

## SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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FORM 8-KCURRENT REPORT  
PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934Date of report (Date of earliest event reported) July 2, 2002  
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SENESCO TECHNOLOGIES, INC.-----  
(Exact Name of Registrant as Specified in Charter)

Delaware

001-35354

84-1368850

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(STATE OR OTHER JURISDICTION  
OF INCORPORATION)

(COMMISSION FILE NUMBER)

(IRS EMPLOYER  
IDENTIFICATION NO.)

303 George Street, Suite 420, New Brunswick, New Jersey

08901

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(Address of Principal Executive Offices)

(Zip Code)

Registrant's telephone number, including area code (732) 296-8400  
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(Former Name or Former Address, if Changed Since Last Report)

## ITEM 5. OTHER EVENTS.

Senesco Technologies, Inc. (the "Company") posted the Company's annual Letter to Stockholders and a Research and Development update on its Company web site at [www.senesco.com](http://www.senesco.com). The Letter to Stockholders reviews corporate events that occurred during the past fiscal year and outlines key goals and objectives for the upcoming fiscal year. Specifically, the letter addresses securing additional long-term equity financing, the Company's new listing on the American Stock Exchange, its license agreements with Harris Moran Seed Company and ArborGen, LLC, and its joint venture with Rahan Meristem. The Research and Development update discusses the expansion of the Company's ongoing research and development programs, including the potential applicability of the Company's gene technology in targeting major diseases in humans and animals.

## ITEM 7. FINANCIAL STATEMENTS, PRO FORMA FINANCIAL INFORMATION AND EXHIBITS.

## (c) Exhibits.

Exhibit No. -----	Description of Exhibits -----
99.1	Press Release dated July 2, 2002, announcing the posting of the Company's annual Letter to Stockholders and a Research and Development update on its Company web site.
99.2	Annual Letter to Stockholders dated July 1, 2002.
99.3	Research and Development update dated July 1, 2002.



SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SENESCO TECHNOLOGIES, INC.

By: /s/ Bruce C. Galton

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Bruce C. Galton  
President and Chief Executive Officer

July 3, 2002

[graphic omitted]

COMPANY CONTACT:

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Senesco Technologies, Inc.  
Bruce C. Galton  
President and CEO  
(732) 296-8400

INVESTOR RELATIONS CONTACTS:

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SENESCO POSTS STOCKHOLDER LETTERS ON COMPANY WEB SITE

NEW BRUNSWICK, N.J.(JULY 2, 2002) - SENESCO TECHNOLOGIES, INC. ("SENESCO" OR THE "COMPANY") (AMEX: SNT) today announced that it posted the Company's annual Letter to Stockholders and a Research and Development update on its Company web site at [www.senesco.com](http://www.senesco.com). The Letter to Stockholders reviews corporate events that occurred during the past fiscal year and outlines key goals and objectives for the upcoming fiscal year. Specifically, the letter addresses securing additional long-term equity financing, Senesco's new listing on the American Stock Exchange, its license agreements with Harris Moran Seed Company and ArborGen, LLC, and its joint venture with Rahan Meristem.

The Company's R&D Letter outlines the expansion of its ongoing research and development programs. As the letter indicates, the Company's research has yielded new findings, which we believe will expand opportunities to apply the Company's gene technology. The Company's research has shown that the DHS and Factor 5A genes regulate apoptosis in animal and human cells, while pre-clinical studies have shown that the Factor 5A gene is able to kill cancer cells. The letter also discusses the potential applicability of Senesco's technology in targeting major diseases such as tumors, heart disease and glaucoma.

For further information and to review these letters, please visit the Company's web site at [www.senesco.com](http://www.senesco.com).

ABOUT SENESCO TECHNOLOGIES, INC.

Senesco takes its name from the scientific term for the aging of cells: senescence. The Company has developed technology that regulates the onset of cell death. Delaying cell breakdown in plants extends freshness after harvesting, while increasing crop yields, plant size and resistance to environmental stress for flowers, fruits and vegetables. The Company believes that Senesco's technology can be used to develop superior strains of crops by delaying natural plant senescence. Senesco has begun to explore ways to trigger or delay cell death in mammals (apoptosis) to determine if the technology is applicable in human medicine. Senesco partners with leading-edge companies and earns research and development fees for applying its gene-regulating platform technology to enhance its partner's products. Senesco is headquartered in New Brunswick, New Jersey, and has research laboratories at the University of Waterloo in Ontario, Canada.

Certain statements included in this press release are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results could differ materially from such statements expressed or implied herein as a result of a variety of factors, including, but not limited to: the development of the Company's gene technology; the approval of the Company's patent applications; the successful implementation of the Company's research and development programs and joint ventures; the success of the Company's commercialization strategy, including its license agreement with Harris Moran; the acceptance by the market of the Company's products; competition and the timing of projects and trends in future operating performance, as well as other factors expressed from time to time in the Company's periodic filings with the Securities and Exchange Commission (the "SEC"). As a result, this press release should be read in conjunction with the Company's periodic filings with the SEC. The forward-looking statements contained herein are made only as of the date of this press release, and the Company undertakes no obligation to publicly update such forward-looking statements to reflect subsequent events or circumstances.

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To our Stockholders:

July 1, 2002

We would like to take this opportunity to review our performance for the fiscal year ended June 30, 2002. In our last letter to our stockholders, which was printed in our 2001 Annual Report, we set forth the following three objectives:

- 1) Securing long-term equity financing;
- 2) Achieving commercial validation of our technology by accelerating our efforts to identify new, and consummate pending, commercial partnerships through licensing or joint ventures in the Ag-Bio field; and
- 3) Strengthening our patent protection and beginning to establish the potential value of our discovery in the human and animal life science field.

Successfully securing long-term equity financing was our highest priority and was essential to supporting our other two objectives. Despite the difficult capital markets environment, during fiscal 2002, we attracted several significant, new investors, including Stanford Venture Capital Holdings, and we raised an aggregate of \$6.5 million in new equity capital. In addition, certain Board members who previously had provided bridge financing to Senesco participated in the new equity financing by converting their bridge loans into equity alongside the new investors. Our current capital provides us with sufficient cash to fund operations for approximately two years, but additional long-term funding remains a high ongoing priority for management.

The capital increase also enabled us to qualify for listing on the American Stock Exchange (Amex) and on May 17, 2002, we commenced trading on Amex under the ticker symbol SNT.

At our last stockholders meeting on November 29, 2001, we announced the signing of our first license agreement with Harris Moran Seed Company, a subsidiary of the French Cooperative Limagrain, for lettuce and melons. We are encouraged by the progress of our research collaboration with Harris Moran. The project's timelines are on track with large-scale field testing to be conducted in calendar 2003.

Our joint venture with Rahan Meristam, which studies the effect of our technology on bananas, is also progressing as planned. This collaboration, established in 1999, has a development timeline of approximately 5 years. Banana plants containing Senesco technology are expected to be tested in field plantings during calendar 2002. We have continued to advance discussions with potential commercial partners, and have recently announced a new development agreement with ArborGen, LLC for incorporation of our technology into forestry products. We continue to diligently pursue many industry contacts and we look forward to announcing additional agreements in the coming fiscal year.

The validation of the research regarding our technology's application to the life science industry continued to make significant progress. We have filed patent applications related to our discoveries, including the potential application of our technology in the fields of neuro-degenerative and ocular conditions, inflammatory disease and cancer.

We have already taken initial steps by identifying research labs and designing initial model experiments for some of the potential applications.

During fiscal 2002, we added significant strength to our Scientific Advisory Board (SAB) and Board of Directors:

- o Charles A. Dinarello, M.D., Professor of Medicine at the University of Colorado and a member of the U.S. National Academy of Sciences, joined the SAB.
- o Russell L. Jones, Ph.D., Professor at the University of California, Berkeley, a prominent researcher of plant cell biology and cell death, joined the SAB.
- o David Rector, Consultant, was elected to the Board of Directors.

All three new members have already made valuable contributions to our success.

Although the nature of our business requires a long-term time horizon to reap

the rewards of our discoveries, we believe that our technologies have significant commercial value. We are consistently achieving the milestones set forth in our discussions and presentations. We believe that pro-active communication with our stockholders within the rules set forth by the Securities and Exchange Commission is a vital and important task of management. We look forward to the future development of Senesco, and we will continue to keep you informed about our progress.

Yours sincerely,

Ruedi Stalder  
Chairman

Bruce C. Galton  
President & CEO

## TO OUR STOCKHOLDERS:

I am pleased to provide an update on some significant developments in Senesco's Research and Development program. In particular, the research indicates that our technology has a more broadly based platform of application than initially envisaged.

## EXPANDED COMPANY FOCUS

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Senesco is a functional genomics company whose mission is to develop technology for the postponement of programmed cell death. Our technology is based on the discovery of three genes, lipase; DHS; and Factor 5A, which regulate the onset and execution of senescence (programmed cell death) in plants. Since the discovery of these genes, we have demonstrated that they can be used to enhance the quality and productivity of important crops for commercial agriculture. Of particular note, however, is our belief that Senesco's proprietary gene technology may also regulate apoptosis (programmed cell death) in animals and humans. This means that our technology also has potential application in the life sciences area as a means of controlling the broad range of human diseases that are rooted in abnormalities of programmed cell death.

## AGRICULTURAL SECTOR

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When Senesco was founded in 1998, our mission was to prevent spoilage of perishable produce (flowers, fruits, and vegetables) through the genetic control of senescence, thus enhancing crop quality. In the interim, our research has shown that Senesco's proprietary gene technology may have additional applications. Specifically, it appears that the genes can be used not only to increase the shelf-life of perishable fruits, flowers and vegetables by delaying senescence, but also to increase biomass, seed yield and tolerance to environmental stress in both horticultural and agronomic crops. These new findings have significantly broadened the platform for application of our technology in the commercial agricultural industry. Indeed, it appears that our technology may have application to virtually every crop. Through in-house research and development, as well as current and pending commercial partnerships, our technology is being introduced into various horticultural crops, such as tomato, carnation, lettuce, melon and banana, as well as canola, an oil-producing crop, and forage and forest crops.

## LIFE SCIENCES SECTOR

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Senescence, which is the term used to describe programmed cell death in plants, is analogous to apoptosis, the term used to describe programmed cell death in animals and humans. In both cases, cell death occurs in accordance with a genetic program, either at the end of a cell's normal lifespan or prematurely in response to a stress (e.g. drought in the case of plants or disease in the case of animals and humans). Moreover, like other processes that are common to plant and animal cells, senescence and apoptosis are regulated in a similar manner. Thus, it was a logical step to determine whether our proprietary plant gene technology might also regulate apoptosis.

Our preliminary research reveals that DHS and Factor 5A regulate apoptosis in animal and human cells. The mammalian apoptosis isoforms of DHS and Factor 5A were first isolated from the corpus luteum of rat. This is a tissue in the ovary that 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 Factor 5A 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 3 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, they can 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 (e.g. Alzheimer's disease, Parkinson's disease), retinal diseases (e.g. glaucoma, macular degeneration), heart and stroke disease and arthritis.

We have also established in pre-clinical studies that our proprietary 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 Senesco's 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, increased levels of apoptosis ranging from 50% to 250% were evident. Moreover, just as the senescence Factor 5A appears to facilitate expression of the entire suite of genes required for programmed cell death in plants, the apoptosis Factor 5A appears to regulate expression of a suite of proteins required for programmed cell death in mammals. For example, over expression of apoptosis Factor 5A up-regulates p53, an important tumor suppressor gene that initiates apoptosis in cells with damaged DNA and also down regulates bcl-2, a suppressor of apoptosis. Because Factor 5A appears to function at the 'well-head' of the apoptotic pathways, the Company believes that its gene technology has potential application as a means of combating a broad range of cancers.

#### NEW INITIATIVES

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Our challenge in the coming months is to test the efficacy of the technology as a means of controlling specific disease states using live animals and tissue samples, as well as cell lines. Preclinical investigations with cell lines have provided strong indications that these studies will be successful. Accordingly, we have initiated new university research collaborations with the University of Colorado and the University of Waterloo that will address the application of our technology to specific tumors, heart disease and glaucoma.

Yours sincerely,

John E. Thompson, Ph.D.  
Executive Vice President, Research and Development