SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-QSB

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended December 31, 2002
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)	(Zip Code)

(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: X No:

State the number of shares outstanding of each of the Issuer's classes of common stock, as of January 31, 2003:

Class	Number of Shares
Common Stock, $0.01 par value	11,880,045

Transitional Small Business Disclosure Format (check one):

Yes: No: X

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

	December 31, 2002 (unaudited)	June 30, 2002
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 436,784	$ 798,711
Short-term investments	3,136,791	2,872,432
Accounts receivable	--	75,000
Prepaid expenses and other current assets	217,032	55,772
Total Current Assets	3,790,607	3,801,915
Long-term investments	--	993,535
Property and equipment, net	69,323	79,581
Intangibles	404,436	347,978
Security deposit	7,187	7,187
TOTAL ASSETS	$ 4,271,553	$ 5,230,196
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 47,481	$ 80,201
Accrued expenses	299,201	296,347
Total Current Liabilities	346,682	376,548
Grant payable	79,061	67,972
TOTAL LIABILITIES	425,743	444,520
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 11,880,045 shares	118,800	118,800
Capital in excess of par	12,234,373	12,157,679
Deficit accumulated during the development stage	(8,507,363)	(7,430,321)
Deferred compensation related to issuance of options and warrants	--	(60,482)
Total Stockholders' Equity	3,845,810	4,785,676
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 4,271,553	$ 5,230,196

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 December 31, 2002	For the Three Months Ended December 31, 2001	For the Six Months Ended December 31, 2002	For the Six Months Ended December 31, 2001	From Inception on July 1, 1998 through December 31, 2002
Revenue	$ --	$ 125,000	$ 10,000	$ 125,000	$ 210,000
Operating Expenses:					
General and administrative	398,789	395,409	762,013	676,128	5,789,790
Research and development	215,803	93,821	360,087	156,976	1,859,663
Stock based compensation	97,497	387,192	137,177	541,040	1,498,435
Total Operating Expenses	712,089	876,422	1,259,277	1,374,144	9,147,888
Loss From Operations	(712,089)	(751,422)	(1,249,277)	(1,249,144)	(8,937,888)
Sale of state income tax loss	130,952	150,551	130,952	150,551	341,834
Interest income (expense), net	18,727	(3,895)	41,283	(7,448)	88,691
Net Loss	$ (562,410)	$ (604,766)	$ (1,077,042)	$ (1,106,041)	$ (8,507,363)
Basic and Diluted Net Loss Per Common Share	$ (0.05)	$ (0.07)	$ (0.09)	$ (0.14)	
Basic and Diluted Weighted Average Number of Common Shares Outstanding	11,880,045	8,403,231	11,880,045	8,138,262	

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 DECEMBER 31, 2002

(unaudited)

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Deferred Compensation Related to the Issuance of Options and Warrants	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)	--	--	--
Fair market value of options and warrants granted on September 7, 1999.....	--	--	252,578	--	$ (72,132)	180,446
Fair market value of warrants granted on October 1, 1999.....	--	--	171,400	--	(108,600)	62,800
Fair market value of warrants granted on December 15, 1999.....	--	--	331,106	--	--	331,106
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

(continued)

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 DECEMBER 31, 2002

(unaudited)

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Deferred Compensation Related to the Issuance of Options and Warrants	Total
	Shares	Amount				
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
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2000	--	--	(260,595)	--	--	(260,595)
Fair market value of warrants granted on October 2, 2000	--	--	80,700	--	--	80,700
Fair market value of warrants granted on September 4, 2001	--	--	41,800	--	--	41,800
Fair market value of warrants granted on October 15, 2001	--	--	40,498	--	--	40,498
Fair market value of options and warrants granted on November 1, 2001	--	--	138,714	--	--	138,714
Issuance of common stock and warrants for cash from November 30, 2001 through April 17, 2002	3,701,430	37,014	6,440,486	--	--	6,477,500
Fair market value of options and warrants granted on December 1, 2001	--	--	262,550	--	--	262,550

(continued)

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 DECEMBER 31, 2002

(unaudited)

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Deferred Compensation Related to the Issuance of Options and Warrants	Total
	Shares	Amount				
Issuance of common stock and warrants associated with bridge loan conversion on December 3, 2001	305,323	$ 3,053	$ 531,263	--	--	$ 534,316
Fair market value of options vested and extended on January 1, 2002	--	--	94,146	--	--	94,146
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2002	--	--	(846,444)	--	--	(846,444)
Fair market value of warrants vested on October 15, 2002	--	--	27,832	--	--	27,832
Fair market value of warrants vested on November 1, 2002	--	--	69,665	--	--	69,665
Fair value of options and warrants vested and change in fair value of options and warrants granted	--	--	118,695	--	$ 180,732	299,427
Net loss	--	--	--	$ (8,507,363)	--	(8,507,363)
Balance at December 31, 2002	11,880,045	$ 118,800	$ 12,234,373	$ (8,507,363)	$ --	$ 3,845,810

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 Six Months Ended December 31, 2002	2001	From Inception on July 1, 1998 through December 31, 2002
Cash flows from operating activities:			
Net loss	$ (1,077,042)	$ (1,106,041)	$ (8,507,363)
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
Issuance of common stock and warrants for interest	--	9,316	9,316
Issuance and vesting of stock options and warrants for services	137,177	541,040	1,498,435
Depreciation and amortization	12,237	11,371	83,470
(Increase) decrease in operating assets:			
Accounts receivable	75,000	--	--
Prepaid expense and other current assets	(161,260)	6,464	(217,032)
Security deposit	--	--	(7,187)
Increase (decrease) in operating liabilities:			
Accounts payable	(32,720)	(143,774)	47,481
Accrued expenses	2,854	279,124	299,201
Net cash used in operating activities	(1,043,754)	(402,500)	(6,577,250)
Cash flows from investing activities:			
Patent costs	(56,458)	(72,315)	(414,453)
Redemption (purchase) of investments, net	729,176	--	(3,136,791)
Purchase of property and equipment	(1,980)	(9,616)	(142,776)
Net cash provided by (used in) investing activities	670,738	(81,931)	(3,694,020)
Cash flows from financing activities:			
Proceeds from grant	11,089	11,051	79,061
Proceeds from issuance of bridge notes	--	525,000	525,000
Proceeds from issuance of common stock and warrants, net	--	2,750,478	10,103,993
Cash provided by financing activities	11,089	3,286,529	10,708,054
Net increase (decrease) in cash and cash equivalents	(361,927)	2,802,098	436,784
Cash and cash equivalents at beginning of period	798,711	14,330	--
Cash and cash equivalents at end of period	$ 436,784	$ 2,816,428	$ 436,784
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.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(unaudited)

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 year ended June 30, 2002.

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 December 31, 2002 and as of June 30, 2002, the results of its operations for the three-month periods ended December 31, 2002 and 2001, the results of its operations and cash flows for the six-month periods ended December 31, 2002 and 2001 and for the period from inception on July 1, 1998 through December 31, 2002.

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

Senesco is a development stage functional genomics company whose mission is to (i) enhance the quality and productivity of fruits, flowers, vegetables and agronomic crops through the control of cell death in plants (senescence); and (ii) develop novel approaches to treat programmed cell death diseases in humans (apoptosis) (e.g., arthritis, macular degeneration, glaucoma, heart disease, Alzheimer's disease and Parkinson's disease), which are the result of premature cell death in humans, and 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. Mammalian results to date include determining the expression of the Company's patent pending genes in both ischemic and non-ischemic heart tissue and inducing apoptosis in human cancer cell lines derived from tumors.

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. Since September 7, 1999, the Company has had outstanding options and warrants to purchase its common stock, $0.01 par value per share (the "Common Stock"); however, for the three months ended December 31, 2002 and 2001, shares to be issued upon the exercise of options and warrants aggregating 5,838,696 and 2,064,105, respectively, at an average exercise price of $2.62 and $2.62, respectively, and for the six months ended December 31, 2002 and 2001, shares to be issued upon the exercise of options and warrants aggregating 5,828,425 and 1,462,379, respectively, at an average exercise price of $2.62 and $2.62, respectively, are not included in the computation of diluted loss per share as the effect is anti-dilutive.

NOTE 3 - SIGNIFICANT EVENTS:

AUTHORIZED STOCK, STOCK INCENTIVE PLAN, OPTION AND WARRANT GRANTS

On October 9, 2002, the Board of Directors of the Company (the "Board") approved: (i) an amendment to the Company's Certificate of Incorporation to increase the authorized shares of Common Stock available for issuance from 20,000,000 shares to 30,000,000 shares; and (ii) an amendment to the Company's 1998 Stock Incentive Plan, as amended (the "Plan"), to increase the maximum number of shares of Common Stock available for issuance under the Plan from 2,000,000 shares to 3,000,000 shares. Stockholder approval for these amendments was obtained at the Company's Annual Meeting of Stockholders held on December 13, 2002.

On October 9, 2002, the Board unanimously approved and the Company subsequently granted options under the Plan to purchase an aggregate of 22,500 shares of Common Stock to two of the Company's executive officers at an exercise price equal to $1.65 per share, with one-third of such options becoming exercisable on each of the first, second and third anniversaries from the date of grant.

On December 13, 2002, the Board unanimously approved and the Company subsequently granted, effective January 7, 2003: (i) options under the Plan to purchase an aggregate of 75,000 shares of Common Stock to certain members of the Board at an exercise price equal to $2.35 per share, with one-half of such options exercisable on the date of grant and one-half of such options becoming exercisable on the first anniversary from the date of grant; (ii) options under the Plan to purchase an aggregate of 57,500 shares of Common Stock to the members of the Company's Scientific Advisory Board, certain research consultants and an executive officer of the Company, at an exercise price equal to $2.35 per share, with one-third of such options becoming exercisable on each of the first, second and third anniversaries from the date of grant; and (iii) a warrant to purchase 15,000 shares of Common Stock to Forbes, Inc. at an exercise price equal to $2.35 per share, with one-third of such warrant becoming exercisable on each of the first, second and third anniversaries from the date of grant.

CONSULTING AGREEMENTS

On November 1, 2002, the Company entered into another one-year consulting agreement with Dr. Alan Bennett, a member of the Company's Scientific Advisory Board, who is experienced in plant transformation. The agreement provides for monthly payments of $2,400 to Dr. Bennett.

On December 23, 2002, the Company entered into a six-month financial consulting agreement with Perrin, Holden & Davenport Capital Corp. The agreement is effective on February 1, 2003 and provides for monthly payments of $5,000.

Effective January 1, 2003, the Company amended its consulting agreement with John E. Thompson, Ph.D., to increase the monthly payments to Dr. Thompson from $3,000 to $5,000 through June 2004.

NEW JERSEY ECONOMIC DEVELOPMENT AUTHORITY

In December 2002, pursuant to the New Jersey Technology Tax Credit Transfer Program (the "Program"), the Company received approval from the New Jersey Economic Development Authority (the "EDA") to sell the Company's New Jersey net operating loss tax benefit in the amount of $151,390 for the fiscal year ended June 30, 2001. In December 2002, the Company sold its entire New Jersey net operating loss tax benefit and received net proceeds of $130,952. The Company may apply to participate in the Program to sell its New Jersey net operating loss tax benefit in the amount of approximately $132,000 for the fiscal year ended June 30, 2002. An application must be submitted to the EDA by June 30, 2003. However, there can be no assurance that the Company will be approved to participate in the Program for the year ended June 30, 2002 or if approved, that the Company will be able to sell all or part of its New Jersey net operating loss tax benefit.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

OVERVIEW

OUR BUSINESS

The primary business of Senesco Technologies, Inc., a Delaware corporation incorporated in 1999, and its wholly-owned subsidiary, Senesco, Inc., a New Jersey corporation incorporated in 1998, collectively referred to as "Senesco," "we," "us" or "our," is the research, development and commercial exploitation of a potentially significant platform technology involving the identification and characterization of genes that we believe control the programmed cell death of plant cells, also known as senescence, and mammalian cells, also known as apoptosis.

AGRICULTURAL APPLICATIONS

Our technology goals for agricultural applications are to: (i) extend the shelf-life of perishable plant products; (ii) produce larger and leafier crops; (iii) increase yield in horticultural and agronomic crops; and (iv) reduce the harmful effects of environmental stress.

Senescence is the natural aging of plant tissues. Loss of cellular membrane integrity is an early event during the senescence of all plant tissues that prompts the deterioration of fresh flowers, fruits and vegetables. This loss of integrity, which is attributable to the formation of lipid metabolites in membrane bilayers that phase-separate, causes the membranes to become leaky. A decline in cell function ensues, leading to deterioration and eventual death, or spoilage, of the tissue. A delay in senescence increases shelf-life and extends the plant's growth timeframe, which allows the plant to devote more time to the photosynthetic process. We have shown that the additional energy gained in this period leads directly to increased seed production, and therefore increases crop yield. Seed production is a vital agricultural function. For example, oil-bearing crops store oil in their seeds. We have also shown that reducing premature senescence allows the plant to allocate more energy toward growth, leading to larger plants, with increased biomass, and more leafy crops. Most recently, we have demonstrated that reducing premature senescence results in crops which exhibit increased resilience to water deprivation and salt stress. Drought and salt resistant crops may ultimately be more cost effective due to reduced loss in the field and less time spent on crop management.

The technology presently utilized by the industry for increasing the shelf-life in certain flowers, fruits and vegetables relies on reducing ethylene biosynthesis, and hence only has application to a limited number of plants that are ethylene-sensitive.

Our research and development focuses on the discovery and development of certain gene technologies, which are designed to confer positive traits on fruits, flowers, vegetables, forestry species and agronomic crops. To date, we have isolated and characterized the senescence-induced lipase gene, deoxyhypusine synthase, or DHS, gene and Factor 5A gene in certain species of plants. Our goal is to inhibit the expression of, or silence, these genes to delay senescence, which will in turn extend shelf-life, increase biomass, increase yield and increase

resistance to environmental stress, thereby demonstrating proof of concept in each category of crop. We have licensed this technology to various strategic partners and have entered into a joint venture, and we intend to continue to license this technology to additional strategic partners and/or enter into additional joint ventures.

We are currently working with lettuce, melon, tomato, canola, Arabidopsis, a model plant that produces oil in a manner similar to canola, banana plants, and certain species of trees and alfalfa, and have obtained proof of concept for the lipase and DHS genes in several of these plants. Also, we have initiated field trials of lettuce and bananas with our respective partners. Near-term research and development initiatives include: (i) silencing or reducing the expression of DHS and Factor 5A genes in these plants; and (ii) propagation and testing of plants with our silenced genes. We have also completed our research and development initiative in carnation flower, which yielded a 100% increase in shelf-life through the inhibition of the DHS reaction.

HUMAN HEALTH APPLICATIONS

Inhibiting Apoptosis

We have also isolated the DHS and programmed cell death Factor 5A genes in mammalian tissue. Our preliminary research reveals that DHS and Factor 5A genes regulate apoptosis in animal and human cells. The mammalian apoptosis isoforms of the DHS and Factor 5A genes were first isolated from the ovarian tissue of rats, which undergoes apoptosis naturally at the end of the female reproductive cycle. The sequences of the mammalian apoptosis DHS and Factor 5A genes are very similar to those of the corresponding plant genes in keeping with their common functions. Moreover, inhibiting the function of the Factor 5A gene in rats has been shown to inhibit the induction of corpus luteum apoptosis. Apoptosis, as manifested by DNA fragmentation, was clearly detectable in super-ovulated control female rats within three hours of treatment with prostaglandin F2a. This hormone induces corpus luteum apoptosis naturally in mammals, but in super-ovulated animals in which the activation of Factor 5A had been inhibited, DNA fragmentation reflecting apoptosis was not apparent. Thus, just as these genes can be used to delay senescence in plants, this experiment shows that they may also be used to inhibit apoptosis in mammals. We believe that our technology has potential application as a means of controlling a broad range of diseases that are attributable to premature apoptosis, including neurodegenerative diseases, such as Alzheimer's disease and Parkinson's disease, retinal diseases, such as glaucoma and macular degeneration, heart disease, stroke and arthritis. We have commenced pre-clinical research on heart tissue samples from both ischemic and non-ischemic patients with heart disease and have found that Factor 5A is significantly upregulated in ischemic heart tissue. Ischemia is the restriction of blood supply to the heart that can result in heart attacks and damage to heart tissue. In addition, we have initiated cell-line studies for applications of our technology to glaucoma.

Accelerating Apoptosis

Conversely, we have also established in pre-clinical studies that our apoptosis Factor 5A gene is able to kill cancer cells. Tumors arise when cells that have been targeted to undergo apoptosis are unable to do so because of an inability to activate the apoptotic pathways. When our apoptosis Factor 5A gene was introduced into RKO cells, a cell line derived from human carcinoma and COS7 cells, an immortal, cancer-like cell line from monkeys, virtually all cells expressing the Factor 5A gene underwent apoptosis. Moreover, just as the senescence Factor 5A gene appears to facilitate expression of the entire suite of genes required for programmed cell death in plants, the apoptosis Factor 5A gene appears to regulate expression of a suite of genes required for programmed cell death in mammals. For example, over expression of apoptosis Factor 5A up regulates p53, an important tumor suppressor gene that promotes apoptosis in cells with damaged DNA and also down regulates bcl 2, a suppressor of apoptosis. Because the Factor 5A gene appears to function at the initiation point of the apoptotic pathways, we believe that our gene technology has potential application as a means of combating a broad range of cancers.

AGRICULTURAL TARGET MARKETS

Our technology embraces crops that are reproduced both through seeds and propagation, which are the only two means of commercial crop reproduction. Propagation is a process whereby the plant does not produce fertile seeds and must reproduce through cuttings from the parent plant which are planted and become new plants. In order to address the complexities associated with marketing and distribution in the worldwide market, we have adopted a multi-faceted commercialization strategy, in which we plan to enter into licensing agreements or other strategic relationships with a variety of companies or other entities on a crop-by-crop basis.

In November 2001, we entered into a worldwide exclusive development and license agreement, referred to herein as the Harris Moran License, with Harris Moran Seed Company to commercialize our technology in lettuce and certain melons for an indefinite term, unless terminated by either party pursuant to the terms of the agreement. In connection with the Harris Moran License, we received an initial license fee of $125,000 in November 2001. Upon the completion of certain marketing and development benchmarks set forth in the Harris Moran License, we will receive an additional $3,875,000 in development payments over a multi-year period along with royalties upon commercial introduction.

To date, the development steps performed by Harris Moran and us have all been completed on schedule in accordance with the protocol set forth in the Harris Moran License. There has been extensive characterization of our genes in lettuce in a laboratory setting. The initial lab work has produced genetically modified seed under greenhouse containment, which has been followed by substantial field trials for evaluation. These field trials represent a vital step in the process necessary to develop a commercial product. Harris Moran foresees additional field trials of our technology by June 2003.

In June 2002, we entered into a three-year worldwide exclusive development and option agreement, referred to herein as the ArborGen Agreement, with ArborGen, LLC to develop our technology in certain species of trees. In connection with the ArborGen Agreement, we received an initial development fee of $75,000 in July 2002. Upon the completion of certain development benchmarks set forth in the ArborGen Agreement, we will receive an additional $225,000 in periodic development payments over the term of the ArborGen Agreement. The ArborGen

Agreement also grants ArborGen an option to acquire an exclusive worldwide license to commercialize our technology in various other forestry products, and upon the execution of a license agreement, we will receive a license fee and royalties from ArborGen.

In September 2002, we entered into an exclusive development and license agreement, referred to herein as the Cal/West License, with Cal/West Seeds to commercialize our technology in certain varieties of alfalfa. The Cal/West License will continue until the expiration of the patents set forth in the agreement, unless terminated earlier by either party pursuant to the terms of the agreement. The Cal/West License also grants Cal/West an exclusive option to develop our technology in various other forage crops. In connection with the execution of the Cal/West License, we received an initial fee of $10,000 from Cal/West. Upon the completion of certain development benchmarks, we will receive an additional $20,000 in periodic payments, and upon the commercialization of certain products, we will receive royalty payments from Cal/West.

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 the gross license fees we 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 variety of fruit and vegetable crops in China. Due to the size and scope of the proposed agreement and the complexities of doing business in China, we anticipate that our ongoing discussions will continue over the course of the next several months.

HUMAN HEALTH TARGET MARKETS

We believe that our gene technology could have broad applicability in the human health field, by either inhibiting or accelerating apoptosis. Inhibiting apoptosis may be useful in preventing or treating a wide range of diseases attributed to premature apoptosis, including stroke, heart disease, arthritis, retinal diseases such as glaucoma, and macular degeneration and neurodegenerative diseases such as Alzheimer's disease and Parkinson's disease. Accelerating apoptosis may be useful in treating certain forms of cancer because the body's immune system is not able to force cancerous cells to undergo apoptosis.

COMPETITION

Competitors who are presently attempting to distribute their technology have generally utilized one of the following distribution channels: (i) licensing technology to major marketing and distribution partners; or (ii) entering into strategic alliances. In addition, some competitors are owned by established distribution companies, which alleviates the need for strategic alliances, while others are attempting to create their own distribution and marketing channels.

Our competitors in the field of delaying plant senescence are companies that develop and produce transformed plants in which ethylene biosynthesis has been silenced. Such companies include, among others: Paradigm Genetics; Aventis Crop Science; Mendel Biotechnology; Bionova Holding Corporation; Renessen LLC; Exelixis Plant Sciences, Inc.; PlantGenix, Inc.; and Eden Bioscience.

Companies working in the field of apoptosis research include, among others: Cell Pathways, Inc.; Trevigen, Inc.; Idun Pharmaceuticals; Novartis; Introgen Therapeutics, Inc.; Genta, Inc.; and Oncogene, Inc.

MARKETING PROGRAM

Based upon our multi-faceted commercialization strategy, we anticipate that there may be a significant period of time before plants enhanced using our technology reach consumers. Thus, we have not begun to actively market our technology directly to consumers, but rather, we have sought to establish ourselves within the industry through advertising in a national magazine, as well as through our website and direct communication with prospective licensees.

RESEARCH PROGRAM

Our subsequent research and development initiatives include: (i) further developing the lipase, DHS and Factor 5A gene technology in lettuce, melon and banana, and implementing the technology in a variety of other commercially important agricultural crops such as tomato, alfalfa and trees; (ii) testing the resultant crops for new beneficial traits such as increased yield and increased tolerance to environmental stress; and (iii) assessing the role of the DHS and Factor 5A genes in human diseases through the accumulation of additional data from pre-clinical experiments with cell lines, mammalian tissue and animal models. Our strategy for agriculture focuses on various plants to allow flexibility that will accommodate different plant reproduction strategies among the different sectors of the broad agricultural and horticultural markets.

Our research and development is performed by third party researchers at our direction, pursuant to various research and license agreements. The primary research and development effort takes place at the University of Waterloo in Ontario, Canada, where the technology was developed, and at the University of Colorado. Additional research and development is performed in connection with the Harris Moran License, the ArborGen Agreement, the Cal/West License and the Tilligen Agreement, as well as through the joint venture with Rahan Meristem Ltd. in Israel. During the three months ended December 31, 2002 and December 31, 2001, we incurred aggregate research and development expenses of $215,803 and $93,821, respectively. During the six months ended December 31, 2002 and December 31, 2001, we incurred aggregate research and development expenses of $360,087 and $156,976, respectively. As of December 31, 2002, our aggregate research and development expenses since inception totaled $1,859,663.

For the three months ended December 31, 2002, approximately 50% of our research and development expenses were incurred on mammalian research applications. Since our inception, the proportion of research and development expenses on mammalian applications has increased, as compared to plant applications. This change is primarily due to the fact that our research focus on mammalian applications has increased and some of our research costs for plant applications have shifted to our research partners.

JOINT VENTURE

On May 14, 1999, we entered into a joint venture agreement with Rahan Meristem Ltd., an Israeli company engaged in the worldwide export marketing of banana germ-plasm, referred to herein as the Rahan Joint Venture. Rahan Meristem accounts for approximately 10% of the worldwide export of banana seedlings. We have contributed, by way of a limited, exclusive, world-wide license to the Rahan Joint Venture, access to our technology, discoveries, inventions and know-how, whether patentable or otherwise, pertaining to plant genes and their cognate expressed proteins that are induced during senescence for the purpose of developing, on a joint basis, genetically enhanced banana plants which will result in a banana that has a longer shelf-life. Rahan Meristem has contributed its technology, inventions and know-how with respect to banana plants. Rahan Meristem and we equally own the Rahan Joint Venture.

The Rahan Joint Venture applied for and received a conditional grant that totals approximately $340,000, which constitutes 50% of the Rahan Joint Venture's research and development budget over a four-year period, from the Israel - U.S. Binational Research and Development Foundation, or BIRD Foundation, referred to herein as the BIRD Grant. Such grant, along with certain royalty payments, shall only be repaid to the BIRD Foundation upon the commercial success of the Rahan Joint Venture's technology. The commercial success is measured based upon certain benchmarks and/or milestones achieved by the Rahan Joint Venture. The Rahan Joint Venture reports these benchmarks periodically to the BIRD Foundation. As of December 31, 2002, we have directly received a total of $79,061, none of which was received during the current quarter, from the BIRD Foundation for research and development expenses we have incurred which are associated with the research and development efforts of the Rahan Joint Venture. We expect to receive additional installments of the BIRD Grant as our expenditures associated with the Rahan Joint Venture increase above certain levels. Our portion of the Rahan Joint Venture's aggregate expenses totaled approximately $15,000 and $13,000 for the six months ended December 31, 2002 and December 31, 2001, respectively, and is included in research and development expenses. As of December 31, 2002, our portion of the Rahan Joint Venture's aggregate expenses to date totaled approximately $145,000.

All aspects of the Rahan Joint Venture's research and development initiative are proceeding on time, or are ahead of the original schedule laid out at the inception of the Rahan Joint Venture. Both the DHS and lipase genes have been identified and isolated in banana, and the Rahan Joint Venture is currently in the process of silencing these genes. The resultant plants will be tested to assess extended shelf-life of banana fruit and enhanced tolerance to environmental stress. Banana plants containing our technology are currently being tested in field trials.

Consistent with our commercialization strategy, we intend to attract other companies interested in strategic partnerships, joint ventures or licensing our technology. The Harris Moran License, the ArborGen Agreement, the Cal/West License and the Rahan Joint Venture are the first successes toward the execution of our strategy.

INTELLECTUAL PROPERTY

Research and Development

The inventor of our technology, John E. Thompson, Ph.D., is the Associate Vice-President, Research and former Dean of Science at the University of Waterloo in Ontario, Canada, and is our Executive Vice President of Research and Development. Dr. Thompson is also one of our directors and owns 4.8% of the outstanding shares of our common stock, $0.01 par value, as of December 31, 2002. On September 1, 1998, we entered into a three-year research and development agreement with the University of Waterloo and Dr. Thompson as the principal inventor, referred to herein as the First Research and Development Agreement. Effective September 1, 2001 and 2002, we extended the First Research and Development Agreement for an additional one-year period and two-year period, respectively. Effective May 1, 2002, we entered into a new one-year research and development agreement with the University of Waterloo and Dr. Thompson, referred to herein as the Second Research and Development Agreement. The First Research and Development Agreement and the Second Research and Development Agreement are collectively referred to herein as the Research and Development Agreements.

The Research and Development Agreements provide that the University of Waterloo will perform research and development under our direction, and we will pay for the cost of this work and make certain payments to the University of Waterloo. In return for payments made under the Research and Development Agreements, we have all rights to the intellectual property derived from the research. As of December 31, 2002, we have paid the University of Waterloo an aggregate of approximately US $1,120,000 under the First Research and Development Agreement. Under the second extension to the First Research and Development Agreement, we are obligated to pay Can $1,092,800, which represented approximately US $691,000 as of December 31, 2002. Under the Second Research and Development Agreement, we are obligated to pay Can $50,000, which represented approximately US $32,000 as of December 31, 2002. During the three-month periods ended December 31, 2002 and December 31, 2001, we incurred expenses of $100,643 and $67,022, respectively, in connection with the Research and Development Agreements. During the six-month periods ended December 31, 2002 and December 31, 2001, we incurred expenses of $190,737 and $114,160, respectively, in connection with the Research and Development Agreements.

Effective May 1, 1999, we entered into a consulting agreement for research and development with Dr. Thompson. On July 1, 2001, we renewed the consulting agreement with Dr. Thompson for an additional three-year term as provided for under the terms and conditions of the agreement. Effective January 1, 2003, the agreement was amended to provide for an increase in the monthly payments to Dr. Thompson from $3,000 to $5,000 through June 2004. The agreement shall automatically renew for an additional three-year term, unless either of the parties provides the other with written notice within six months prior to the end of the term.

In September 2002, we entered into an exclusive worldwide collaboration agreement, referred to herein as the Tilligen Agreement, with Tilligen, Inc. to establish a research alliance to develop and commercialize certain genetically enhanced species of produce. Under the Tilligen Agreement, Tilligen will license its proprietary technology to us and will also perform certain transformation functions in order to develop seeds in certain species of produce that have been enhanced with our technology. The Tilligen Agreement will continue until the expiration of the

patents set forth in the agreement, unless terminated earlier by either party pursuant to the terms of the agreement. In connection with the execution of the Tilligen Agreement, we incurred an initial research and development fee of $200,000, which is being amortized over the term of the research to be performed under the agreement. Upon the completion of certain development benchmarks, we will incur additional research and development fees, and upon commercialization of the enhanced produce, we will make certain royalty payments to Tilligen.

Our future research and development program focuses on the discovery and development of certain gene technologies which intend to extend shelf life and to confer other positive traits on fruits, flowers, vegetables and agronomic row crops and on expanding our mammalian research programs. Over the next twelve months, we are planning the following research and development initiatives: (i) the development of plants that possess new beneficial traits, such as protection against drought, with emphasis on lettuce, melon, corn, forestry products, alfalfa and the other species described below with several entities, including Tilligen; (ii) the development of enhanced lettuce and melon plants through the Harris Moran License; (iii) the development of enhanced trees through the ArborGen Agreement; (iv) the development of enhanced alfalfa through the Cal/West License; (v) the isolation of new genes in the Arabidopsis, tomato, lettuce, soybean, rape seed (canola) and melon plants, among others, at the University of Waterloo; (vi) the isolation of new genes in the banana plant through the Rahan Joint Venture; (vii) the transformation of seed enhanced with our technology; and (viii) assessing the function of the DHS and Factor 5A genes in human diseases at the University of Waterloo and the University of Colorado. We may further expand our research and development program beyond the initiatives listed above.

Patent Applications

Dr. Thompson and his colleagues, Dr. Yuwen Hong and Dr. Katalin Hudak, filed a patent application on June 26, 1998, referred to herein as the Original Patent Application, to protect their invention, which is directed to methods for controlling senescence in plants. By assignment dated June 25, 1998 and recorded with the United States Patent and Trademark Office, or PTO, on June 26, 1998, Drs. Thompson, Hong and Hudak assigned all of their rights in and to the Original Patent Application and any other applications filed in the United States or elsewhere with respect to the invention and/or improvements thereto to Senesco, L.L.C. We succeeded to the assignment and ownership of the Original Patent Application. Drs. Thompson, Hong and Hudak filed an amendment to the Original Patent Application on February 16, 1999, referred to herein as the Amended Patent Application and together with the Original Patent Application, the First Patent Application, titled "DNA Encoding A Plant Lipase, Transgenic Plants and a Method for Controlling Senescence in Plants." The Amended Patent Application serves as a continuation of the Original Patent Application. Concurrent with the filing of the Amended Patent Application with the PTO and as in the case of the Original Patent Application, Drs. Thompson, Hong and Hudak assigned to us all of their rights in and to the Amended Patent Application and any other applications filed in the United States or elsewhere with respect to such invention and/or improvements thereto. Drs. Thompson, Hong and Hudak have received shares of our common stock in consideration for the assignment of the First Patent Application. The inventions, which were the subject of the First Patent Application, include a method for controlling senescence of plants, a vector containing a cDNA whose expression regulates senescence, and a transformed microorganism expressing the lipase of the cDNA. We believe that the inventions provide a means for delaying deterioration and spoilage, which could greatly

increase the shelf-life of fruits, vegetables, and flowers by silencing or substantially repressing the expression of the lipase gene induced coincident with the onset of senescence.

We filed a second patent application, referred to herein as the Second Patent Application, and together with the First Patent Application, collectively, the Patent Applications, on July 6, 1999, titled "DNA Encoding A Plant Deoxyhypusine Synthase, Transgenic Plants and a Method for Controlling Programmed Cell Death in Plants." The inventors named on the patent are Drs. John E. Thompson, Tzann-Wei Wang and Dongen Lily Lu. Concurrent with the filing of the Second Patent Application with the PTO and as in the case of the First Patent Application, Drs. Thompson, Wang and Lu assigned to us all of their rights in and to the Second Patent Application and any other applications filed in the United States or elsewhere with respect to such invention and/or improvements thereto. Drs. Thompson, Wang and Lu have received options to purchase our common stock as consideration for the assignments of the Second Patent Application. The inventions include a method for the genetic modification of plants to control the onset of either age-related or stress-induced senescence, an isolated DNA molecule encoding a senescence induced gene, and an isolated protein encoded by the DNA molecule.

We have broadened the scope of our intellectual property protection by utilizing the Patent Cooperation Treaty to facilitate international filing and prosecution of the Patent Applications. The First Patent Application was published through the Patent Cooperation Treaty in August 2000, and then between August 2001 and October 2001, was filed in Australia, Canada, China, Japan, Korea, New Zealand and Europe through the European Patent Office, which has twenty member states. Israel and Mexico are the last remaining countries in which we have opted to file that have yet to issue a filing date. The Patent Cooperation Treaty published the Second Patent Application in January 2001.

We have filed several new Continuations in Part and Divisional Patent Applications on both the First Patent Application and the Second Patent Application to protect our intellectual property pertaining to new technological developments. We have also filed one additional application (the "Third Patent Application") followed by a substantial Continuation in Part, in addition to those listed above, which pertain to the possible mammalian applicability of our technology. The Third Patent Application is focused on suppressing cell death as a prospective therapy for a wide range of diseases and the Continuation in Part focuses on accelerating cell death as a means of treating cancer. We have filed a second Continuation in Part on the Third Patent Application based on data we gathered in studies of ischemic heart tissue. We intend to continue our strategy of enhancing these new patent applications through the addition of data as it is collected.

GOVERNMENT REGULATION

At present, the U.S. federal government regulation of biotechnology is divided among three agencies: (i) the U.S. Department of Agriculture regulates the import, field-testing and interstate movement of specific types of genetic engineering that may be used in the creation of transformed plants; (ii) the Environmental Protection Agency regulates activity related to the invention of plant pesticides and herbicides, which may include certain kinds of transformed plants; and (iii) the Food and Drug Administration regulates foods derived from new plant varieties. The FDA requires that transformed 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 transformed plant developers to consult the FDA before introducing a new food into the market place.

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, we, or our licensees, may be required to obtain such licensing or approval from governmental regulatory agencies prior to the commercialization of our genetically transformed plants and mammalian technology.

EMPLOYEES

In addition to the scientists performing funded research for us at the University of Waterloo and the University of Colorado, as of December 31, 2002 and currently, we have five employees and one consultant, four of whom are executive officers and are involved in our management.

The officers are assisted by a Scientific Advisory Board that consists of prominent experts in the fields of plant and mammalian cell biology. Alan Bennett, Ph.D., who serves as the Chairman of the Scientific Advisory Board, is the Executive Director of the Office of Technology Transfer at the University of California. His research interests include: the molecular biology of tomato fruit development and ripening; the molecular basis of membrane transport; and cell wall disassembly. Charles A. Dinarello, M.D., who serves as a member of the Scientific Advisory Board, is a Professor of Medicine at the University of Colorado School of Medicine, a member of the U.S. National Academy of Sciences and the author of over 500 published research articles. In addition to his active academic research career, Dr. Dinarello has held advisory positions with two branches of the National Institutes of Health and positions on the Board of Governors of both the Weizmann Institute and Ben Gurion University. Russell L. Jones, Ph.D., who serves as a member of the Scientific Advisory Board, is a professor at the University of California, Berkeley and an expert in plant cell biology and cell death. Dr. Jones is also an editor of Planta, Annual Review of Plant Physiology and Plant Molecular Biology as well as Research Notes in Plant Science. Additionally, he has held positions on the editorial boards of Plant Physiology and Trends in Plant Science.

In addition to his service on the Scientific Advisory Board, we utilize Dr. Bennett as a consultant experienced in plant transformation. Effective November 1, 2001, we had entered into a one-year consulting agreement with Dr. Bennett, which provided for monthly payments of $2,400 to Dr. Bennett through October 31, 2002. Effective November 1, 2002, we entered into another one-year consulting agreement with Dr. Bennett on the same terms and conditions.

Furthermore, pursuant to the Research and Development Agreements, the majority of our research and development activities are conducted at the University of Waterloo under the supervision of Dr. Thompson. We utilize the University's substantial research staff including graduate and post-graduate researchers.

We have also undertaken pre-clinical apoptosis research at the University of Colorado under the supervision of Dr. Dinarello. This research is performed pursuant to specific project proposals that have agreed-upon research outlines, timelines and budgets. We may also contract research to additional university laboratories or to other companies in order to advance the development of our technology.

We may hire additional employees over the next twelve months to meet the needs created by possible expansion of our operations.

SAFE HARBOR STATEMENT

The statements contained in this Quarterly Report on Form 10-QSB that are not historical facts are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. Such forward-looking statements may be identified by, among other things, the use of forward-looking terminology such as "believes," "expects," "may," "will," "should," or "anticipates" or the negative thereof or other variations thereon or comparable terminology, or by discussions of strategy that involve risks and uncertainties. In particular, our statements regarding the anticipated growth in the markets for our technologies, the continued advancement of our research, the approval of our Patent Applications, the possibility of governmental approval in order to sell or offer for sale to the general public a genetically engineered plant or plant product, the successful implementation of our commercialization strategy, including the success of the Harris Moran License, the ArborGen Agreement, the Cal/West License, the Tilligen Agreement and the Research and Development Agreements, the successful implementation of the Rahan Joint Venture, the conversion of the letter of intent with the Tianjin Academy of Agricultural Sciences into an executed agreement, statements relating to our Patent Applications, the anticipated longer term growth of our business, and the timing of the projects and trends in future operating performance are examples of such forward-looking statements. The forward-looking statements include risks and uncertainties, including, but not limited to, the timing of revenues due to the variability in size, scope and duration of research projects, regulatory delays, research study results which lead to cancellations of research projects, and other factors, including general economic conditions and regulatory developments, not within our control. The factors discussed herein and expressed from time to time in our filings with the Securities and Exchange Commission could cause actual results and developments to be materially different from those expressed in or implied by such statements. The forward-looking statements are made only as of the date of this filing, and we undertake no obligation to publicly update such forward-looking statements to reflect subsequent events or circumstances.

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.

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 $8,507,363 at December 31, 2002. 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.

Our primary business is the development and commercial exploitation of technology to identify, isolate, characterize, and silence genes which control the aging and death of cells in plants and mammals. 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 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 mammalian 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 mammals or reduced benefits in terms of crop yield or protection. Our failure to develop a commercially viable product, to obtain market acceptance of our technology or to successfully commercialize such technology would have a material adverse effect on our business.

WE OUTSOURCE ALL OF OUR RESEARCH AND DEVELOPMENT ACTIVITIES.

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 developed, at the University of Colorado, at Tilligen, Inc. 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, would have a material adverse effect on our ability to develop and exploit our technology.

WE HAVE SIGNIFICANT FUTURE CAPITAL NEEDS.

As of December 31, 2002, we had cash and highly-liquid investments valued at $3,573,575 and working capital of $3,443,925. We believe that we can operate according to our current business plan for at least twelve months using our available reserves. 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 anticipate that we will be required to raise additional capital in the future in order to operate according to our current business plan. We may require additional funding in less than twelve months, and additional funding may not be available on favorable terms, if at all. In addition, in connection with such 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 granted, as of December 31, 2002, we had 12,131,802 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 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 ON OUR PATENTS, LICENSES AND PROPRIETARY RIGHTS AND THE ENFORCEMENT OF THESE RIGHTS.

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 technologies, products and processes;
- our ability to preserve 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 filed three patent applications in the United States for our technology which is vital to our primary business, two of which have been filed internationally. We have also filed seven Continuations in Part on these patent applications. Our success depends in part upon patents being granted from our pending patent applications and, if granted, the enforcement of our patent rights.

Furthermore, although we believe that our technology is unique and will not violate or infringe upon the proprietary rights of any third party, there can be no assurance that such 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 guarantee 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 sale of one or more of our products; 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.

If any relevant claims of third-party patents which 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 guarantee that such licenses would be available or, even if available, would be on acceptable terms.

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.

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.

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 U.S. Patent and Trademark Office 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.

Our success also 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 guarantee adequate protection for our trade secrets, know-how or other proprietary information against unauthorized use or disclosure. We occasionally provide information to research collaborators in academic institutions and request the collaborators to conduct certain tests. We cannot guarantee 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 have a material adverse effect on our business and financial results.

WE WILL HAVE TO PROPERLY MANAGE OUR GROWTH.

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. 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. Our failure to effectively respond to changes brought about by our growth may have a material adverse effect on our business and financial results.

WE HAVE NO MARKETING OR SALES HISTORY AND DEPEND ON THIRD-PARTY MARKETING PARTNERS.

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, such marketing partners may not be able to successfully market 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, we will not be able to generate significant revenue.

WE DEPEND ON PARTNERS TO DEVELOP AND MARKET PRODUCTS.

At our 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 products are still being developed, and who will pay us royalties when they market and distribute our products 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 our product development may be harmed.

COMPETITION IN THE AGRICULTURAL AND BIOTECHNOLOGY INDUSTRIES IS INTENSE AND TECHNOLOGY IS CHANGING RAPIDLY.

Many agricultural and 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 our products. 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. Such companies include: Paradigm Genetics; Aventis Crop Science; Mendel Biotechnology; Bionova Holding Corporation; Renessen LLC; Exelixis Plant Sciences, Inc.; PlantGenix, Inc.; and Eden Bioscience, among others. Some of the companies involved in apoptosis research include: Cell Pathways, Inc.; Trevigen, Inc.; Idun Pharmaceuticals; Novartis; Introgen Therapeutics, Inc.; Genta, Inc.; and Oncogene, 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.

OUR BUSINESS IS SUBJECT TO VARIOUS GOVERNMENT REGULATIONS.

At present, the U.S. federal government regulation of biotechnology is divided among three agencies: (i) 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; (ii) the EPA regulates activity related to the invention of plant pesticides and herbicides, which may include certain kinds of transgenic plants; and (iii) 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.

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 mammalian technology. In addition, our marketing partners who utilize our technology or sell products grown with our technology may be subject to government regulations. The imposition of unfavorable governmental regulations on our

technology or the failure to obtain licenses or approvals in a timely manner would have a material adverse effect on our business.

THE HUMAN HEALTH APPLICATIONS OF OUR TECHNOLOGY ARE SUBJECT TO A LENGTHY AND UNCERTAIN REGULATORY PROCESS.

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 mammalian 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 pre-clinical testing and clinical trials, which could take several years and may require substantial expenditures. Any failure to obtain regulatory approval could delay or prevent us from commercializing our mammalian technology.

CLINICAL TRIALS ON OUR HUMAN HEALTH APPLICATIONS MAY BE UNSUCCESSFUL IN DEMONSTRATING EFFICACY AND SAFETY, WHICH COULD DELAY OR PREVENT REGULATORY APPROVAL.

Clinical trials may reveal that our mammalian technology is ineffective or harmful, 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 pre-clinical, 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.

CONSUMERS MAY NOT ACCEPT OUR TECHNOLOGY.

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 our proposed products 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.

We are highly dependent on our scientific advisors, consultants and third-party research partners. Dr. Thompson is the inventor of our technology and the driving force behind our current research. The loss of Dr. Thompson would severely hinder our technological development. 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. 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.

OUR MANAGEMENT AND OTHER AFFILIATES HAVE SIGNIFICANT CONTROL OF OUR COMMON STOCK AND COULD CONTROL OUR ACTIONS IN A MANNER THAT CONFLICTS WITH OUR INTERESTS AND THE INTERESTS OF OTHER STOCKHOLDERS.

As of December 31, 2002, our executive officers, directors and affiliated entities together beneficially own approximately 45.9% 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 considerable 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 OUTSTANDING OPTIONS AND WARRANTS TO PURCHASE OUR COMMON STOCK.

As of December 31, 2002, we have granted options outside of our stock option plan to purchase 10,000 shares of our common stock and warrants to purchase 4,207,153 shares of our common stock. In addition, as of December 31, 2002, 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, 1,771,000 of which have been granted and 1,229,000 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.

SHARES ELIGIBLE FOR PUBLIC SALE.

As of December 31, 2002, we had 11,880,045 shares of our common stock issued and outstanding, of which approximately 8,000,000 shares are registered pursuant to a registration statement on Form S-3, which was deemed effective on June 28, 2002, and the remainder of which are in the public float. In addition, we intend to register 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 adversely affect the market price of our common stock.

OUR STOCK HAS A LIMITED TRADING MARKET.

Our common stock is quoted on the American Stock Exchange and currently has a limited trading market. We cannot assure 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.

OUR STOCK PRICE MAY FLUCTUATE.

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 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.

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 Nasdaq 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.

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 terrorist attacks of September 11, 2001 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, the Rahan Joint Venture could be adversely affected.

LIQUIDITY AND CAPITAL RESOURCES

OVERVIEW

As of December 31, 2002, our cash balance and investments totaled $3,573,575, and we had working capital of $3,443,925. As of December 31, 2002, we had a federal tax loss carry-forward of approximately $6,625,000 and a state tax loss carry-forward of approximately $2,525,000 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.

FINANCING NEEDS

We have research and development agreements with the University of Waterloo, which provide for research and development services to be performed at the direction of our company and Dr. Thompson. Effective September 1, 2002, we extended our First Research and Development Agreement for an additional two-year period, in the amount of Can $1,092,800, which represented approximately US $691,000 as of December 31, 2002. Effective May 1, 2002, we entered into a Second Research and Development for a one-year period, under which we are obligated to pay Can $50,000, which represented approximately US $32,000 as of December 31, 2002.

In September 2002, we entered into the Tilligen Agreement, which provides us with a license to use their technology to develop and commercialize enhanced species of produce. The agreement will continue until the expiration of the patents set forth in the agreement, unless terminated earlier by either party pursuant to the terms of the agreement. In connection with the execution of the agreement, we incurred an initial fee of $200,000, which is being amortized over the term of the research to be performed under the agreement. Upon the completion of certain benchmarks, we will incur additional research and development fees and will make certain royalty payments to Tilligen.

We lease office space in New Brunswick, New Jersey for a monthly rental fee of $2,838, subject to certain escalations for our proportionate share of increases in the building's operating costs. The lease expires in May 2006.

We have employment agreements with certain employees, some of whom are also our stockholders, which provide for a base compensation and additional amounts, as set forth in each agreement. The agreements expire between January 2004 and October 2004. As of December 31, 2002, future base compensation to be paid under the agreements through October 2004 totals $441,875.

We have consulting agreements with each of Dr. Thompson and Dr. Bennett, which provide for monthly payments in exchange for research and development services. The agreement with Dr. Thompson provides for monthly payments of $5,000 through June 2004, and is automatically renewable unless terminated by either party within six months prior to the end of the term. The agreement with Dr. Bennett provides for monthly payments of $2,400 until November 2003.

In February 2002, we entered into scientific advisory board agreements with each of Dr. Russell A. Jones and Dr. Charles A. Dinarello, which provide for payments of $10,000 per year,

payable in quarterly installments, to each of Drs. Jones and Dinarello, respectively, through February 28, 2005 and may be terminated by either party within 90 days written notice.

In December 2002, we entered into a six-month financial consulting agreement with Perrin, Holden & Davenport Capital Corp. The agreement is effective on February 1, 2003 and provides for monthly payments of $5,000.

The following table lists our cash contractual obligations as of December 31, 2002:

	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)	$ 585,668	$ 355,668	$ 230,000	$ --	$ --
Facility, Rent and Operating Leases (2)	$ 113,520	$ 34,056	$ 68,112	$ 11,352	$ --
Employment, Consulting and Scientific Advisory Board Agreements (3)	$ 687,510	$ 483,500	$ 204,010	$ --	$ --
Total Contractual Cash Obligations	$ 1,386,698	$ 873,224	$ 502,122	$ 11,352	$ --

(1) Certain of our research and developments 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 sales and marketing efforts.

CAPITAL RESOURCES

Since inception, we have generated revenues of $210,000 in connection with the initial fees received under the Harris Moran License, the ArborGen Agreement and the Cal/West License, none of which was generated during the three months ended December 31, 2002. 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 sale of our products 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, receive revenues from contract research, or other related revenue.

In November 2001, we entered into a worldwide exclusive development and license agreement with Harris Moran Seed Company to commercialize our technology in lettuce and certain melons for an indefinite term, unless terminated by either party pursuant to the terms of the agreement. In connection with the Harris Moran License, we received an initial license fee of $125,000 in November 2001. Upon the completion of certain marketing and development benchmarks set forth in the Harris Moran License, we will receive an additional $3,875,000 in development payments over a multi-year period along with certain royalties upon commercial introduction.

In June 2002, we entered into a three-year worldwide exclusive development and option agreement with ArborGen to develop our technology in certain species of trees. In connection with the ArborGen Agreement, we received an initial development fee of $75,000 in July 2002. Upon the completion of certain development benchmarks set forth in the ArborGen Agreement, we will receive an additional $225,000 in periodic development payments over the term of the ArborGen Agreement. The ArborGen Agreement also grants ArborGen an option to acquire an exclusive worldwide license to commercialize our technology in various forestry products, and upon the execution of a license agreement, we will receive a license fee and royalties from ArborGen.

In September 2002, we entered into an exclusive development and license agreement with Cal/West to develop our technology in certain varieties of alfalfa. The Cal/West License will continue until the expiration of the patents set forth in the agreement, unless terminated earlier by either party pursuant to the terms of the agreement. The Cal/West License also grants Cal/West an exclusive option to develop our technology in various other forage crops. In connection with the execution of the Cal/West License, we received an initial fee of $10,000 in September 2002. Upon the completion of certain development benchmarks, we will receive an additional $20,000 in periodic payments, and upon the commercialization of certain products, we will receive royalty payments from Cal/West.

In September 2002, we received $11,089 from the BIRD Foundation for research and development expenses that we have incurred in connection with the Rahan Joint Venture. We anticipate receiving additional funds from the BIRD Grant in the future to assist in funding the Rahan Joint Venture, subject to the Rahan Joint Venture achieving its stated research and development objectives.

In December 2002, pursuant to the New Jersey Technology Tax Credit Transfer Program (the "Program"), we received approval from the New Jersey Economic Development Authority (the "EDA") to sell our New Jersey net operating loss tax benefit in the amount of $151,390 for the fiscal year ended June 30, 2001. In December 2002, we sold our entire New Jersey net operating loss tax benefit and received net proceeds of $130,952. We may apply to participate in the Program to sell our New Jersey net operating loss tax benefit in the amount of approximately $132,000 for the fiscal year ended June 30, 2002. An application must be submitted to the EDA by June 30, 2003. However, there can be no assurance that we will be approved to participate in the Program for the fiscal year ended June 30, 2002 or if approved, that we will be able to sell all or part of our New Jersey net operating loss tax benefit.

We anticipate that, based upon our current cash and investments, that 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 utilizing our current cash balance and investments, achieving the milestones set forth in our current licensing agreements, and through the consummation 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, 2002, as updated by our Quarterly Report on Form 10-QSB for the quarterly period ended September 30, 2002. The following sets forth changes to such critical accounting policies and estimates:

We are amortizing the cost of an initial $200,000 non-refundable payment made under a research agreement over the estimated eighteen-month term of the project. As of December 31, 2002, $166,667, which will be amortized over the remaining estimated fifteen months of the research project, is included in the balance sheet as a prepaid expense.

As of December 31, 2002, we have determined that the estimated future undiscounted cash flows related to our patent applications will be sufficient to recover their carrying value.

RESULTS OF OPERATIONS

Three Months Ended December 31, 2002 and Three Months Ended December 31, 2001
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We are a development stage company. We had no revenue during the three-month period ended December 31, 2002 compared to revenue of $125,000 for the three-month period ended December 31, 2001, which consisted of the initial license fee in connection with the Harris Moran License.

Operating expenses consist of general and administrative expenses, research and development expenses and stock-based compensation. Operating expenses for the three-month periods ended December 31, 2002 and December 31, 2001 were $712,089 and $876,422, respectively, a decrease of $164,333, or 18.8%. This decrease in operating expenses was primarily the result of a decrease in stock-based compensation which was partially offset by an increase in general and administrative and research and development expenses.

General and administrative expenses consist primarily of payroll and benefits, professional and consulting services, investor relations, office rent and corporate insurance. General and administrative expenses for the three-month periods ended December 31, 2002 and December 31, 2001 were $398,789 and $395,409, respectively, an increase of $3,380, or 0.9%. This increase was primarily the result of an increase in payroll and benefits and investor relations, which were mostly offset by a decrease in recruiting costs, professional fees and consulting services. Professional services decreased during the three-month period ended December 31, 2002, primarily as a result of reduced legal costs in connection with the preparation of certain regulatory filings. Consulting services decreased during the three-month period ended December 31, 2002, as a result of the hiring of Mr. Galton on October 4, 2001, as our President and Chief Executive Officer. During the three-month period ended December 31, 2001, the positions of President and CEO were held by two non-employee board members and accordingly, their compensation for those functions was categorized as consulting services. The decrease in consulting services was partially offset by an increase in employee payroll and benefits during the three-month period ended December 31, 2002 as a result of the President and CEO compensation being classified as payroll instead of consulting services. In connection with our strategy to increase our recognition in the public market, expenses related to investor relations increased during the three-month period ended December 31, 2002, primarily as a result of fees incurred for our investor relations firm, listing fees for the American Stock Exchange, financial consulting fees and costs associated with presentations to various analysts, money managers and funds, all of which were not incurred during the three months ended December 31, 2001.

Research and development expenses consist primarily of fees associated with the Research and Development Agreements, costs associated with the research being performed at the University of Colorado, amortization of the initial fee in connection with the Tilligen Agreement and consulting fees to the Scientific Advisory Board, Dr. Thompson and Dr. Bennett. Research and development expenses for the three-month periods ended December 31, 2002 and December 31, 2001 were $215,803 and $93,821, respectively, an increase of $121,982, or 130.0%. This increase was primarily the result of an increase in the research and development costs incurred in connection with the expanded research undertaken by the University of Waterloo, the implementation of our mammalian cell research programs and the implementation of new plant research being conducted in connection with the Tilligen Agreement.

Stock-based compensation consists of non-employee stock options and warrants granted and vesting as consideration for certain professional, consulting, legal and advertising services. Stock-based compensation for the three-month periods ended December 31, 2002 and December 31, 2001 was $97,497 and $387,192, respectively, a decrease of $289,695, or 74.8%. The decrease was primarily the result of a decrease in stock options granted to members of the Scientific Advisory Board and consultants and warrants granted to certain financial advisors during the three-month period ending December 31, 2002.

Six Months Ended December 31, 2002 and Six Months Ended December 31, 2001
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We are a development stage company. Revenue for the six-month period ended December 31, 2002 was $10,000, which represented the initial license fee in connection with the Cal/West License. Revenue for the six-month period ended December 31, 2001 was $125,000, which represented the initial license fee in connection with the Harris Moran License.

Operating expenses consist of general and administrative expenses, research and development expenses and stock-based compensation. Operating expenses for the six-month periods ended December 31, 2002 and December 31, 2001 were $1,259,277 and $1,374,144, respectively, a decrease of $114,867, or 8.4%. This decrease in operating expenses was primarily the result of a decrease in stock-based compensation which was mostly offset by an increase in general and administrative and research and development expenses.

General and administrative expenses consist primarily of payroll and benefits, professional and consulting services, investor relations, office rent and corporate insurance. General and administrative expenses for the six-month periods ended December 31, 2002 and December 31, 2001 were $762,013 and $676,128, respectively, an increase of $85,885, or 12.7%. This increase was primarily the result of an increase in payroll and benefits and investor relations, which were partially offset by a decrease in consulting services and recruiting costs. Consulting services decreased during the six-month period ended December 31, 2002, as a result of the hiring of Mr. Galton on October 4, 2001, as our President and Chief Executive Officer. During the six-month period ended December 31, 2001, the positions of President and CEO were held by two non-employee board members and accordingly, their compensation for those functions was categorized as consulting services. The decrease in consulting services was partially offset by an increase in employee payroll and benefits during the six-month period ended December 31, 2002 as a result of the President and CEO compensation being classified as payroll instead of consulting services. In connection with our strategy to increase our recognition in the public market, expenses related to investor relations increased during the six-month period ended December 31, 2002, primarily as a result of fees incurred for our investor relations firm, listing fees for the American Stock Exchange, financial consulting fees and costs associated with presentations to various analysts, money managers and funds, all of which were not incurred during the six months ended December 31, 2001.

Research and development expenses consist primarily of fees associated with the Research and Development Agreements, costs associated with the research being performed at the University of Colorado, amortization of the initial fee in connection with the Tilligen Agreement and consulting fees to the Scientific Advisory Board, Dr. Thompson and Dr. Bennett. Research and development expenses for the six-month periods ended December 31, 2002 and December 31, 2001 were $360,087 and $156,976, respectively, an increase of $203,111, or 129.4%. This increase was primarily the result of an increase in the research and development costs incurred in connection with research undertaken by the University of Waterloo and the implementation of our mammalian cell research programs. The increase in costs incurred in

connection with the research undertaken by the University of Waterloo was primarily due to an inadvertent overcharge of approximately $40,000 during the year ended June 30, 2001. Had the overcharge not occurred, research and development expenses for the six month period ended December 31, 2001 would have been approximately $206,976. Therefore, had the overcharge not occurred, research and development expenses for the six-month period ended December 31, 2002 would have increased by $153,111, or 97.5%, from the six-month period ended December 31, 2001. This increase was the result of the implementation of our mammalian cell research programs and the implementation of new plant research being conducted in connection with the Tilligen Agreement.

Stock-based compensation consists of non-employee stock options and warrants granted and vesting as consideration for certain professional, consulting, legal and advertising services. Stock-based compensation for the six-month periods ended December 31, 2002 and December 31, 2001 was $137,177 and $541,040, respectively, a decrease of $403,863, or 74.6%. The decrease was primarily the result of a decrease in stock options granted to members of the Scientific Advisory Board and consultants and warrants granted to certain financial advisors during the six months ending December 31, 2002.

Period From Inception on July 1, 1998 through December 31, 2002
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We are a development stage company. From inception of operations on July 1, 1998 through December 31, 2002, we had revenues of $210,000, 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 $8,507,363 at December 31, 2002. We expect to continue to incur losses as a result of expenditures on research, product development and administrative activities.

We do not expect to generate significant revenues from product sales for approximately the next two to three years, during which time we will engage in significant research and development efforts. However, we have entered into the Harris Moran License, the ArborGen Agreement and the Cal/West License to develop and commercialize our technology in certain varieties of lettuce, melons, trees and alfalfa. These agreements provide that, upon the achievement of certain benchmarks, we will receive an aggregate of $4,130,000 in development payments over a multi-year period. The Harris Moran License and the Cal/West License also provide for royalty payments to us upon commercial introduction. The ArborGen Agreement contains an option for ArborGen to execute a license to commercialize developed products, and upon the execution of a license agreement, we will receive a license fee and royalties from ArborGen. The Cal/West License contains an option for Cal/West to develop our technology in various other forage crops.

Consistent with our commercialization strategy, we intend to attract other companies interested in strategic partnerships or licensing our technology that 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.

ITEM 3. CONTROLS AND PROCEDURES.

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

Based on their evaluation of our disclosure controls and procedures, as defined in Rules 13a-14(c) and 15d-14(c) under the Securities Exchange Act of 1934, as of a date within 90 days of the filing date of this Quarterly Report on Form 10-QSB, our President and Chief Executive Officer, considered our principal executive officer, and our Chief Financial Officer, considered our principal financial and accounting officer, have concluded that our disclosure controls and procedures are designed to ensure that information we are required to disclose in the reports we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and are operating in an effective manner.

CHANGES IN INTERNAL CONTROLS

There were no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date of their most recent evaluation.

PART II. OTHER INFORMATION.

ITEM 2. CHANGES IN SECURITIES AND USE OF PROCEEDS.

On October 9, 2002, pursuant to our 1998 Stock Incentive Plan, as amended, we granted options to purchase an aggregate of 22,500 shares of our common stock to two of our executive officers at an exercise price equal to $1.65 per share, with one-third of such options becoming exercisable on each of the first, second and third anniversaries from the date of grant.

On December 13, 2002, our Board of Directors unanimously approved and we subsequently granted, effective January 7, 2003: (i) options under the plan to purchase an aggregate of 75,000 shares of common stock to certain members of our Board of Directors at an exercise price equal to $2.35 per share, with one-half of such options exercisable on the date of grant and one-half of such options becoming exercisable on the first anniversary from the date of grant; (ii) options under the plan to purchase an aggregate of 57,500 shares of common stock to the members of our Scientific Advisory Board, certain research consultants and an executive officer of our company, at an exercise price equal to $2.35 per share, with one-third of such options becoming exercisable on each of the first, second and third anniversaries from the date of grant; and (iii) a warrant to purchase 15,000 shares of common stock to Forbes, Inc. at an exercise price equal to $2.35 per share, with one-third of such warrant becoming exercisable on each of the first, second and third anniversaries from the date of grant.

We did not employ an underwriter in connection with the issuance of the securities described above. We believe that the issuance of the foregoing securities was exempt from registration under Section 4(2) of the Securities Act of 1933, as transactions not involving a public offering. Each of the recipients acquired the securities for investment purposes only and not with a view to distribution and had adequate information about our company.

ITEM 4. STOCKHOLDER VOTE.

(a) Our Annual Meeting was held on December 13, 2002.

(b) The following is a complete list of our current directors, each of whom were elected to a one-year term at the meeting, and whose term of office continued after the meeting.

Ruedi Stalder
Bruce C. Galton
John E. Thompson, Ph.D.
Christopher Forbes
Thomas C. Quick
David Rector
Philip E. Livingston

(c) There were 6,402,527 shares of common stock present at the meeting in person or by proxy, out of a total number of 11,880,045 shares of common stock issued and outstanding and entitled to vote at the meeting.

The proposals and results of the vote of the stockholders taken at the meeting by ballot and by proxy as solicited by us on behalf of our Board of Directors were as follows:

(A) For the election of the nominees for our Board of Directors:

Nominee	For	Against	Withheld
Ruedi Stalder	6,401,381	1,146	-
Bruce C. Galton	6,359,481	43,046	-
John E. Thompson, Ph.D.	6,401,381	1,146	-
Christopher Forbes	6,401,381	1,146	-
Thomas C. Quick	6,401,381	1,146	-
David Rector	5,665,029	737,498	-
Philip E. Livingston	6,401,381	1,146	-

(B) For the proposal to approve an amendment to our Certificate of Incorporation to increase the maximum number of authorized shares of common stock from 20,000,000 shares to 30,000,000 shares:

For	Against	Abstain
6,257,076	145,171	280

(C) For the proposal to approve an amendment to our 1998 Stock Incentive Plan to increase the maximum number of shares of common stock available for issuance under the plan from 2,000,000 shares to 3,000,000 shares:

For	Against	Abstain	Broker Non-Votes
4,144,573	165,871	1,646	2,090,437

(D) For the proposal to ratify the appointment of Goldstein Golub and and Kessler, LLP as our independent auditors for the fiscal year ending June 30, 2003:

For	Against	Abstain
5,604,665	778,252	19,610

ITEM 5. OTHER INFORMATION.

On October 9, 2002, our Board of Directors approved: (i) an amendment to our Certificate of Incorporation to increase the authorized shares of common stock available for issuance from 20,000,000 shares to 30,000,000 shares; and (ii) an amendment to our 1998 Stock Incentive Plan, as amended, to increase the maximum number of shares of common stock available for issuance under the plan from 2,000,000 shares to 3,000,000 shares. Stockholder approval for these increases was obtained at our Annual Meeting of Stockholders held on December 13, 2002.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K.

(a) Exhibits.

3.1 Amended and Restated Certificate of Incorporation of Senesco Technologies, Inc., filed with the Secretary of State of the State of Delaware on December 26, 2002.

10.1 1998 Stock Incentive Plan of Senesco Technologies, Inc., as amended on December 13, 2002.

10.2 Amendment to Consulting Agreement of July 12, 1999, as modified on February 8, 2001, by and between Senesco Technologies, Inc. and John E. Thompson, Ph.D., dated December 13, 2002.

10.3 Sales Representative Agreement by and between Senesco Technologies, Inc. and DP, Inc., dated October 14, 2002.

10.4 Financial Consulting Agreement by and between Senesco Technologies, Inc. and Perrin, Holden & Davenport Capital Corp., dated December 23, 2002.

99.1 Certification of principal executive officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1350.

99.2 Certification of principal financial and accounting officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1350.

(b) Reports on Form 8-K.

None.

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: February 14, 2003 By: /s/ Bruce C. Galton

Bruce C. Galton, President
and Chief Executive Officer
(Principal Executive Officer)

DATE: February 14, 2003 By: /s/ Joel Brooks

Joel Brooks, Chief Financial Officer
and Treasurer
(Principal Financial and Accounting Officer)

CERTIFICATION

I, Bruce C. Galton, certify that:

1. I have reviewed this quarterly report on Form 10-QSB of Senesco Technologies, Inc.;

2. Based on my knowledge, this quarterly 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 quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures, as defined in Exchange Act Rules 13a-14 and 15d-14, for the registrant and we have:

   a) designed such disclosure controls and procedures 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 quarterly report is being prepared;

   b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report; and

   c) presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of a date within 90 days prior to the filing date of this quarterly report;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors, or persons performing the equivalent function:

   a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: February 14, 2003

/s/ Bruce C. Galton

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

CERTIFICATION

I, Joel Brooks, certify that:

1. I have reviewed this quarterly report on Form 10-QSB of Senesco Technologies, Inc.;

2. Based on my knowledge, this quarterly 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 quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures, as defined in Exchange Act Rules 13a-14 and 15d-14, for the registrant and we have:

   a) designed such disclosure controls and procedures 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 quarterly report is being prepared;

   b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report; and

   c) presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of a date within 90 days prior to the filing date of this quarterly report;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors, or persons performing the equivalent function:

   a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: February 14, 2003

/s/ Joel Brooks

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

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

SENESCO TECHNOLOGIES, INC.

Senesco Technologies, Inc., a corporation organized and existing under the laws of the State of Delaware (hereinafter referred to as the "Corporation"), hereby certifies as follows:

1. The name of the Corporation is Senesco Technologies, Inc. The Corporation filed its original Certificate of Incorporation with the Secretary of State of the State of Delaware on September 30, 1999.

2. This Amended and Restated Certificate of Incorporation amends the Corporation's Certificate of Incorporation to increase the number of shares of common stock, $0.01 par value, authorized for issuance from twenty million (20,000,000) shares to thirty million (30,000,000) shares.

3. This Amended and Restated Certificate of Incorporation was duly adopted in accordance with the provisions of Sections 242 and 245 of the Delaware General Corporation Law (the "DGCL"). The requisite approval was obtained at the Corporation's 2002 Annual Meeting of Stockholders, called and held upon notice in accordance with Section 222 of the DGCL. This Amended and Restated Certificate of Incorporation restates, integrates and amends the provisions of the Corporation's Certificate of Incorporation as follows:

FIRST: The name of the Corporation is Senesco Technologies, Inc.

SECOND: The Corporation's registered office in the State of Delaware is located at Corporation Service Company, 2711 Centerville Road, Suite 400, City of Wilmington, County of New Castle, Delaware 19808. The name of its registered agent at such address is Corporation Service Company.

THIRD: The purpose for which the Corporation is organized is to engage in any lawful act or activity for which corporations may be organized under the DGCL and to possess and exercise all of the powers and privileges granted by such law and any other law of Delaware.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is Thirty Five Million (35,000,000) shares. The Corporation is authorized to issue two classes of stock designated "Common Stock" and "Preferred Stock," respectively. The total number of shares of Common Stock authorized to be issued by the Corporation is Thirty Million (30,000,000), each such share of Common Stock having a $0.01 par value. The total number of shares of Preferred Stock authorized to be issued by the Corporation is Five Million (5,000,000), each such share of Preferred Stock having a $0.01 par value.

The Board of Directors is expressly authorized to provide for the issuance of all or any shares of the Preferred Stock in one or more classes or series, and to fix for each such class or series such voting powers, full or limited, or no voting powers, and such distinctive designations, preferences and relative, participating, optional or other special rights and such qualifications, limitations or restrictions thereof, as shall be stated and expressed in the resolution or resolutions adopted by the Board of Directors providing for the issuance of such class or series and as may be permitted by the DGCL, including, without limitation, the authority to provide that any such class or series may be: (i) subject to redemption at such time or times and at such price or prices; (ii) entitled to receive dividends (which may be cumulative or non-cumulative) at such rates, on such conditions, and at such times, and payable in preference to, or in such relation to, the dividends payable on any other class or classes or any other series; (iii) entitled to such rights upon the dissolution of, or upon any distribution of the assets of, the Corporation; or (iv) convertible into, or exchangeable for, shares of any other class or classes of stock, or of any other series of the same or any other class or classes of stock, of the Corporation at such price or prices or at such rates of exchange and with such adjustments; all as may be stated in such resolution or resolutions.

FIFTH: The Corporation is to have perpetual existence.

SIXTH: In furtherance and not limitation of the powers conferred by law, subject to any limitations contained elsewhere in this Amended and Restated Certificate of Incorporation, the Bylaws of the Corporation may be adopted, amended or repealed by a majority of the board of directors of the Corporation, and any Bylaws adopted by the board of directors of the Corporation may be amended or repealed by the stockholders entitled to vote thereon. Election of directors need not be by written ballot.

SEVENTH: A director of the Corporation shall not be personally liable either to the Corporation or to any stockholder for monetary damages for breach of fiduciary duty as a director, except for: (i) any breach of the director's duty of loyalty to the Corporation or its stockholders; or (ii) acts or omissions which are not in good faith or which involve intentional misconduct or

knowing violation of the law; or (iii) any matter in respect of which such director shall be liable under Section 174 of the DGCL or any amendment thereto or successor provision thereto; or (iv) any transaction from which the director shall have derived an improper personal benefit. Neither amendment nor repeal of this paragraph nor the adoption of any provision of this Amended and Restated Certificate of Incorporation inconsistent with this paragraph shall eliminate or reduce the effect of this paragraph in respect of any matter occurring, or any cause of action, suit or claim that, but for this paragraph of this Article SEVENTH, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

EIGHTH: The Corporation shall indemnify its directors and officers to the fullest extent authorized or permitted by law, as now or hereafter in effect, and such right to indemnification shall continue as to a person who has ceased to be a director or officer of the Corporation and shall inure to the benefit of his or her heirs, executors and personal and legal representative; provided, however, that, except for proceedings to enforce rights to indemnification, the Corporation shall not be obligated to indemnify any director or officer or his or her heirs, executors or personal or legal representatives) in connection with a proceeding (or part thereof) initiated by such person unless such proceeding (or part thereof) was authorized or consented to by the Board of Directors. The right to indemnification conferred by this Article EIGHTH shall include the right to be paid by the Corporation the expenses incurred in defending or otherwise participating in any proceeding in advance of its final disposition.

The Corporation may, to the extent authorized from time to time by the Board of Directors, provide rights to indemnification and to the advancement of expenses to employees and agents of the Corporation similar to those conferred in this Article EIGHTH to directors and officers of the Corporation.

The rights to indemnification and to the advance of expenses conferred in this Article EIGHTH shall not be exclusive of any other right which any person may have or hereafter acquire under this Amended and Restated Certificate of Incorporation, the Bylaws of the Corporation, any statute, agreement, vote of stockholders or disinterested directors or otherwise.

Any repeal or modification of this Article EIGHTH by the stockholders of the Corporation shall not adversely affect any rights to indemnification and to the advancement of expenses of a director or officer of the Corporation existing at the time of such repeal or modification with respect to any acts or omissions occurring prior to such repeal or modification.

NINTH: Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them and/or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Corporation or of any creditor or stockholder thereof, or on the application of any receiver or receivers appointed for this Corporation under the provisions of Section 291 of the DGCL or on the application of trustees in dissolution or of any receiver or receivers appointed for this Corporation under the provisions of Section 279 of the DGCL order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this Corporation as consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Corporation, as the case may be, and also on this Corporation.

TENTH: The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Amended and Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Amended and Restated Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

* * * * * * *

IN WITNESS WHEREOF, the undersigned, being the President and Chief Executive Officer of the Corporation, does hereby execute this Amended and Restated Certificate of Incorporation this 13th day of December, 2002.

/s/ Bruce C. Galton

Bruce C. Galton
President and Chief Executive Officer

SENESCO TECHNOLOGIES, INC.

1998 STOCK INCENTIVE PLAN
(AS AMENDED ON DECEMBER 13, 2002)

1. Purposes of the Plan. The purposes of this Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees, non-Employee Directors and Consultants of the Company and its Subsidiaries and to promote the success of the Company's business. Options granted under the Plan may be incentive stock options (as defined under Section 422 of the Code) or non-statutory stock options, as determined by the Administrator at the time of grant of an option and subject to the applicable provisions of Section 422 of the Code, as amended, and the regulations promulgated thereunder. Stock purchase rights may also be granted under the Plan.

2. Certain Definitions. As used herein, the following definitions shall apply:

(a) "Administrator" means the Board or any of its Committees appointed pursuant to Section 4 of the Plan.

(b) "Board" means the Board of Directors of the Company.

(c) "Code" means the Internal Revenue Code of 1986, as amended.

(d) "Committee" means the Committee appointed by the Board of Directors in accordance with paragraph (a) of Section 4 of the Plan.

(e) "Common Stock" means the Common Stock of the Company.

(f) "Company" means Senesco Technologies, Inc., a Delaware corporation.

(g) "Consultant" means any person, including an advisor, who is engaged by the Company or any Parent or subsidiary to render services and is compensated for such services.

(h) "Continuous Status as an Employee" means the absence of any interruption or termination of the employment relationship by the Company or any Subsidiary. Continuous Status as an Employee shall not be considered interrupted in the case of: (i) sick leave; (ii) military leave; (iii) any other leave of absence approved by the Board, provided that such leave is for a period of not more than ninety (90) days, unless reemployment upon the expiration of such leave is guaranteed by contract or statute, or unless provided otherwise pursuant to Company policy adopted from time to time; or (iv) transfers between locations of the Company or between the Company, its Subsidiaries or its successor.

(i) "Director" means a director of the Company.

(j) "Employee" means any person, including officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. The payment of a Director's fee by the Company shall not be sufficient to constitute "employment" by the Company.

(k) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(l) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system including without limitation the National Market System of the National Association of Securities Dealers, Inc. Automated Quotation ("Nasdaq") System, its Fair Market Value shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such system or exchange for the last market trading day prior to the time of determination as reported in the Wall Street Journal or such other source as the Administrator deems reliable or;

(ii) If the Common Stock is quoted on Nasdaq (but not on the National Market System thereof) or regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean between the high and low asked prices for the Common Stock or;

(iii) In the absence of an established market for the Common Stock, the Fair Market Value thereof shall be determined in good faith by the Administrator.

(m) "Incentive Stock Option" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code.

(n) "Nonstatutory Stock Option" means an Option not intended to qualify as an Incentive Stock Option.

(o) "Option" means a stock option granted pursuant to the Plan.

(p) "Optioned Stock" means the Common Stock subject to an Option.

(q) "Optionee" means a Director, Employee or Consultant who receives an Option.

(r) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(s) "Plan" means this 1998 Stock Incentive Plan, as amended.

(t) "Restricted Stock" means shares of Common Stock acquired pursuant to a grant of stock purchase rights under Section 11 below.

(u) "Share" means a share of the Common Stock, as adjusted in accordance with Section 13 of the Plan.

(v) "Subsidiary" means a "subsidiary corporation", whether now or hereafter existing, as defined in Section 424(f) of the Code.

3. Stock Subject to the Plan. Subject to the provisions of Section 13 of the Plan, the maximum aggregate number of shares which may be optioned and sold under the Plan is three million (3,000,000) shares of Common Stock. The shares may be authorized, but unissued, or reacquired Common Stock.

If an option should expire or become unexercisable for any reason without having been exercised in full, the unpurchased Shares which were subject thereto shall, unless the Plan shall have been terminated, become available for future grant under the Plan.

4. Administration of the Plan.

(a) Procedure.

(i) Administration With Respect to Directors and Officers. With respect to grants of Options or stock purchase rights to Employees who are also officers or Directors of the Company, the Plan shall be administered by (A) the Board, if the Board may administer the Plan in compliance with Rule 16b-3 promulgated under the Exchange Act or any successor thereto ("Rule 16b-3") with respect to a plan intended to allow transactions between the Company and the Optionee to be exempt for Section 16(b) of the Exchange Act, or (B) a Committee designated by the Board to administer the Plan, which Committee shall be constituted in such a manner as to permit the Plan to comply with Rule 16b-3 with respect to a plan intended to allow transactions between the Company and the Optionee to be exempt for Section 16(b) of the Exchange Act. Once appointed, such Committee shall continue to serve in its designated capacity until otherwise directed by the Board. From time to time the Board may increase the size of the Committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies, however caused, and remove all members of the Committee and thereafter directly administer the Plan, all to the extent permitted by Rule 16b-3 with respect to a plan intended to qualify thereunder as a discretionary plan.

(ii) Multiple Administrative Bodies. If permitted by Rule 16b-3, the Plan may be administered by different bodies with respect to Directors, non-director officers and Employees who are neither Directors nor officers.

(iii) Administration With Respect to Consultants and Other Employees. With respect to grants of Options or stock purchase rights to Employees who are neither Directors nor officers of the Company or to Consultants, the Plan shall be administered by (A) the Board, if the Board may administer the Plan in compliance with Rule 16b-3, or (B) a Committee designated by the Board, which Committee shall be constituted in such a manner as to satisfy the legal requirements relating to the administration of incentive stock option plans, if any, of Idaho corporate law and applicable securities laws and of the Code (the "Applicable Laws"). Once appointed, such Committee shall continue to serve in its designated capacity until otherwise directed by the Board. From time to time the Board may increase the size of the Committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies, however caused, and remove all members of the Committee and thereafter directly administer the Plan, all to the extent permitted by the Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan and in the case of a Committee, the specific duties delegated by the Board to such Committee, the Administrator shall have the authority, in its discretion:

(i) to determine the Fair Market Value of the Common Stock, in accordance with Section 2(k) of the Plan;

(ii) to select the officers, Directors, Consultants and Employees to whom Options and stock purchase rights may from time to time be granted hereunder;

(iii) to determine whether and to what extent Options and stock purchase rights or any combination thereof, are granted hereunder;

(iv) to determine the number of shares of Common Stock to be covered by each such award granted hereunder;

(v) to approve forms of agreement for use under the Plan;

(vi) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any award granted hereunder (including, but not limited to, the share price and any restriction or limitation or waiver of forfeiture restrictions regarding any Option or other award and/or the shares of Common Stock relating thereto, based in each case on such factors as the Administrator shall determine, in its sole discretion);

(vii) to determine whether and under what circumstances an Option may be settled in cash under subsection 9(f) instead of Common Stock;

(viii) to determine whether, to what extent and under what circumstances Common Stock and other amounts payable with respect to an award under this Plan shall be deferred either automatically or at the election of the participant (including providing for and determining the amount, if any, of any deemed earnings on any deferred amount during any deferral period);

(ix) to reduce the exercise price of any Option to the then current Fair Market Value if the Fair Market Value of the Common Stock covered by such Option shall have declined since the date the Option was granted; and

(x) to determine the terms and restrictions applicable to stock purchase rights and the Restricted Stock purchased by exercising such stock purchase rights.

(c) Effect of Committee's Decision. All decisions, determinations and interpretations of the Administrator shall be final and binding on all Optionees and any other holders of any Options.

5. Eligibility.

(a) Nonstatutory Stock Options may be granted to Directors, Employees and Consultants. Incentive Stock Options may be granted only to Employees. A Director, Employee or Consultant who has been granted an Option may, if he is otherwise eligible, be granted an additional Option or Options.

(b) Each Option shall be designated in the written option agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designations, to the extent that the aggregate Fair Market Value of the Shares with respect to which Options designated as Incentive Stock Options are exercisable for the first time by any optionee during any calendar year (under all plans of the Company or any Parent or Subsidiary) exceeds $100,000, such excess Options shall be treated as Nonstatutory Stock Options.

(c) For purposes of Section 5(b), Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted.

(d) The Plan shall not confer upon any Optionee any right with respect to continuation of employment or consulting relationship with the Company, nor shall it interfere in any way with his right or the Company's right to terminate his employment or consulting relationship at any time, with or without cause.

6. Term of Plan. The Plan shall become effective upon the earlier to occur of its adoption by the Board of Directors or its approval by the shareholders of the Company as described in Section 19 of the Plan. It shall continue in effect for a term of ten (10) years unless sooner terminated under Section 15 of the Plan.

7. Term of Option. The term of each Option shall be the term stated in the Option Agreement; provided, however, that in the case of an Incentive Stock Option, the term shall be no more than ten (10) years from the date of grant thereof or such shorter term as may be provided in the Option Agreement. However, in the case of an Option granted to an Optionee who, at the time the Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Option shall be five (5) years from the date of grant thereof or such shorter term as may be provided in the Option Agreement.

8. Option Exercise Price and Consideration.

(a) The per share exercise price for the Shares to be issued pursuant to exercise of an Option shall be such price as is determined by the Board, but shall be subject to the following:

(i) In the case of an Incentive Stock Option

(A) granted to an Employee who, at the time of the grant of such Incentive Stock Option, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(B) granted to any Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option

(A) granted to a person who, at the time of the grant of such Option, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of the grant.

(B) granted to any person, the per Share exercise price shall be no less than 85% of the Fair Market Value per Share on the date of grant.

(b) The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator (and, in the case of an Incentive Stock Option, shall be determined at the time of grant) and may consist entirely of (1) cash, (2) check, (3) promissory note, (4) other Shares which (x) in the case of Shares acquired upon exercise of an Option either have been owned by the Optionee for more than six months on the date of surrender or were not acquired, directly or indirectly, from the Company, and (y) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option shall be exercised, (5) authorization from the Company to retain from the total number of Shares as to which the Option is exercised that number of Shares having a Fair Market Value on the date of exercise equal to the exercise price

for the total number of Shares as to which the option is exercised, (6) delivery of a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company the amount of sale or loan proceeds required to pay the exercise price, (7) by delivering an irrevocable subscription agreement for the Shares which irrevocably obligates the option holder to take and pay for the Shares not more than twelve months after the date of delivery of the subscription agreement, (8) any combination of the foregoing methods of payment, or (9) such other consideration and method of payment for the issuance of Shares to the extent permitted under Applicable Laws. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company.

9. Exercise of Option.

(a) Procedure for Exercise; Rights as a Shareholder. Any Option granted hereunder shall be exercisable at such times and under such conditions as determined by the Administrator, including performance criteria with respect to the Company and/or the Optionee, and as shall be permissible under the terms of the Plan.

An Option may not be exercised for a fraction of a Share.

An Option shall be deemed to be exercised when written notice of such exercise has been given to the Company in accordance with the terms of the Option by the person entitled to exercise the Option and full payment for the Shares with respect to which the Option is exercised has been received by the Company. Full payment may, as authorized by the Administrator, consist of any consideration and method of payment allowable under Section 8(b) of the Plan. Until the issuance (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company) of the stock certificate evidencing such Shares, no right to vote or receive dividends or any other rights as a shareholder shall exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. The Company shall issue (or cause to be issued) such stock certificate promptly upon exercise of the Option. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued, except as provided in Section 11 of the Plan.

Exercise of an Option in any manner shall result in a decrease in the number of Shares which thereafter may be available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(b) Termination of Employment. In the event of termination of an Optionee's consulting relationship, directorship or Continuous Status as an Employee with the Company (as the case may be), such Optionee may, but only within three (3) months (or such other period of time as is determined by the Board, with such determination in the case of an Incentive Stock Option being made at the time of grant of the Option and not exceeding three (3) months) after the date of such termination (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), exercise his Option to the extent that Optionee was entitled to exercise it at the date of such termination. To the extent that Optionee was not

entitled to exercise the Option at the date of such termination, or if Optionee does not exercise such Option to the extent so entitled within the time specified herein, the Option shall terminate.

(c) Disability of Optionee. Notwithstanding the provisions of Section 9(b) above, in the event of termination of an Optionee's consulting relationship or Continuous Status as an Employee as a result of his total and permanent disability (as defined in Section 22(e)(3) of the Code), Optionee may, but only within twelve (12) months from the date of such termination (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), exercise the Option to the extent otherwise entitled to exercise it at the date of such termination. To the extent that Optionee was not entitled to exercise the Option at the date of termination, or if Optionee does not exercise such Option to the extent so entitled within the time specified herein, the Option shall terminate.

(d) Death of Optionee. In the event of the death of an Optionee, the Option may be exercised, at any time within twelve (12) months following the date of death (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), by the Optionee's estate or by a person who acquired the right to exercise the Option by bequest or inheritance, but only to the extent the Optionee was entitled to exercise the Option at the date of death. To the extent that Optionee was not entitled to exercise the Option at the date of termination, or if Optionee does not exercise such Option to the extent so entitled within the time specified herein, the Option shall terminate.

(e) Rule 16b-3. Options granted to persons subject to Section 16(b) of the Exchange Act must comply with Rule 16b-3 and shall contain such additional conditions or restrictions as may be required thereunder to qualify for the maximum exemption from Section 16 of the Exchange Act with respect to Plan transactions.

(f) Buyout Provisions. The Administrator may at any time offer to buy out for a payment in cash or Shares, an Option previously granted, based on such terms and conditions as the Administrator shall establish and communicate to the Optionee at the time that such offer is made.

10. Non-Transferability of Options. The Option may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Optionee, only by the Optionee. The terms of the Option shall be binding upon the executors, administrators, heirs, successors and assigns of the Optionee.

11. Stock Purchase Rights.

(a) Rights to Purchase. Stock purchase rights may be issued either alone, in addition to, or in tandem with other awards granted under the Plan and/or cash awards made outside of the Plan. After the Administrator determines that it will offer stock purchase rights under the Plan, it shall advise the offeree in writing of the terms, conditions and restrictions related to the offer, including the number of Shares that such person shall be entitled to purchase, the price to be paid (which price shall not be less than 50% of the Fair Market Value of the

Shares as of the date of the offer), and the time within which such person must accept such offer, which shall in no event exceed thirty (30) days from the date upon which the Administrator made the determination to grant the stock purchase right. The offer shall be accepted by execution of a Restricted Stock purchase agreement in the form determined by the Administrator.

(b) Repurchase Option. Unless the Administrator determines otherwise, the Restricted Stock purchase agreement shall grant the Company a repurchase option exercisable upon the voluntary or involuntary termination of the purchaser's employment with the Company for any reason (including death or Disability). The purchase price for Shares repurchased pursuant to the Restricted Stock purchase agreement shall be the original price paid by the purchaser and may be paid by cancellation of any indebtedness of the purchaser to the Company. The repurchase option shall lapse at such rate as the Committee may determine.

(c) Other Provisions. The Restricted Stock purchase agreement shall contain such other terms, provisions and conditions not inconsistent with the Plan as may be determined by the Administrator in its sole discretion. In addition, the provisions of Restricted Stock purchase agreements need not be the same with respect to each purchaser.

(d) Rights as a Shareholder. Once the stock purchase right is exercised, the purchaser shall have the rights equivalent to those of a shareholder, and shall be a shareholder when his or her purchase is entered upon the records of the duly authorized transfer agent of the Company. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock purchase right is exercised, except as provided in Section 13 of the Plan.

12. Stock Withholding to Satisfy Withholding Tax Obligations. At the discretion of the Administrator, Optionees may satisfy withholding obligations as provided in this paragraph. When an Optionee incurs tax liability in connection with an Option or stock purchase right, which tax liability is subject to tax withholding under applicable tax laws, and the Optionee is obligated to pay the Company an amount required to be withheld under applicable tax laws, the Optionee may satisfy the withholding tax obligation by electing to have the Company withhold from the Shares to be issued upon exercise of the Option, or the Shares to be issued in connection with the stock purchase right, if any, or delivery of additional shares of Common Stock, that number of shares having a Fair Market Value equal to the amount required to be withheld; provided, however, that the total tax withholding where stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income). The Fair Market Value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined (the "Tax Date").

All elections by an Optionee to have Shares withheld for this purpose shall be made in writing in a form acceptable to the Administrator and shall be subject to the following restrictions:

(a) the election must be made on or prior to the applicable Tax Date;

(b) once made, the election shall be irrevocable as to the particular Shares of the Option or Right as to which the election is made;

(c) all elections shall be subject to the consent or disapproval of the Administrator;

(d) if the Optionee is subject to Rule 16b-3, the election must comply with the applicable provisions of Rule 16b-3 and shall be subject to such additional conditions or restrictions as may be required thereunder to qualify for the maximum exemption from Section 16 of the Exchange Act with respect to Plan transactions.

In the event the election to have Shares withheld is made by an Optionee and the Tax Date is deferred under Section 83 of the Code because no election is filed under Section 83(b) of the Code, the Optionee shall receive the full number of Shares with respect to which the Option or stock purchase right is exercised but such Optionee shall be unconditionally obligated to tender back to the Company the proper number of Shares on the Tax Date.

13. Adjustments Upon Changes in Capitalization or Merger. Subject to any required action by the shareholders of the Company, the number of shares of Common Stock covered by each outstanding Option, and the number of shares of Common Stock which have been authorized for issuance under the Plan but as to which no Options have yet been granted or which have been returned to the Plan upon cancellation or expiration of an Option, as well as the price per share of Common Stock covered by each such outstanding Option, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other increase or decrease in the number of issued shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an Option.

In the event of the proposed dissolution or liquidation of the Company, the Board shall notify the Optionee at least fifteen (15) days prior to such proposed action. To the extent it has not been previously exercised, the Option will terminate immediately prior to the consummation of such proposed action. In the event of a merger or consolidation of the Company with or into another corporation or the sale of all or substantially all of the Company's assets (hereinafter, a "merger"), the Option shall be assumed or an equivalent option shall be substituted by such successor corporation or a parent or subsidiary of such successor corporation. In the event that such successor corporation does not agree to assume the Option or to substitute an equivalent option, the Board shall, in lieu of such assumption or substitution, provide for the

Optionee to have the right to exercise the Option as to all of the Optioned Stock, including Shares as to which the Option would not otherwise be exercisable. If the Board makes an Option fully exercisable in lieu of assumption or substitution in the event of a merger, the Board shall notify the Optionee that the Option shall be fully exercisable for a period of fifteen (15) days from the date of such notice, and the Option will terminate upon the expiration of such period. For the purposes of this paragraph, the Option shall be considered assumed if, following the merger, the Option or right confers the right to purchase, for each Share of stock subject to the Option immediately prior to the merger, the consideration (whether stock, cash, or other securities or property) received in the merger by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger was not solely common stock of the successor corporation or its Parent, the Board may, with the consent of the successor corporation and the participant, provide for the consideration to be received upon the exercise of the Option, for each Share of stock subject to the Option, to be solely common stock of the successor corporation or its Parent equal in Fair Market Value to the per share consideration received by holders of Common Stock in the merger or sale of assets.

14. Time of Granting Options. The date of grant of an Option shall, for all purposes, be the date on which the Administrator makes the determination granting such Option, or such other date as is determined by the Board. Notice of the determination shall be given to each Director, Employee or Consultant to whom an Option is so granted within a reasonable time after the date of such grant.

15. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or discontinue the Plan, but no amendment, alteration, suspension or discontinuation shall be made which would impair the rights of any Optionee under any grant theretofore made, without his or her consent. In addition, to the extent necessary and desirable to comply with Rule 16b-3 under the Exchange Act or with Section 422 of the Code (or any other applicable law or regulation, including the requirements of the NASD or an established stock exchange), the Company shall obtain shareholder approval of any Plan amendment in such a manner and to such a degree as required.

(b) Effect of Amendment or Termination. Any such amendment or termination of the Plan shall not affect Options already granted and such Options shall remain in full force and effect as if this Plan had not been amended or terminated, unless mutually agreed otherwise between the Optionee and the Board, which agreement must be in writing and signed by the Optionee and the Company.

16. Conditions Upon Issuance of Shares. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares pursuant thereto shall comply with all relevant provisions of law, including, without limitation, the Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the Shares may

then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an Option, the Company may require the person exercising such Option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned relevant provisions of law.

17. Reservation of Shares. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

18. Agreements. Options and stock purchase rights shall be evidenced by written agreements in such form as the Board shall approve from time to time.

19. Shareholder Approval. Continuance of the Plan shall be subject to approval by the shareholders of the Company within twelve (12) months before or after the date the Plan is adopted. Such shareholder approval shall be obtained in the degree and manner required under applicable state and federal law.

20. Information to Optionees. The Company shall provide to each Optionee, during the period for which such Optionee has one or more Options outstanding, copies of all annual reports and other information which are provided to all shareholders of the Company. The Company shall not be required to provide such information if the issuance of Options under the Plan is limited to key employees whose duties in connection with the Company assure their access to equivalent information.

* * * * * * * *

[S E N E S C O LOGO]

December 13, 2002

Dr. John Thompson, Dean of Science
University of Waterloo
Waterloo, Ontario N2L 3G1
Canada

Re: AMENDMENT #2 TO CONSULTING AGREEMENT OF JULY 12, 1999

Dear Dr. Thompson:

This will modify paragraph 3 of your Consulting Agreement with Senesco dated July 12, 1999, as modified on February 8, 2001. Effective as of January 1, 2003, Company's reimbursement to Consultant, shall be in the amount of $5,000 per month. All other terms of the Agreement remain unchanged.

Sincerely,

/s/ Joel Brooks

Joel Brooks
Senesco, Inc.

Acknowledged and Agreed:

/s/ John Thompson
- ------------------------
Dr. John Thompson

SALES REPRESENTATIVE AGREEMENT

THIS SALES REPRESENTATIVE AGREEMENT (this "Agreement") is made this 14th day of October, 2002 by and between Senesco Technologies, Inc., a Delaware corporation, having its principal place of business at 303 George Street, Suite 420, New Brunswick, New Jersey 08901 ("Senesco"), and DP, Inc., a Maryland corporation, having its principal place of business at 5607 Whitney Mill Way, Rockville, Maryland 20852 ("DP").

WITNESSETH

WHEREAS, Senesco is the owner of certain intellectual property, including, but not limited to, trade secrets, proprietary formulas, technology, patent applications, and processes and procedures utilized in, among other areas, the development of agricultural products (the "Technology"); and

WHEREAS, Senesco desires to have its Technology licensed (the "License") in the People's Republic of China (hereinafter "PRC");

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Senesco and DP do hereby agree as follows:

1. APPOINTMENT OF DP IN THE PRC - (a) Senesco hereby grants DP the non-exclusive right to market and promote Senesco's Technology solely within the PRC, Taiwan, Hong Kong and Macau, and DP hereby agrees to use reasonable efforts to market and promote Senesco's Technology solely within the PRC for the purpose of consummating the License. DP understands that this is a non-exclusive agreement, such that Senesco shall have the right to appoint other non-exclusive representatives.

   (b) DP will be charged with the task of promoting, marketing and handling negotiations with any and all potential licensors of Senesco's Technology. This includes, but is not limited to, private industry, central government, provincial government, and individuals. It is understood that all negotiations will be handled with the complete approval of Senesco, and that any agreements generated by DP will not be binding to Senesco.

   (c) Senesco reserves the right to directly negotiate a License inside and outside the PRC. Any License is subject to acceptance or rejection by Senesco in its sole discretion. DP understands that it is granted only the authority to solicit and handle negotiations of the License. DP is neither expressly nor impliedly authorized to enter into written or oral contracts or agreements of any nature on behalf of Senesco.

2. MARKETING SUPPORT - Senesco agrees to provide to DP such literature, brochures, information and training as is required in the judgment of Senesco.

3. PRICE AND TERM OF PAYMENT - (a) It is completely understood that Senesco will determine any and all terms relating to the License of its Technology. DP shall not receive any payment except as outlined below based upon the gross license fees received by Senesco in connection with the License.

   (b) Payment Schedule:

   - 5% of the gross license fees paid to Senesco up to $50 Million ($50,000,000 U.S.).
   - 6% of the gross license fees paid to Senesco from $50 Million to $100 Million ($50,000,000-$100,000,000 U.S.).
   - 7% of the gross license fees paid to Senesco in excess of $100 Million ($100,000,000 U.S.).
   - By way of example, should Senesco receive a total of $150 Million in aggregate license fees from all licenses signed as a result of DP's involvement, DP will receive 5% of the first $50 Million, or $2.5 Million, 6% of the next $50 Million, or $3 Million and 7% of the final $30 Million, or $3.5 Million, for a total of $9 Million.

   (c) Such gross license fee shall be determined at the time of executing the License by the Board of Directors of Senesco, in its sole discretion. Senesco shall make such payments to DP only upon the time when Senesco receives payment under the License, on a pro-rata portion based upon the amount actually received as compared to the gross license fee. All transactions will occur through letters of credit in U.S. funds drawn on U.S. banks that are issued by bona fide financial institutions.

   (d) Each party is completely and solely responsible for their respective expenses incurred in connection with this Agreement.

4. TERM OF AGREEMENT - The term of this Agreement shall be for a period of one year from the date above, and shall automatically renew for

successive one-year periods unless either party gives the other party written notice of its intention not to renew the Agreement within 60 days of such anniversary; provided, however, that this Agreement (other than Section 3 and Section 6 hereunder which shall survive the termination of this Agreement) shall automatically terminate upon the execution of a License.

5. TERMINATION - (a) Senesco may terminate this Agreement without liability at any time by serving DP with a written notice of termination. DP may terminate this Agreement for breach by Senesco, of any of its terms and conditions, which breach is not cured by Senesco, within 30 days after receipt of written notice of such breach from DP.

(b) In the event of termination, DP shall promptly return to Senesco or its designee all sales literature, brochures, technical information, price lists, samples, evaluation units and all other materials supplied by Senesco to DP without charge.

6. RELATIONSHIP BETWEEN PARTIES - (a) The relationship between DP and Senesco established by this Agreement is solely that of an independent sales representative, and neither party is in any way the legal representative, joint venture partner or agent of the other, and nothing in this Agreement shall be construed to constitute DP as an employee, partner or agent of Senesco. Without limiting the foregoing, DP shall have no authority to act for or to bind Senesco in any way, to alter any of the terms or conditions of any standard forms or other agreements of Senesco, to make representations or warranties or to execute agreements on behalf of Senesco, or to represent that Senesco is in any way responsible for the acts or omissions of DP. DP shall indemnify and hold Senesco harmless for any liability or damage to Senesco resulting from a violation of this Agreement.

(b) Except as expressly set forth in this Agreement, this Agreement shall not be construed as granting to DP any license or right in or to any patent, copyright, trademark or other proprietary right of Senesco.

(c) DP shall maintain the confidentiality of, and not disclose to others, any confidential or proprietary information of Senesco which it may now have or may hereafter obtain, including, without limitation, specifications, technical reports, customer lists, research and development initiatives and commercialization plans relating to the Senesco's Technology, business or products. DP shall cause each of its employees and/or agents to execute such agreements as may be necessary to assure compliance with this provision.

(d) It is also understood that Senesco may alter or modify its Technology or change its business in any way without the consent of DP.

(e) DP shall conduct its business under its own name. DP shall not use any trademarks or tradenames of Senesco in any manner, except as authorized in writing by Senesco or in connection with the use of literature supplied by Senesco. DP shall discontinue such usage upon the termination of this Agreement.

(f) DP shall not, during the term of this Agreement, market or engage in any business that competes with Senesco, without the prior written consent of Senesco.

7. ASSIGNMENT - Neither party shall assign any of its rights or obligations under this Agreement without the written consent of the non-moving party, which consent shall not be unreasonably withheld; provided, however, Senesco shall be entitled to assign this Agreement to its successor-in-interest without the consent of DP upon a merger, sale of all or substantially all of its assets, or the sale or exchange of a majority of the capital stock of Senesco.

8. GOVERNING LAW - This Agreement shall be governed, interpreted and enforced in accordance with the laws of the State of New Jersey, and each party hereto consents to the exclusive jurisdiction of the state and federal courts or arbitration proceedings located within the State of New Jersey.

9. ENFORCEABILITY - If any provision of this Agreement is determined by a court of competent jurisdiction to be unenforceable or invalid, the remainder of this Agreement shall continue to be in full force and effect. The failure of either DP or Senesco to enforce any provision herein shall in no event be considered a waiver thereof by either of them.

10. NOTICES - Any notice or consent required by this Agreement shall be in writing and either personally delivered or mailed by registered or certified mail, return receipt requested, to such party at its address specified below or to such other address as such party may designate by notice given in accordance herewith. Such notices shall be deemed delivered on the date of receipt, or upon attempted delivery if acceptance of delivery is refused. The initial addresses at which the parties shall receive notice shall be:

PAUL HUANG	SASCHA FEDYSZYN
DP, Inc.	Senesco Technologies, Inc.
5607 Whitney Mill Way	303 George Street, Suite 420
Rockville, Md. 20852	New Brunswick, NJ 08901

11. AMENDMENTS - No alteration, modification or amendment of this Agreement will be effective unless it is in writing and signed by both parties hereto.

12. BINDING AND SUCCESSORS - This Agreement shall be binding upon the successors and assigns of the parties hereto.

13. FURTHER ASSURANCES - Each party to this Agreement represents, agrees and warrants that it will perform all other acts and execute and deliver all other documents that may be necessary or appropriate to carry out the intent and purpose of this Agreement.

14. ENTIRE AGREEMENT - This Agreement constitutes the entire agreement between the parties with reference to the subject matter hereof and supersedes all prior negotiations, understandings, representations, and agreements, if any. Each of the parties acknowledges that it is entering into this Agreement as a result of its own independent investigation and not as a result of any representations of any other party not contained herein.

15. ARBITRATION - Any controversy or claim arising out of or relating to this Agreement, or any breach thereof, including, without limitation, any claim that this Agreement, or any part thereof, is invalid, illegal, or otherwise voidable or void, may be submitted to final and binding arbitration before, and in accordance with, the rules of the American Arbitration Association, and judgment upon the award may be entered in any court having jurisdiction thereof upon mutual agreement of the parties hereto; provided, however, that this clause shall not be construed to limit any rights which either party may have to bring an action in a court of law or equity. Such arbitration shall be conducted by the American Arbitration Association at its offices in New Jersey with one arbitrator; provided, that, any claim for an amount greater than $250,000 shall be heard by a panel of three (3) arbitrators. All fees and expenses for this Arbitration shall be borne equally between the parties hereto; provided, however, that the prevailing party shall be entitled to be reimbursed for all reasonable fees and expenses.

****

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed in their names by their duly authorized representatives as of the date of this Agreement.

AGREED AND ACCEPTED,

SENESCO TECHNOLOGIES, INC.

/s/ Sascha Fedyszyn
- ------------------------------------
Name: Sascha Fedyszyn
Title: Vice President of Corporate Development

DP, INC.

/s/ David Huang
- ------------------------------------
David Huang
President

PERRIN, HOLDEN & DAVENPORT CAPITAL CORP.
5 Hanover Square, New York, NY 10004
Tel: (212) 269-3500 / Fax: (212) 269-3087

December 23, 2002

Bruce Galton
President & CEO
Senesco Technologies, Inc.
303 George Street
Suite 420
New Brunswick, NJ 08901

Re: Financial Services Advisory Agreement

Dear Bruce,

Under the terms and conditions of this agreement, Senesco Technologies, Inc. (the Company) agrees to engage Perrin, Holden & Davenport Capital (specifically, Chet Dubov) to perform various investment services for the Company for a period of six-months under our Financial Services Advisory Program. The following sets forth the terms and conditions upon which Senesco Technologies, Inc. has agreed to engage PHDC and PHDC has agreed to be engaged.

Within the framework of this agreement PHDC (specifically, Chet Dubov) will provide the following services:

- Introduce the Company to Institutional Investors: to receive strong institutional awareness and sponsorship.
- Introduce the Company to Healthcare Analyst: to provide research coverage.
- Advise the Company on strategies relating to investors in order to leverage the Company's ability to gain on-going investor confidence.
- Provide the institutional investment community with periodic updates on the Company.
- Introduce the Company to publications in order to receive media coverage.
- If necessary, act as the Company's Non-exclusive Placement Agent, upon such terms as may be agreed between the parties, for any future funding requirements. It is understood by PHDC that Stanford Financial Group has a right of first refusal to act the exclusive managing agent as to Senesco's next equity placement.

This agreement will commence on February 1, 2002 and be in affect for a period of 6 months and is renewable if mutually agreed by both parties. For providing the above services, Senesco Technologies, Inc. agrees to pay PHDC a monthly retainer of $5000.00 payable on the first of each month. Either party may terminate this agreement upon thirty days written notice. It is specifically understood by the parties that if one party shall duly exercise its right of termination, neither party shall be entitled to any compensation or claim for goodwill or other loss, cost or expense which either of them may suffer or claim to have suffered by reason of termination of this agreement.

PHDC understands that it may receive confidential and or material non-public information from the Company and PHDC agrees to maintain such information in confidence and not to trade on such information. This requirement shall survive termination of the agreement.

By providing these services my goal is to continue assisting Senesco Technologies gain the visibility it so well deserves. I believe the Company has a great future and the public should be made aware of the huge potential of your technology. It has been a pleasure working with you and John. I look forward to the future together so that I may contribute to Senesco's success in the attainment of its goals.

Please acknowledge this agreement by signing at the base of this letter.

Sincerely,

Perrin, Holden & Davenport
Capital Corp.

By: /s/ Chet Dubov

Chet Dubov
Senior Investment Banking Specialist

Agreed and Accepted:

Senesco Technologies, Inc.

By: /s/ Bruce Galton

Bruce Galton
President & CEO

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 December 31, 2002 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: February 14, 2003

/s/ Bruce C. Galton

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

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 December 31, 2002 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: February 14, 2003

/s/ Joel Brooks

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