2004 that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

PART II. OTHER INFORMATION.

Item 6. Exhibits.

Exhibits.

10.1*	Indemnification Agreement with David Rector dated as of April, 2002.
10.2*+	Development and License Agreement with Broin and Associates, Inc. dated as of October 14, 2004.
31.1*	Certification of principal executive officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of principal financial and accounting officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of principal executive officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1350.
32.2*	Certification of principal financial and accounting officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1350.

* Filed herewith.
+ Confidential treatment requested.

SIGNATURES

In accordance with the requirements of the Securities Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SENESCO TECHNOLOGIES, INC.

DATE: November 12, 2004

By: /s/ Bruce C. Galton
Bruce C. Galton, President
and Chief Executive Officer
(Principal Executive Officer)

DATE: November 12, 2004

By: /s/ Joel Brooks
Joel Brooks, Chief Financial Officer
and Treasurer
(Principal Financial and Accounting Officer)

SENESCO TECHNOLOGIES, INC.

INDEMNIFICATION AGREEMENT

This Indemnification Agreement ("Agreement") is made as of April , 2002 by and between Senesco Technologies, Inc., a Delaware corporation (the "Company"), and David Rector ("Indemnitee").

WHEREAS, Indemnitee is a director of the Company and performs valuable services in such capacities for the Company;

WHEREAS, the Company and Indemnitee recognize the substantial increase in corporate litigation in general, subjecting directors, officers, employees, agents and fiduciaries to expensive litigation risks at the same time as the availability and coverage of liability insurance may be limited;

WHEREAS, the Company and Indemnitee further recognize the difficulty in obtaining liability insurance for its directors, officers, employees, agents and fiduciaries, the significant increases in the cost of such insurance and the general reductions in the coverage of such insurance;

WHEREAS, Indemnitee does not regard the current protection available as adequate under the present circumstances, and the Indemnitee and other directors, officers, employees, agents and fiduciaries of the Company may not be willing to continue to serve in such capacities without additional protection; and

WHEREAS, the Company desires to attract and retain the services of highly qualified individuals, such as Indemnitee, to serve the Company and, in part, in order to induce Indemnitee to continue to provide services to the Company as a director, the Company wishes to provide for the indemnification and advancing of expenses to Indemnitee to the maximum extent permitted by law.

NOW, THEREFORE, the Company and Indemnitee hereby agree as follows:

1. Indemnification.

(a) Indemnification of Expenses. The Company shall indemnify Indemnitee to the fullest extent permitted by law if Indemnitee was or is or becomes a party to or witness or other participant in, or is threatened to be made a party to or witness or other participant in, any threatened, pending or completed action, suit, proceeding or alternative dispute resolution mechanism, or any hearing, inquiry or investigation that Indemnitee in good faith believes might lead to the institution of any such action, suit, proceeding or alternative dispute resolution mechanism, whether civil, criminal, administrative, investigative or other (hereinafter a "Claim")

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by reason of (or arising in part out of) any event or occurrence related to the fact that Indemnitee is or was a director, officer, employee, agent or fiduciary of the Company, or any subsidiary of the Company, or is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action or inaction on the part of Indemnitee while serving in such capacity (hereinafter an "Indemnifiable Event") against any and all expenses (including attorneys' fees and all other costs, expenses and obligations incurred in connection with investigating, defending, being a witness in or participating in (including on appeal), or preparing to defend, be a witness in or participate in, any such action, suit, proceeding, alternative dispute resolution mechanism, hearing, inquiry or investigation), judgments, fines, penalties and amounts paid in settlement (if such settlement is approved in advance by the Company, which approval shall not be unreasonably withheld) of such Claim and any federal, state, local or foreign taxes imposed on the Indemnitee as a result of the actual or deemed receipt of any payments under this Agreement (collectively, hereinafter "Expenses"), including all interest, assessments and other charges paid or payable in connection with or in respect of such Expenses. Such payment of Expenses shall be made by the Company as soon as practicable but in any event no later than thirty (30) days after written demand by Indemnitee therefor is presented to the Company.

(b) Reviewing Party. Notwithstanding the foregoing, (i) the obligations of the Company under Section l(a) shall be subject to the condition that the Reviewing Party (as described in Section 10(e) hereof) shall not have determined (in a written opinion, in any case in which the Independent Legal Counsel referred to in Section 1(c) hereof is involved) that Indemnitee would not be permitted to be indemnified under applicable law, and (ii) the obligation of the Company to make an advance payment of Expenses to Indemnitee pursuant to Section 2(a) (an "Expense Advance") shall be subject to the condition that, if, when and to the extent that the Reviewing Party determines that Indemnitee would not be permitted to be so indemnified under applicable law, the Company shall be entitled to be reimbursed by Indemnitee (who hereby agrees to reimburse the Company) for all such amounts theretofore paid; provided, however, that if Indemnitee has commenced or thereafter commences legal proceedings in a court of competent jurisdiction to secure a determination that Indemnitee should be indemnified under applicable law, any determination made by the Reviewing Party that Indemnitee would not be permitted to be indemnified under applicable law shall not be binding and Indemnitee shall not be required to reimburse the Company for any Expense Advance until a final judicial determination is made with respect thereto (as to which all rights of appeal therefrom have been exhausted or lapsed). Indemnitee's obligation to reimburse the Company for any Expense Advance shall be unsecured and no interest shall be charged thereon. If there has not been a Change in Control (as defined in Section 10(c) hereof), the Reviewing Party shall be selected by the Board of Directors, and if there has been such a Change in Control (other than a Change in Control which has been approved by a majority of the Company's Board of Directors who were directors immediately prior to such Change in Control), the Reviewing Party shall be the Independent Legal Counsel referred to in Section l(c) hereof. If there has been no determination by the Reviewing Party or if the Reviewing Party determines that Indemnitee substantively would not be permitted to be indemnified in whole or in part under applicable law, Indemnitee shall have the right to commence litigation seeking an

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initial determination by the court or challenging any such determination by the Reviewing Party or any aspect thereof, including the legal or factual bases therefor, and the Company hereby consents to service of process and to appear in any such proceeding. Any determination by the Reviewing Party otherwise shall be conclusive and binding on the Company and Indemnitee.

(c) Change in Control. The Company agrees that if there is a Change in Control of the Company (other than a Change in Control which has been approved by a majority of the Company's Board of Directors who were directors immediately prior to such Change in Control) then with respect to all matters thereafter arising concerning the rights of Indemnitee to payments of Expenses and Expense Advances under this Agreement or any other agreement or under the Company's Certificate of Incorporation or By-laws as now or hereafter in effect, the Company shall seek legal advice only from Independent Legal Counsel (as defined in Section 10(d) hereof) selected by Indemnitee and approved by the Company (which approval shall not be unreasonably withheld). Such counsel, among other things, shall render its written opinion to the Company and Indemnitee as to whether and to what extent Indemnitee would be permitted to be indemnified under applicable law. The Company agrees to pay the reasonable fees of the Independent Legal Counsel referred to above and to fully indemnify such counsel against any and all expenses (including attorneys' fees), claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(d) Mandatory Payment of Expenses. Notwithstanding any other provision of this Agreement other than Section 9 hereof, to the extent that Indemnitee has been successful on the merits or otherwise, including, without limitation, the dismissal of an action without prejudice, in defense of any action, suit, proceeding, inquiry or investigation referred to in Section (1)(a) hereof or in the defense of any claim, issue or matter therein, Indemnitee shall be indemnified against all Expenses incurred by Indemnitee in connection therewith.

2. Expenses; Indemnification Procedure.

(a) Advancement of Expenses. The Company shall advance all Expenses incurred by Indemnitee. The advances to be made hereunder shall be paid by the Company to Indemnitee as soon as practicable but in any event no later than five (5) days after written demand by Indemnitee therefor to the Company.

(b) Notice/Cooperation by Indemnitee. Indemnitee shall, as a condition precedent to Indemnitee's right to be indemnified under this Agreement, give the Company notice in writing as soon as practicable of any Claim made against Indemnitee for which indemnification will or could be sought under this Agreement. Notice to the Company shall be directed to the Chief Executive Officer of the Company at the address shown on the signature page of this Agreement (or such other address as the Company shall designate in writing to Indemnitee). In addition, Indemnitee shall give the Company such information and cooperation as it may reasonably require and as shall be within Indemnitee's power.

(c) No Presumptions; Burden of Proof. For purposes of this Agreement, the termination of any claim, action, suit or proceeding, by judgment, order, settlement (whether with or without court approval) or conviction, or upon a plea of nolo contendere, or its equivalent, shall not create a presumption that Indemnitee did not meet any particular standard of conduct or have any particular belief or that a court has determined that indemnification is not permitted by applicable law. In addition, neither the failure of the Reviewing Party to have made a determination as to whether Indemnitee has met any particular standard of conduct or had any particular belief, nor an actual determination by the Reviewing Party that Indemnitee has not met such standard of conduct or did not have such belief, prior to the commencement of legal proceedings by Indemnitee to secure a judicial determination that Indemnitee should be indemnified under applicable law, shall be a defense to Indemnitee's claim or create a presumption that Indemnitee has not met any particular standard of conduct or did not have any particular belief. In connection with any determination by the Reviewing Party or otherwise as to whether the Indemnitee is entitled to be indemnified hereunder, the burden of proof shall be on the Company to establish that Indemnitee is not so entitled.

(d) Notice to Insurers. If, at the time of the receipt by the Company of a notice of a Claim pursuant to Section 2(b) hereof, the Company has liability insurance in effect which may cover such Claim, the Company shall give prompt notice of the commencement of such Claim to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such action, suit, proceeding, inquiry or investigation in accordance with the terms of such policies. Nothing in this Section 2(d) shall limit the Company's obligations as otherwise provided for herein, including the Company's obligation to pay Expenses under Section 1(b) or to advance Expenses under Section 2(a).

(e) Selection of Counsel. In the event the Company shall be obligated hereunder to pay the Expenses of any action, suit, proceeding, inquiry or investigation, the Company, if appropriate, shall be entitled to assume the defense of such action, suit, proceeding, inquiry or investigation with counsel approved by Indemnitee, upon the delivery to Indemnitee of written notice of its election so to do. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same action, suit, proceeding, inquiry or investigation; provided that, (i) Indemnitee shall have the right to employ Indemnitee's counsel in any such action, suit, proceeding, inquiry or investigation at Indemnitee's expense and (ii) if (A) the employment of counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of any such defense, or (C) the Company shall not continue to retain such counsel to defend such action, suit, proceeding, inquiry or investigation, then the fees and expenses of Indemnitee's counsel shall be at the expense of the Company.

3. Additional Indemnification Rights; Nonexclusivity.

(a) Scope. The Company hereby agrees to indemnify the Indemnitee to the fullest extent permitted by law, notwithstanding that such indemnification is not specifically authorized by the other provisions of this Agreement, the Company's Certificate of Incorporation, the Company's By-laws or by statute. In the event of any change after the date of this Agreement in any applicable law, statute or rule which expands the rights of the corporation to indemnify a member of its board of directors or an officer, employee, agent or fiduciary, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits afforded by such change. In the event of any change in any applicable law, statute or rule which narrows the rights of this Company to indemnify a member of its board of directors or an officer, employee, agent or fiduciary, such change, to the extent not otherwise required by such law, statute or rule to be applied to this Agreement, shall have no effect on this Agreement or the parties' rights and obligations hereunder.

(b) Nonexclusivity. The indemnification provided by this Agreement shall be in addition to any rights to which Indemnitee may be entitled under the Company's Certificate of Incorporation, its By-laws, any agreement, any vote of shareholders or disinterested directors, the relevant business corporation law of the Company's state of incorporation, or otherwise. The indemnification provided under this Agreement shall continue as to Indemnitee for any action taken or not taken while serving in an indemnified capacity even though Indemnitee may have ceased to serve in such capacity.

4. No Duplication of Payments. The Company shall not be liable under this Agreement to make any payment in connection with any action, suit, proceeding, inquiry or investigation made against Indemnitee to the extent Indemnitee has otherwise actually received payment (under any insurance policy, Certificate of Incorporation, By-laws or otherwise) of the amounts otherwise indemnifiable hereunder.

5. Partial Indemnification. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of Expenses in the investigation, defense, appeal or settlement of any civil or criminal action, suit, proceeding, inquiry or investigation, but not, however, for all of the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion of such Expenses to which Indemnitee is entitled.

6. Mutual Acknowledgment. Both the Company and Indemnitee acknowledge that in certain instances, Federal law or applicable public policy may prohibit the Company from indemnifying its directors, officers, employees, agents or fiduciaries under this Agreement or otherwise. Indemnitee understands and acknowledges that the Company has undertaken or may be required in the future to undertake with the Securities and Exchange Commission to submit the question of indemnification to a court in certain circumstances for a determination of the Company's right under public policy to indemnify Indemnitee.

7. Liability Insurance. To the extent the Company maintains liability insurance applicable to directors, officers, employees, agents or fiduciaries, Indemnitee shall be covered by such policies in such a manner as to provide Indemnitee the same rights and benefits as are accorded to the most favorably insured of the Company's directors, if Indemnitee is a director; or of the Company's officers, if Indemnitee is not a director of the Company but is an officer; or of the Company's key employees, agents or fiduciaries, if Indemnitee is not an officer or director but is a key employee, agent or fiduciary.

8. Exceptions. Any other provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement:

(a) Excluded Action or Omissions. To indemnify Indemnitee for acts, omissions or transactions from which Indemnitee may not be relieved of liability under applicable law.

(b) Claims Initiated by Indemnitee. To indemnify or advance expenses to Indemnitee with respect to proceedings or claims initiated or brought voluntarily by Indemnitee and not by way of defense, except (i) with respect to proceedings brought to establish or enforce a right to indemnification under this Agreement or any other agreement or insurance policy or under the Company's Certificate of Incorporation or By-laws now or hereafter in effect relating to Claims for Indemnifiable Events, (ii) in specific cases if the Board of Directors has approved the initiation or bringing of such suit, or (iii) as otherwise required under the applicable provisions of the business corporation law of the Company's state of incorporation, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advance expense payment or insurance recovery, as the case may be.

(c) Lack of Good Faith. To indemnify Indemnitee for any expenses incurred by the Indemnitee with respect to any proceeding instituted by Indemnitee to enforce or interpret this Agreement, if a court of competent jurisdiction determines that each of the material assertions made by the Indemnitee in such proceeding was not made in good faith or was frivolous; or

(d) Claims Under Section 16(b). To indemnify Indemnitee for expenses and the payment of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 16(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or any similar successor statute.

9. Period of Limitations. No legal action shall be brought and no cause of action shall be asserted by or in the right of the Company against Indemnitee, Indemnitee's estate, spouse, heirs, executors or personal or legal representatives after the expiration of two (2) years from the date of accrual of such cause of action, and any claim or cause of action of the Company shall be extinguished and deemed released unless asserted by the timely filing of a legal action within such two (2)-year period; provided, however, that if any shorter period of limitations is otherwise applicable to any such cause of action, such shorter period shall govern.

10. Construction of Certain Phrases.

(a) For purposes of this Agreement, references to the "Company" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, employees, agents or fiduciaries, so that if Indemnitee is or was a director, officer, employee, agent or fiduciary of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, employee benefit plan, trust or other enterprise, Indemnitee shall stand in the same position under the provisions of this Agreement with respect to the resulting or surviving corporation as Indemnitee would have with respect to such constituent corporation if its separate existence had continued.

(b) For purposes of this Agreement, references to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on Indemnitee with respect to an employee benefit plan; and references to "serving at the request of the Company" shall include any service as a director, officer, employee, agent or fiduciary of the Company which imposes duties on, or involves services by, such director, officer, employee, agent or fiduciary with respect to an employee benefit plan, its participants or its beneficiaries; and if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan, Indemnitee shall be deemed to have acted in a manner "not opposed to the best interests of the Company" as referred to in this Agreement.

(c) For purposes of this Agreement a "Change in Control" shall be deemed to have occurred if (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act), other than a trustee or other fiduciary holding securities under an employee benefit plan of the Company or a corporation owned directly or indirectly by the shareholders of the Company in substantially the same proportions as their ownership of stock of the

Company, is or becomes the "beneficial owner" (as determined in accordance with Rule 13d-3 under said Exchange Act), directly or indirectly, of securities of the Company representing more than twenty percent (20%) of the total voting power represented by the Company's then outstanding Voting Securities, (ii) during any period of two (2) consecutive years, individuals who at the beginning of such period constitute the Board of Directors of the Company and any new director whose election by the Board of Directors or nomination for election by the Company's shareholders was approved by a vote of at least two thirds (2/3) of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof, or (iii) the shareholders of the Company approve a merger or consolidation of the Company with any other corporation other than a merger or consolidation which would result in the Voting Securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into Voting Securities of the surviving entity) at least 80% of

the total voting power represented by the Voting Securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or the shareholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of (in one transaction or a series of transactions) all or substantially all of the Company's assets.

(d) For purposes of this Agreement, "Independent Legal Counsel" shall mean an attorney or firm of attorneys, selected in accordance with the provisions of Section 1(c) hereof, who shall not have otherwise performed services for the Company or Indemnitee within the last three years (other than with respect to matters concerning the rights of Indemnitee under this Agreement, or of other indemnitees under similar indemnity agreements).

(e) For purposes of this Agreement, a "Reviewing Party" shall mean any appropriate person or body consisting of a member or members of the Company's Board of Directors or any other person or body appointed by the Board of Directors who is not a party to the particular Claim for which Indemnitee is seeking indemnification, or Independent Legal Counsel.

(f) For purposes of this Agreement, "Voting Securities" shall mean any securities of the Company that vote generally in the election of directors.

11. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall constitute an original.

12. Binding Effect; Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors and assigns, including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business and/or assets of the Company, spouses, heirs, and personal and legal representatives. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all, substantially all, or a substantial part, of the business and/or assets of the Company, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place. This Agreement shall continue in effect regardless of whether Indemnitee continues to serve as a director of the Company or of any other enterprise at the Company's request.

13. Attorneys' Fees. In the event that any action is instituted by Indemnitee under this Agreement or under any liability insurance policies maintained by the Company to enforce or interpret any of the terms hereof or thereof, Indemnitee shall be entitled to be paid all Expenses incurred by Indemnitee with respect to such action, regardless of whether Indemnitee is ultimately successful in such action, and shall be entitled to the advancement of Expenses with respect to such action, unless as a part of such action the court of competent jurisdiction over such action determines that each of the material assertions made by Indemnitee as a basis for such action were

not made in good faith or were frivolous. In the event of an action instituted by or in the name of the Company under this Agreement to enforce or interpret any of the terms of this Agreement, Indemnitee shall be entitled to be paid all Expenses incurred by Indemnitee in defense of such action (including costs and expenses incurred with respect to Indemnitee's counterclaims and cross-claims made in such action), and shall be entitled to the advancement Expenses with respect to such action, unless as a part of such action the court having jurisdiction over such action determines that each of Indemnitee's material defenses to such action were made in bad faith or were frivolous.

14. Notice. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be deemed duly given (i) if delivered by hand and receipted for by the party addressee, on the date of such receipt, or (ii) if mailed by domestic certified or registered mail with postage prepaid, on the third business day after the date postmarked. Addresses for notice to either party are as shown on the signature page of this Agreement, or as subsequently modified by written notice.

15. Consent to Jurisdiction. The Company and Indemnitee each hereby irrevocably consent to the jurisdiction of the courts of the State of New Jersey for all purposes in connection with any action or proceeding which arises out of or relates to this Agreement and agree that any action instituted under this Agreement shall be commenced, prosecuted and continued only in the Superior Court of the State of New Jersey in and for Mercer County, which shall be the exclusive and only proper forum for adjudicating such a claim.

16. Severability. The provisions of this Agreement shall be severable in the event that any of the provisions hereof (including any provision within a single section, paragraph or sentence) are held by a court of competent jurisdiction to be invalid, void or otherwise unenforceable, and the remaining provisions shall remain enforceable to the fullest extent permitted by law. Furthermore, to the fullest extent possible, the provisions of this Agreement (including, without limitations, each portion of this Agreement containing any provision held to be invalid, void or otherwise unenforceable, that is not itself invalid, void or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable.

17. Choice of Law. This Agreement shall be governed by and its provisions construed and enforced in accordance with the laws of the State of New Jersey, as applied to contracts between New Jersey residents, entered into and to be performed entirely within the State of New Jersey, without regard to the conflict of laws principles thereof.

18. Subrogation. In the event of payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all documents required and shall do all acts that may be necessary to secure such rights and to enable the

Company effectively to bring suit to enforce such rights.

19. Amendment and Termination. No amendment, modification, termination or cancellation of this Agreement shall be effective unless it is in writing signed by both the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

20. Integration and Entire Agreement. This Agreement sets forth the entire understanding between the parties hereto and supersedes and merges all previous written and oral negotiations, commitments, understandings and agreements relating to the subject matter hereof between the parties hereto.

21. No Construction as Employment Agreement. Nothing contained in this Agreement shall be construed as giving Indemnitee any right to be retained in the employ of the Company or any of its subsidiaries.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

SENESCO TECHNOLOGIES, INC.

By: Sascha P. Fedyszyn
Title: Vice President of Corporate Development and Secretary

AGREED TO AND ACCEPTED:

INDEMNITEE:

_____
(signature)

_____
(print name)

_____
(address)

** Certain information in this exhibit has been omitted and will be filed separately with the Securities and Exchange Commission pursuant to a confidential treatment request.

DEVELOPMENT AND LICENSE AGREEMENT

This Development and License Agreement ("Agreement") is made and entered into this day of , 2004 (the "Effective Date") by and between Senesco Technologies, Inc, a Delaware corporation with principal offices at 303 George Street, Suite 420, New Brunswick, New Jersey 08901 ("Senesco") and Broin and Associates, Inc., a South Dakota corporation with principal offices at 2209 East 57th Street North, Sioux Falls, South Dakota 57104 ("Broin").

WITNESSETH

WHEREAS, Senesco owns technology, know-how and United States and foreign patent applications concerning methods for controlling programmed cell death;

WHEREAS, Broin owns certain proprietary technology, know-how concerning ethanol and co-product(s) production and is in the business of ethanol, ethanol production, and ethanol co-product(s) production;

WHEREAS, Senesco desires to develop , Senesco desires to grant to Broin an exclusive license to make, use, sell, and sublicense in the Field (hereinafter defined), and Broin desires to acquire said license;

NOW THEREFORE, in consideration of the premises and the faithful performance of the mutual covenants hereinafter set forth, the parties hereto hereby agree as follows:

1. DEFINITIONS

As used in this Agreement, the following defined terms shall have the respective meanings set forth below:

1.1 "Broin Managed Plants" shall mean plants managed by Broin (see Appendix B).

1.2 "Broin Technology" shall mean for example and without limitation: Broin and Associates Companies' business and technical information, financial information, data, marketing techniques and materials, business plans and strategies, business operations and systems, pricing policies, information concerning employees, customers, vendors and/or investors, technology, intellectual property, trade secrets, ideas, concepts, discoveries, inventions, patents, patent applications, improvements, research, developments, know-how, techniques, algorithms, drawings, formulas, designs, plans, engineering information, specifications, products, compositions, prototypes, biological or physical materials, manufacturing information, and manufacturing processes.

1.3 "Confidential Information" means any information received by either party (Senesco or Broin) from the other, including all business, technical and other information, whether disclosed in writing, orally or in any other form, tangible or intangible, including but not limited to: information concerning inventions (including patent applications and related documents), discoveries, techniques, processes, designs, biological materials, specifications, algorithms, data, finances and plans, customer lists, business plans, contracts, marketing plans, production plans, distribution plans, system implementations plans, business concepts, supplier information, business procedures, business operations;

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all know-how and trade secrets; and all other unpublished copyrightable material. Confidential Information does not include information which:

(i) is known to the receiving party prior to the time of disclosure by the disclosing party, as evidenced by contemporaneous dated written records;
(ii) is received by Senesco or Broin (as applicable) from independent sources having the right to such information without an obligation of confidence or non-disclosure, and without the information having been solicited or obtained by any use of the Confidential Information;
(iii) the disclosing party gives written consent for disclosure to a third party; or
(iv) is subsequently and independently developed by the receiving party without use of the Confidential Information and by persons who have not had access to the Confidential Information, as evidenced by contemporaneous dated written records.

1.4 "Field" is the production of industrial and fuel ethanol, which does not include potable ethanol.

1.5 "Joint Development " shall mean proprietary and confidential know-how developed by one or more employees of Broin and one or more employees or funded researchers of Senesco, pursuant to the Project, other than, Broin Technology, Senesco Patents, and Senesco Technology, pursuant to this Agreement.

1.6 "Licensed Product" means product developed pursuant to the Project involving for use in the Field.

1.7 "Project" means development of incorporating Senesco Patents, Senesco Technology, and Senesco Development pursuant to this Agreement.

1.8 "Senesco Patents" means (i) all pending (as of the Effective Date of this Agreement) U.S. and foreign patent applications owned or controlled by Senesco pertaining to controlling senescence, including original applications, provisionals, divisions, continuations, continuations in part, extensions, PCT applications, renewals, reissues, or reexamination applications or supplemental prosecution certificates, including, but not limited to, all applications listed in Appendix A; (ii) all U.S. and foreign patents that have issued or will issue from any application identified in Section (i) of this

paragraph; and (iii) all U.S. and foreign applications that claim priority in any way from any application or patent identified in subparagraphs (i) or (ii) of this paragraph.

1.9 "Senesco Technology" means the Senesco Patents, Senesco Confidential Information, and all Senesco know-how, materials, information and methods (whether developed by Senesco or acquired from a third party), including, but not limited to methods for controlling programmed cell death involving altering the expression of plant and/or animal genes and their cognate expressed proteins that are induced during or coincident with the onset of senescence.

1.10 "Senesco Development" means any improvement or development, whether or not patentable or protectable as a trade secret, relating to or deriving from the Senesco

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Technology, made by Senesco, pursuant to and during the term of this Agreement, including all patents and patent applications to be filed relating to any such improvements or developments.

1.11 "Territory" means worldwide.

1.12 "Third Party" means all persons and entities other than Senesco and Broin.

2. LICENSE GRANT

2.1 Senesco grants Broin an exclusive license in the Field for the Territory to make, have made, use, sell, offer to sell, import, and sublicense Licensed Products under the Senesco Technology and Senesco Developments. Except as set forth in the preceding sentence, Broin shall have no rights to make, have made, use, sell, offer to sell, import, sublicense products or processes within the scope of the Senesco Technology and Senesco Developments.

2.2 Broin grants Senesco license to Broin Technology necessary for Senesco's development of a Licensed Product.
&nb sp; .

2.3 In the event that Broin elects, pursuant to Paragraph 5.4, that the parties shall proceed with patent protection concerning the Joint Developments, Senesco grants Broin an exclusive license in the Field for the Territory to make, have made, use, sell offer to sell, import, and sublicense Licensed Products under the Joint Developments, Senesco reserving all rights outside the Field for itself, except that Senesco grants Broin a first right of refusal to negotiate an exclusive license under the Joint Developments to any subject matter outside of the Field.

3. TERM

3.1 This Agreement is effective as of the Effective Date, and shall continue until the expiration of the last of the Senesco patents unless earlier terminated pursuant to Article 12 below or extended by mutual written agreement of the parties.

4. PRODUCT DEVELOPMENT

4.1 Senesco shall conduct research and development within the scope and goals of the Project.

4.2 Senesco shall devote as much time and attention to the Project as is reasonably necessary for its success.

4.3 Work on the Project will begin as soon as reasonably possible and will continue until the completion of Project.

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4.4 The parties hereby agree, for the duration of this Agreement, to collaborate exclusively on the Licensed Product contemplated under this Agreement.

4.5 Senesco agrees that all information obtained by it through work on the Project shall be made available to Broin at any reasonable time during Senesco's business hours, and that Senesco will communicate to Broin, promptly without request, all information that it deems pertinent to the Project as it progresses. Broin shall keep all such information in confidence.

4.6 Each party shall be responsible for its own costs in carrying out the activities of the Project, except if agreed otherwise in writing between the parties.

4.7 Senesco shall pay only its own research costs incurred in connection with the Project, consisting of the following:

a. Cost of staff time and direct technical supervision;
b. Cost of materials and supplies;
c. Miscellaneous expenses such as telephone and telephone-facsimile bills, postage and shipping bills, service department and stenographic expense, costs of equipment repairs and renewals, and similar costs where directly applicable to Project;

d. Cost of special equipment necessary for the Project;
e. Travel expense and freight and express charges directly applicable to Project;
f. All costs associated with research and development (i.e. university costs) of Licensed Product, including intellectual property (including but not limited to patent applications, continuations, divisionals, issue fees, maintenance fees, etc.).

4.8 Broin shall be responsible, and Senesco shall fully cooperate with Broin, to obtain any required state, federal, national, or international approval needed to carry out the terms of this Agreement.

5. PATENTS, PATENT APPLICATIONS AND PATENT ENFORCEMENT

5.1 Broin acknowledges that all the Senesco Technology is and shall remain the property of Senesco, and except as provided herein, all right, title and interest in the Senesco Technology is and shall remain with Senesco.

5.2 Senesco acknowledges that all Broin Technology is and shall remain the property of Broin, and except as provided herein, all right, title and interest in the Broin Technology is and shall remain with Broin.

5.3 Broin and Senesco agree that all Senesco Development(s) are and shall remain the property of Senesco, and except as provided herein, all right, title and interest in the Senesco Development(s) is and shall remain with Senesco. Broin assigns all patentable inventions relating to any Senesco Development to Senesco and agrees to execute all documents, provide all information and materials (including any biological materials necessary for deposit) and do all acts, at Senesco's sole expense, necessary to perfect and maintain Senesco's rights to all patentable Senesco Development(s).

** Certain information in this exhibit has been omitted and will be filed separately with the Securities and Exchange Commission pursuant to a confidential treatment request.

5.4 Broin and Senesco agree that all Joint Developments will be maintained as trade secrets and shall be jointly owned and used by the parties only in accordance with the terms of this Agreement. At Broin's election, the parties may forego trade secret protection concerning the Joint Developments and instead pursue patent protection. At Broin's election, Senesco, at its own expense, shall file patent applications covering the Joint Developments. Inventorship on such patent applications shall be determined in accordance with applicable law. If one or more employees of Broin are deemed to be joint inventors, Broin herein assigns patentable inventions relating to Joint Development to Senesco and agrees to execute documents, provide information and materials (including any biological materials necessary for deposit) and do acts, at Senesco's sole expense, necessary to perfect and maintain Senesco's rights to patentable Joint Developments. Broin shall have exclusive rights to said Joint Developments inside the Field and an option to acquire rights outside the Field as provided in Paragraph 2.3.

5.5 Parties agree to notify one another if either makes a discovery or invention in the Field during work on the Project and apply improvements to the Licensed Product at Senesco's expense.

5.6 Senesco shall retain the sole right to prosecute and maintain any and all patents and patent applications relating to Senesco Technology and Senesco Development(s) in its sole and absolute discretion and at its own expense. Senesco shall retain the sole right to prosecute and maintain any and all patents and patent applications which the parties elect to file relating to a Joint Development in Senesco's sole and absolute discretion and at its own expense.

5.7 Senesco will use reasonable best efforts to defend its intellectual property by notifying alleged patent infringers of the issued Senesco Patents, to vigorously seek to have them use non-infringing technology or to pursue a sublicense from Broin, and Senesco shall have sole and absolute discretion over whether to bring any claims for patent infringement under the Senesco Patents, shall have complete control of any suits, claims or counterclaims it asserts, and shall retain 100% of any monies received, including all damage awards and settlement payments. In the event Senesco declines to enforce the Senesco Patents in the Field, and Senesco gives written consent to Broin, which shall not be unreasonably withheld, Broin may enforce the Senesco Patents in the Field against a Third Party at its own cost and Senesco shall provide reasonable cooperation. Any monies received in a suit brought by Broin shall be first used to reimburse the parties for their respective legal expenses in connection with said litigation, the remainder to be split 80% to Broin and 20% to Senesco.

6. PAYMENTS

6.1 In consideration of the license granted herein, Broin shall make payments to Senesco in accordance with the following terms:

(i) Broin shall pay for each Broin Managed Plant using the Licensed Product herein.

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(ii)

(iii) Broin shall promptly notify Senesco in writing each time the Licensed Product is first used at each Broin Managed Plant.
(iv) Broin shall allow Senesco reasonable access to Broin Managed Plant and documents to inspect and ascertain whether the Licensed Product is being employed.
(v) Broin Shall to Senesco ..

7. SUBLICENSING

7.1 Any sublicense granted by Broin (not including to Broin Managed Plants) herein shall require said sublicensee to abide by the obligations of Broin herein (other than the payment provisions of Article 6), as if said sublicensee were a party to this Agreement hereto.

7.2 &nbs p; or other remuneration received from any using Licensed Product for the duration of the .

8. NO COMPETE

8.1 Other than products under development prior to the effective date of this Agreement, parties agree not to develop or commercialize any product which would compete with Licensed Product in the Field of this Agreement.

9. ASSIGNMENT

9.1 Neither Senesco nor Broin shall assign or transfer any rights or obligations under this Agreement without the consent of the other party, such consent not to be unreasonably withheld.

9.2 This Agreement shall inure to the benefit of and shall be binding upon the parties hereto and their successors and permitted assigns.

10. CONFIDENTIALITY

10.1 Broin and Senesco each agree that it will respect the other's Confidential Information and treat it in the same manner as if it were its own Confidential Information. Such Confidential Information shall not be disclosed by the receiving party to any third person or entity or to the public except as provided herein.

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10.2 Broin and Senesco shall designate their Confidential Information, when disclosed in writing, by stating that such information is confidential. When disclosed orally or visually, the disclosing party shall use its best efforts to orally state that such information is considered confidential at the time of the disclosure, and shall use its best efforts to reduce to writing a notice regarding said confidentiality within thirty (30) days of such disclosure.

10.3 Broin and Senesco each agree to treat and hold as confidential and not disclose to or provide access to any third person or entity or to the public any and all Confidential Information received pursuant to this Agreement and will cause its respective agents, representatives, and employees to do likewise.

10.4 Broin and Senesco shall use the other's Confidential Information only for the uses as agreed upon in this Agreement and only in connection with the development of Licensed Products in the Field, the development of processes for the production of such Licensed Products; and any other purpose mutually agreeable to the parties.

10.5 Broin or Senesco, as the case may be, may disclose Confidential Information received, to the extent it is required to do so pursuant to a final court order; provided, however, that the receiving party (i) promptly notifies the disclosing party upon its receipt of any pleading, discovery request, interrogatory, motion or other paper that requests or demands disclosure of the Confidential Information, (ii) opposes any request for disclosure, and that failing, seeks to have access and use limited by a protective order, and (iii) provides the disclosing party a reasonable opportunity to contest and assist in opposing any requirement of disclosure, to seek judicial protection against the disclosure and to have such disclosure as is required made under a protective secrecy order.

10.6 Broin and Senesco each agree that, at any time upon the request of the disclosing party, the receiving party will return or destroy any materials containing Confidential Information (and destroy its notes and copies related thereto). If destroyed, the receiving party shall provide the disclosing party with written certification of destruction of the materials containing said Confidential Information, said certification to be signed by an officer of the receiving party.

10.7 Broin and Senesco each agree that only those of its employees who need to know the Confidential Information will have access to same, and then only to the extent necessary to carry out their respective tasks. Each employee to which Confidential Information will be disclosed in which the employee agrees to be bound to the terms of the Confidentiality provisions of this Agreement in accordance with this Section 10 as if he or she were a party hereto. Broin and Senesco each agree to be responsible for any use by its respective employees of the Confidential Information of the disclosing party.

10.8 In the event Broin or Senesco wishes to use a Third Party contractor or consultant and disclose to that contractor or consultant the other party's Confidential Information, the receiving party shall, prior to disclosure, (i) secure written permission from the disclosing party (which shall not be unreasonably withheld) and (ii) secure from the Third Party a signed undertaking in which the Third Party agrees to be bound to the terms of the

Confidentiality provisions of this Agreement in accordance with this Section 10 as if he or she were a party hereto.

10.9 Senesco and Broin each agree not to disclose the terms of this Agreement other than as required by law to any regulatory or judicial body, or as necessary to potential investors or financiers (provided such potential investors or financiers are subject to confidentiality undertakings) without the express prior written consent of the other party, which consent shall not be unreasonably withheld. The parties, however, shall be permitted to prepare press releases disclosing the existence of the Agreement in accordance with the provisions of Paragraph 10.10.

10.10 Prior to issuing any reports, statements, press releases, publications, or other disclosures to third parties regarding this Agreement or the transactions contemplated herein, Senesco and Broin shall exchange copies of said disclosure with reasonable advance notice in the case of press releases and at least sixty (60) days in advance in the case of any other disclosures, and the parties shall consult with each other regarding the content of said disclosure. Except as otherwise required by law, neither Senesco nor Broin shall issue any such disclosure without the prior written approval of the other. This paragraph does not apply to disclosures necessary for filing documents with the U.S. Securities and Exchange Commission.

11. REPRESENTATIONS AND WARRANTIES

11.1 Senesco represents to the best of its knowledge that it is legally entitled to disclose the Senesco Confidential Information disclosed by it, and that to the best of its knowledge the disclosure of the Senesco Confidential Information under this Agreement does in no event violate any right of any Third Party. No other warranties concerning the Senesco Confidential Information are made, whether express or implied, and Senesco expressly disclaims all other warranties concerning, including without limitation, merchantability, fitness for a particular purpose, and non-infringement.

11.2 Senesco represents that each of its employees or sponsored researchers to be engaged in the Project has entered into a contract of employment, consultancy or other agreement, that provides for assignment to Senesco of all inventions made by the employee or sponsored researcher during the course and in connection with their work on the Project.

11.3 Senesco represents and warrants that it is the sole and exclusive owner of the entire right, title and interest in and to the Senesco Technology and Senesco Patents, and that Senesco has the right to grant the exclusive right in the Field, license and privilege granted in this Agreement; that it has executed no agreement in conflict with this Agreement; and that it has not granted to any other person, firm or corporation any right, license, shop-right, or privilege granted under this Agreement.

11.4 Broin represents to the best of its knowledge that it is legally entitled to disclose the Broin Confidential Information disclosed by it, and that to the best of its knowledge the disclosure of the Broin Confidential Information under this Agreement does in no event violate any right of any Third Party. No other warranties concerning the Broin

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Confidential Information are made, whether express or implied, and Broin expressly disclaims all other warranties concerning, including without limitation, merchantability, fitness for a particular purpose, and non-infringement.

11.5 Senesco will devote its best efforts to research and develop Licensed Product.

12. DEFAULT AND TERMINATION

12.1 Senesco or Broin may terminate this Agreement upon sixty (60) days notice if the other party fails to materially fulfill or perform any one or more of its duties, obligations, or responsibilities pursuant to this Agreement and does not cure said failure within thirty (30) days after receiving notice of said failure.

12.2 Parties may terminate this Agreement if other party declares or petitions for bankruptcy, is the subject of a bankruptcy petition filed against it, makes an assignment for the benefit of creditors or seeks similar relief under state law, or becomes insolvent.

12.3 Upon termination of this Agreement pursuant to this Section 12, (i) any licenses granted to the other party shall cease; (ii) all Confidential Information exchanged pursuant to this Agreement shall be returned immediately to the disclosing party; (iv) neither party to this Agreement shall be responsible to the other for any damages arising from the termination of this Agreement, including any claim for lost or anticipated profits, expenditures, reliance, or other damages.

12.4 In the event that this Agreement is terminated by Broin after Senesco has developed the Licensed Product, Broin shall pay to Senesco any amounts then owed pursuant to Articles 6 and 7, and assign the licensed product back to Senesco.

12.5 Parties may terminate this Agreement if other party violates any provisions of section 10 or 11 (Confidentiality and Representations And Warranties, respectively).

12.6 Parties may terminate this Agreement if other party transfers or assigns their obligations of this Agreement.

13. CHOICE OF LAW; CHOICE OF FORUM

13.1 This Agreement shall be construed and interpreted in accordance with the laws of the State of South Dakota without reference to its choice of law principles.

14. ENTIRE AGREEMENT; NO ORAL MODIFICATIONS; WAIVER

14.1 This Agreement contains the entire understanding and agreement between Senesco and Broin with respect to the subject matter hereof, and supersedes all prior oral or written understandings and agreements relating thereto. Neither party shall be bound by any conditions, definitions, warranties, understandings, or representations concerning the subject matter hereof except as are (i) provided in this Agreement, (ii) contained in any prior existing written agreement between the parties, or (iii) duly set forth on or after the

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Effective Date of this Agreement in a written instrument subscribed by an authorized representative of the party to be bound thereby.

14.2 No waiver by either party, whether express or implied, of any provision of this Agreement, or of any breach or default thereof, shall constitute a continuing waiver of such provision or of any other provision of this Agreement. Either party's acceptance of payments by the other under this Agreement shall not be deemed a waiver of any violation of or default under any of the provisions of this Agreement.

15. RELATIONSHIP OF THE PARTIES

15.1 Nothing in this Agreement is intended or shall be deemed to constitute a partnership, agency, employment or joint venture relationship between the parties. All activities by the parties hereunder shall be performed by the parties as independent parties. Neither party shall incur any debts or make any commitments for or on behalf of the other party except to the extent, if at all, specifically provided herein or subsequently agreed upon in writing.

16. SEVERABILITY

16.1 If any provision or any portion of any provision of this Agreement shall be held to be void or unenforceable, the remaining provisions of this Agreement and the remaining portion of any provision held void or unenforceable in part shall continue in full force and effect.

17. CONSTRUCTION

17.1 This Agreement shall be construed without regard to any presumption or other rule requiring construction against the party causing this Agreement to be drafted. If any words or phrases in this Agreement shall have been stricken out or otherwise eliminated, whether or not any other words or phrases have been added, this Agreement shall be construed as if those words or phrases were never included in this Agreement, and no implication or inference shall be drawn from the fact that the words or phrases were so stricken out or otherwise eliminated.

18. HEADINGS

18.1 The captions and paragraph headings appearing in this Agreement are inserted for convenience and reference only and in no way define, limit or describe the scope or intent of this Agreement or any of the provisions thereof.

19. NOTICES

19.1 All reports, approvals, requests, demands and notices required or permitted by this Agreement to be given to a party (hereafter "Notices") shall be in writing. Notices shall be hand delivered, sent by certified or registered mail, return receipt requested, or sent via a reputable private express service which requires the addressee to acknowledge receipt thereof. Notices may also be transmitted by fax, provided that a confirmation copy is

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also sent by one of the above methods. Except as otherwise provided in this Agreement, Notices shall be effective upon dispatch. Notices shall be sent to the party concerned as follows (or at such other address as a party may specify by notice to the other):

As to Senesco:

Senesco Technologies, Inc.
303 George Street, Suite 420
New Brunswick, NJ 08901
Facsimile: (732) 296-9292
Attn: Bruce C. Galton, President and Chief Executive Officer

As to Broin:

Broin and Associates, Inc.
2209 East 57th Street North
Sioux Falls, South Dakota 57103
Facsimile: (605) 965-2203
Attn: Doug Berven, Director of Project Development

20. SURVIVAL OF TERMS

20.1 The obligations set forth in Section 3, 5, 7, 10, 11-14, 16, 17, and 20 shall survive the termination of this Agreement.

21. APPENDICES

21.1 All Appendices referenced herein are hereby made a part of this Agreement.

IN WITNESS WHEREOF, each of the parties has caused this Agreement to be executed by its duly authorized representative as of the day and year first above written.

SENESCO TECHNOLOGIES, INC.	**BROIN AND ASSOCIATES, INC.**
By: /s/ Bruce C. Galton	By: /s/ Jeffrey Broin
Print: Bruce C. Galton	Print: Jeffrey Broin
Title: Chief Executive Officer	Title: Chief Executive Officer

** Certain information in this exhibit has been omitted and will be filed separately with the Securities and Exchange Commission pursuant to a confidential treatment request.

APPENDIX A

Patents

** Certain information in this exhibit has been omitted and will be filed separately with the Securities and Exchange Commission pursuant to a confidential treatment request.

** Certain information in this exhibit has been omitted and will be filed separately with the Securities and Exchange Commission pursuant to a confidential treatment request.

APPENDIX B

Broin Managed Plants as of date of execution:

Broin Enterprises BEI
Scotland, SD 57059

Dakota Ethanol DEL
Wentworth, SD 57075

Ethanol2000 ELP
Bingham Lake, MN 56118

EXOL EXL
Albert Lea, MN 56007

Great Plains Ethanol, LLC GPE
Chancellor, SD 57015

Iowa Ethanol, LLC IEL
Hanlontown, IA 50444

James Valley Ethanol, LLC JVE
Groton, SD 57445

Michigan Ethanol, LLC MEL
Caro, MI 48723

North East Missouri Grain, NEM-E1
Macon, MO 63552

Northern Lights Ethanol, LLC NLE
Big Stone City, SD 57216

Northstar Ethanol, LLC NSE
Lake Crystal, MN 56055

Otter Creek Ethanol, LLC OCE
Ashton, IA 51232

Pro Corn, LLC PCL
Preston, MN 55965

Sioux River Ethanol, LLC SRE
Hudson, SD 57034

Tall Corn Ethanol, LLC TCE
Coon Rapids, IA 50058

Voyager Ethanol, LLC VEL
Emmetsburg, IA 50536

Exhibit 31.1

CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Bruce C. Galton, President and Chief Executive Officer of Senesco Technologies, Inc., certify that:

1. I have reviewed this Quarterly Report on Form 10-QSB of Senesco Technologies, Inc.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) [Paragraph omitted in accordance with SEC transition instructions contained in SEC Release 34-47986]

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

---

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 12, 2004

/s/ Bruce C. Galton
Bruce C. Galton
President and Chief Executive Officer
(principal executive officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Joel Brooks, Chief Financial Officer and Treasurer of Senesco Technologies, Inc., certify that:

1. I have reviewed this Quarterly Report on Form 10-QSB of Senesco Technologies, Inc.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) [Paragraph omitted in accordance with SEC transition instructions contained in SEC Release 34-47986]

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

---

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 12, 2004

/s/ Joel Brooks
Joel Brooks
Chief Financial Officer and Treasurer
(principal financial and accounting officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-QSB of Senesco Technologies, Inc. for the period ended September 30, 2004 as filed with the Securities and Exchange Commission on the date hereof, the undersigned, Bruce C. Galton, President and Chief Executive Officer, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of Senesco Technologies, Inc.

Dated: November 12, 2004

/s/ Bruce C. Galton *
Bruce C. Galton
President and Chief Executive Officer
(principal executive officer)

* A signed original of this written statement required by Section 906 has been provided to us and will be retained by us and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-QSB of Senesco Technologies, Inc. for the period ended September 30, 2004 as filed with the Securities and Exchange Commission on the date hereof, the undersigned, Joel Brooks, Chief Financial Officer and Treasurer, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of Senesco Technologies, Inc.

Dated: November 12, 2004

/s/ Joel Brooks *
Joel Brooks
Chief Financial Officer and Treasurer
(principal financial and accounting officer)

* A signed original of this written statement required by Section 906 has been provided to us and will be retained by us and furnished to the Securities and Exchange Commission or its staff upon request.