EDEN BIOSCIENCE CORP Form 10-K March 15, 2006

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# FORM 10-K

(Mark One)

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2005

OR

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

For the transition period from

to

Commission File No. 0-31499

# Eden Bioscience Corporation (Exact name of registrant as specified in its charter)

Washington91-1649604(State or other jurisdiction of<br/>incorporation or organization)(IRS Employer<br/>Identification No.)

11816 North Creek Parkway N., Bothell, Washington (Address of principal executive offices)

98011-8201 (Zip code)

(425) 806-7300

(Registrant s telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None

#### Securities registered pursuant to Section 12(g) of the Act: Common stock, par value \$0.0025 per share (Title of class)

Indicate by check mark if the registrant is a well-known-seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [ ] No [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes [ ] No [X]

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 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 []

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act of 1934.

Large accelerated filer [ ] Accelerated filer [ ] Non-accelerated filer [X]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes [ ] No [X]

The aggregate market value of the common stock held by non-affiliates of the registrant, based on the closing sale price on June 30, 2005 as reported on The Nasdaq National Market, was \$14,229,868.

The number of shares of the registrant s common stock outstanding as of March 14, 2006 was 24,406,870.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of Eden Bioscience Corporation s proxy statement for its 2006 Annual Meeting of Shareholders to be filed with the Commission pursuant to Regulation 14A not later than 120 days after December 31, 2005 are incorporated by reference in Part III of this Form 10-K.

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#### PART I

This Annual Report on Form 10-K and the documents incorporated herein by reference contain forward-looking statements. These statements relate to future events or our future financial performance. In some cases, you can identify forward-looking statements by terminology such as expect, intend, anticipate, believe, predict, potential or continue, the negative of these may, should, plan, estimate, terminology. These statements are only predictions. Actual events or results may differ materially. In evaluating these statements, you should specifically consider various factors, including the risks outlined in Item 1Aof this report. These factors may cause our actual results to differ materially from any forward-looking statement. The cautionary statements made in this document should be read as being applicable to all forward-looking statements wherever they appear in this document. We undertake no obligation to publicly release any revisions to these forward-looking statements that may be made to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

#### Item 1. Business.

#### Overview

Eden Bioscience is a plant health technology company that markets a line of products based on our proprietary harpin protein technology and manufacturing processes. These products are marketed under the umbrella brand of Harp-N-Tek and are used in agricultural and horticultural production as well as the Home & Garden market. We believe that Harp-N-Tek products enhance plant health and improve overall plant production and output quality. Harpins are naturally occurring proteins produced by disease-causing bacteria that attack plants. Harpin proteins are not a part of the destructive disease complex but instead serve the beneficial purpose of alerting plants to the fact that they are under attack. They activate signaling receptors present in most plants designed to specifically detect the presence of harpin proteins. This warning signal is transmitted throughout the plant and turns on the plant s intrinsic ability to protect itself by deploying both growth and defense responses. Eden Bioscience s Harp-N-Tek products provide these harmless yet potent signal-inducing harpin proteins and protein extracts, which trigger beneficial responses designed to protect plants, to help plants grow through stress, to improve plants uptake of nutrients, and to enhance the overall level of plant health. The mode of action of Harp-N-Tek products differ from other plant health and protection products. They work by turning on the plant s own natural inside-out growth and defense capabilities. In the absence of growing plants, Harp-N-Tek products have no activity. They have no direct effect on any pest or on the plant s external environment. Even when sprayed on a plant, Harp-N-Tek products do not enter the plant. They bind with the plant s external harpin protein receptors. Since Harp-N-Tek products rapidly biodegrade, they do not persist on the plant or in the environment, nor leave any detectible residue. Standard plant protection products are designed to directly attack pests in the plant s external environment using either an outside-only (non-systemic) or an outside-in (systemic) mode of action. Harp-N-Tek products complement these outside-only and outside-in modes of action, and can be used in conjunction with most standard plant protection products to gain the added advantage of the inside-out mode of action.

Harp-N-Tek products activate the plant s innate, interrelated physiological processes for self-defense, stress-relief, and growth. These responses can be turned on through seed treatments and/or foliar sprays. This flexibility of use provides several different products and application

strategies for obtaining beneficial results. One strategy is to time applications to coincide with physiologically significant events in the plant s life cycle. The goal is to enhance the plant s productive capacity during critical stages such as early root development, peak nutrient utilization, or bloom initiation. Another application strategy is to use Harp-N-Tek products in anticipation of predictable stress-defense events. These may be related to pre-existing challenges such as the presence of nematodes at planting, or may be related to cultural practices, such as the stress caused by transplanting or the application of many post-emergence chemicals.

The first Harp-N-Tek product commercialized was Messenger®, which contained the first generation protein harping. Messenger received Environmental Protection Agency (EPA) approval in April 2000,

and we began sales in August 2000. In January 2004, we introduced an improved EPA-approved formulation of Messenger trade named Messenger® STS. This formulation improved our initial formulation in three important areas: tolerance to chlorinated water, slower degradation in the application tank after mixing with water, and longer shelf life in the product container after opening. Messenger STS continues to be used in high-value tree, vine, fruit, and vegetable crops. Applications are timed to occur during physiologically significant events and the results sought are improved output quality, increased marketable yields, and enhanced shelf life. Sales of the original formulation of Messenger will be discontinued over time as all appropriate registrations have been received for Messenger STS, allowing for introduction of the improved formulation.

Our sales of Messenger and Messenger STS to distributors and usage by growers have been significantly below our expectations since our inception. Our sales suggest that the initial emphasis on disease control as one of the primary benefits of using Messenger was not accepted by the marketplace. In the fall of 2002, we began the process of repositioning Messenger as a plant health regulator for increasing marketable yield, quality, and shelf life in high value crops. We believed market research conducted in the spring and summer of 2003 revealed that enhancing our value proposition to growers could increase the amount of product used by growers. We implemented a sales promotion through our distributors in the fall of 2003 to test our research and the response it predicted and to select a new price level. We believed the results of our test market validated our research, demonstrated the potential of an enhanced value proposition in increasing grower usage, and led us to significantly reduce the per-ounce price of Messenger and Messenger STS for 2004 compared to the per-ounce price of Messenger in 2003. Our strategy did not generate the anticipated increase in grower usage in high value crops in the US; although we believe it did result in a significant increase in usage in row crops. In Spain and in the Home and Garden market, where Messenger was introduced as a plant health regulator using our new value proposition, sales in 2004 met or exceeded our expectations. Our overall grower usage for 2004 of Messenger and Messenger STS increased only 9%. In 2005, grower usage of Messenger products increased 8% overall and 48% outside the US. Messenger sales in the US were negatively impacted by the introduction of our second generation harpin protein product, ProAct, as a replacement for Messenger STS in row crop markets. In 2005, distributor inventory of Messenger products decreased by 40% to 309,000 ounces. With our inventory at this level, we believe sales to distributors will be the best representation of future Mes

Our market research also indicates that plant nutrition is another market closely associated with plant health. In 2004, we introduced both employ and MightyPlant , a new line of products designed especially for the plant nutrition market. MightyPlant and employ contain protein extracts from the manufacturing process of both harpin $_{\text{EA}}$  and/or harpin $_{\text{GB}}$  proteins. Employ is specifically designed to enhance nutrient uptake when mixed in the application tank with foliar nutrients and is a non-EPA regulated product. The research we conducted on nutrient uptake has also allowed us to develop Harp-N-Tek inside fertilizers, under the trade named MightyPlant. These products are also not regulated by the EPA. Our first product, MightyPlant 18-18-18, was introduced in a test market in the Home & Garden segment in April of 2004 and in a test market for agricultural use in June of the same year. Market response to MightyPlant 18-18-18 has been favorable. We introduced our second product, MightyPlant 15-0-40 CitrusSet, in January of 2005. This was followed by the introduction of MightyPlant 11-41-08 in November of 2005 for turf markets. The MightyPlant line of products not only represents a new market entry for Harp-N-Tek products; it is also a new strategy for marketing harpin technology by taking products already being used in the marketplace and creating value added products that incorporate our technology. In the specific case of MightyPlant, most high value crops receive in-season foliar sprays of nutrients to augment soil fertility levels at times of significant plant nutrient utilization. MightyPlant 18-18-18, MightyPlant 15-0-40 CitrusSet, and MightyPlant 11-41-08 are Harp-N-Tek inside formulations of existing foliar fertilizers that are already being used extensively in high value crops and turf. The harpin technology enhances nutrient activity and this allows MightyPlant to be sold as a value-added substitute for existing commodity products.

In September of 2004, we received registration from the EPA for N-Hibit seed treatment. It utilizes the first generation harpina protein and is specially formulated to reduce nematode populations by turning on the

plant s own natural capabilities to defend itself. N-Hibit illustrates the complimentary mode-of-action from using Harp-N-Tek products that work from the inside-out in conjunction with standard pesticides that normally work from the outside-in. Nematodes are a predictable stress event on a large acreage of cotton. Nematode damage starts at planting and nematode populations increase rapidly as the season progresses. The most widely used cultural practices are for the suppression of nematode populations. The widely used products are insecticides that work outside the plant in its root zone. With moisture, these insecticides are absorbed by the plant and dispersed throughout the plant for systemic control. As the plant grows, the insecticide concentration in the plant decreases, the roots grow out of the treated zone in the soil, and the effectiveness of nematode suppression is reduced. N-Hibit is also used at planting to suppress egg reproduction but the inside-out, whole plant defense mechanism is activated with seed germination and is not affected by the size of the externally treated zone in the soil. University research has shown that the performance of N-Hibit compared favorably with current products in use. N-Hibit was launched in the US cotton market in February of 2005 to be used in conjunction with existing nematode suppression strategies. Initial sales of N-Hibit were encouraging and the second year of field results was positive. We expect sales of N-Hibit to increase in 2006.

In February of 2005, we received EPA registration for ProAct . It is made using the next generation harpin protein harpin ProAct was developed specifically to enhance yield in row crops such as corn, cotton, rice, and other cereals. In the development of ProAct, we targeted applications around a predictable stress event related to cultural practices associated with weed control by combining ProAct with existing post-emerge herbicide applications. In field trials conducted in 2003, ProAct generated an average yield increase of 9% in cotton and 8% in corn at application rates containing one-sixth the active ingredient used in Messenger. In 2004, we received an experimental use permit from the EPA and expanded our development program to include rice. We contracted with independent scientist and crop experts to conduct all 2004 trials. In approximately 20 commercial and replicated cotton trials, ProAct generated increased yields across all tested application rates and timings. We selected the one-ounce per acre application rate for commercialization because we believe it provides the most attractive return on investment for growers with an average yield increase, based on field trial data, of 11% when applied with existing applications of glyphosate post-emerge herbicide and 9% when applied after glyphosate. In field trials conducted in 2005, ProAct averaged a 53 pound lint yield increase across 99 yield comparisons. The three-year average yield increase in cotton across 135 comparisons with ProAct, based on field trial data, is 69 pounds, which we believe provides a favorable return on investment to growers. In 3 replicated rice trials in 2004, ProAct produced an average yield increase of 6 bushels per acre at the one-half ounce application rate. In replicated rice trials conducted in 2005, the average yield increase was 5.7 bushels. These commercial use rates require one-sixth to one-twelfth the active ingredient used in Messenger and provide similar or better performance. This has allowed us to make what we believe is an attractive economic proposal to growers in these crops. We also expanded our field research in 2005 to soybeans. In 8 replicated trials, yields were increased by 5.9% at the one-half ounce rate and 10.9% at the one ounce rate.

In 11 replicated corn trials in 2004, ProAct increased corn yields on average by eight bushels per acre at the one-half ounce per acre rate when applied with the first application of glyphosate herbicide. In February of 2005, Eden Bioscience and the National Corn Growers Association (NCGA) entered into an agreement to co-sponsor a ProAct Partnership Program for corn growers who are NCGA members. Under this program, corn growers with combine yield monitors conducted trial plots of about 20 acres each. They then determined yield increases and other beneficial results from ProAct treatments. This program was designed to provide further information on ProAct performance in a variety of post-emergence weed management systems, growing conditions, and tillage systems across the Corn Belt. As part of this program, NCGA members also qualified for a \$1.00 per ounce discount on ProAct. The average yield increase across this broad geographic range of trials in 2005 was five bushels per acre, making the three year average yield increase with ProAct, based on field trial data, seven bushels per acre.

In shelf-life studies in bagged lettuce conducted by the University of Arizona in 2004, the harpin $_{\alpha\beta}$  protein gave superior performance in reducing microbial populations relative to the harpin $_{\alpha\beta}$  protein at rates

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of active ingredient one-sixth of those used for Messenger. At an active ingredient concentration one-third that used in Messenger, the shelf life of bagged lettuce was increased from 12 days for the untreated control to 18 days for the harpin $_{\alpha\beta}$  protein treated sample. These results have led us to conclude that further study of the harpin $_{\alpha\beta}$  protein s performance in enhancing shelf life should be investigated, as well as, comparing ProAct performance to Messenger STS performance in high value crops.

In March 2003, we began limited marketing of Messenger to the Home and Garden market, focusing primarily on roses. In 2004, we used the information we gained in 2003 and incorporated it into an expanded marketing plan concentrating our Home and Garden efforts in the Pacific Northwest and the Northeastern regions of the United States. We also introduced MightyPlant as a test market. We expanded our efforts with plant-specific interest groups such as the American Rose Society and, in addition to the endorsement from the American Rose Society, we received endorsements for Messenger from the National Home Gardening Club and the National Gardening Association. We expect to receive additional society endorsements in 2006. We greatly increased resources allocated to the Home and Garden market in 2005 and expanded our efforts to include the Southeastern US in our target areas. Sales in the Home and Garden segment grew by 100% in 2005 and continued strong growth is expected in 2006. In January of 2006, we introduced Messenger seed treatment in a puffer applicator bottle for Home and Garden use.

In 2005, sales of new products accounted for 51% of total revenue. Sales of Messenger products represented 39% of total revenue and sales in the Home & Garden market accounted for 10% of total revenue. Our near-term priorities are to build on the successful introduction and commercialization of N-Hibit, ProAct, and MightyPlant in the US agricultural market; continue to aggressively pursue the expansion of Messenger sales in Spain; and increase sales in the Home and Garden market. We will also investigate the potential of ProAct in high value crop markets now served with Messenger products and the efficacy of the harpin $_{\alpha\beta}$  protein in seed treatments. In 2005, we expanded our sales outside of the United States and Spain with new sales in Turkey, Greece, South Africa, and Asian markets and with the sale of harpin proteins as an input for enhanced nutrient products. We will continue to seek growth in these markets and we will expand our efforts in row crops in the US and other countries with ProAct. We believe that the additional products and technologies currently being commercialized have the potential to enhance performance in specific markets, reduce our production costs and provide the combination of performance and economics necessary to create a profitable company. Due to the growing seasons of our targeted crops, we expect grower usage of our products to be highly seasonal and believe the second quarter of each year to be the most significant period of use. We have incurred significant operating losses since inception. We have reduced the cash used in operations from \$17.6 million in 2002 to \$5.2 million in 2005.

We were incorporated in the state of Washington in 1994.

#### **Industry Overview**

In order to remain competitive in the global agricultural marketplace, growers are consistently challenged to increase productivity by improving crop yield and quality. Over the last several decades, growers have relied on the development of more effective farming practices, improved plant protection and yield enhancement methods and products to limit agricultural crop losses and to increase the yield and quality of their crops. In recent years, however, the rate at which advanced growers have been able to further improve crop productivity has declined as improved farming practices have become more fully implemented, as land suitable for conversion to farming has become scarcer and as concerns about the environmental impact of farming practices have increased. Moreover, growers today face increasing scarcity of available resources, such as labor, water and land, and increasing restrictions on the use of traditional chemical pesticides. At the same time, the global demand for food and improved food quality continues to increase with population growth and generally rising standards of living.

In today s competitive agricultural environment, growers must maximize crop productivity by enhancing yield and minimizing crop losses both before and after harvest. In addition to basic agronomic practices such

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as crop rotation, cultivation or variety selection, growers generally have two alternatives to limit economic losses and increase yields. The first approach is to use traditional chemical pesticides, and the second is to grow genetically modified plants that are engineered to resist certain insects or to tolerate applications of nonselective herbicides. Each of these approaches has come under criticism from a variety of sources worldwide including environmental groups, government regulators, consumers and labor advocacy groups.

#### Traditional Chemical Pesticides

Growers use traditional chemical pesticides to kill weeds, insects, microorganisms and other pests. Although generally effective in killing targeted pests, traditional pesticides are targeted at the environment external to the plant and may have serious adverse side effects. Pesticide applicators and field workers face risks from direct exposure to toxic chemical pesticides and are required to obtain specialized training and follow EPA-approved label instructions. In addition, use of chemical pesticides often suppresses beneficial insects and microorganisms that otherwise provide a degree of natural protection. Over time, many pathogens and pests develop resistance to chemical pesticides.

Over the past 50 years, increased use of pesticides, with their potential risks and problems, has heightened public awareness and concern over their environmental and health hazards. As a result, the U.S. government and various state and foreign governments have imposed increasingly stringent regulations on the manufacture and use of chemical pesticides.

Regulatory and public pressure is forcing manufacturers to remove many traditional chemical pesticides from the market. Over the last 15 years, numerous pesticide products have been removed from the marketplace or have been severely restricted in their allowable uses. Currently, many widely used pesticides are subject to extensive and costly re-registration requirements mandated by changes in federal pesticide laws. As a result of these regulatory constraints as well as other economic pressures, growers have increasingly sought new technologies to protect crops and maintain profit margins.

Genetically Modified Plants

Scientific advances, coupled with the health and environmental problems associated with conventional chemical pesticides, led to the introduction of genetically modified plants in the early 1990s. These products can provide a variety of pesticidal and other benefits. Genetically modified plants have been developed to produce herbicide-tolerant, insect-resistant or virus-resistant crops. In addition, improved output traits, including those designed to create higher-quality animal feed, have been introduced into the market.

While genetically modified plants have been widely used, environmental groups, some scientists and consumers, especially in Europe, have raised questions regarding the potential adverse side effects, long-term risks and uncertainties associated with genetically modified plants. Some countries, primarily in the European Union, have established restrictions on the planting of certain genetically modified seeds or on the importation of grain produced from these seeds. Moreover, some countries, including Japan and certain members of the European Union, have imposed labeling requirements on genetically modified food products, and federal legislation requiring such labeling has been proposed in the United States. Several food-related companies have indicated that they will not use genetically modified crops in their products.

#### The Eden Bioscience Solution and Advantages

Utilizing our harpin and harpin-related technology, we have developed and are continuing to develop Harp-N-Tek products that have no direct impact on the environment external to the plant but rather activate the plant s natural, innate, and interrelated physiological processes for self-defense, stress-relief, and growth.

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The Harp-N-Tek component of our products works without entering the plant and then rapidly biodegrades. We believe our Harp-N-Tek products provide the following valuable benefits to growers:

Simultaneous activation of natural plant systems to:

Improve plant health, growth, crop yield, shelf-life, and quality. We have demonstrated an ability to activate the plant s interrelated physiological processes for self-defense, stress-relief, and growth. These plant responses can be turned on through seed treatments and/or foliar sprays and applications can be timed to coincide with physiologically significant events in the plant s life cycle or in anticipation of predictable stress-defense events. These responses result in improved plant growth as evidenced by increases in one or more of the following: biomass, photosynthesis, nutrient uptake and root development. We believe the improved plant growth observed in our field trials of Harp-N-Tek products leads to improved plant health and generally increased yields, shelf-life, and quality over current agronomic practices.

Resist and/or suppress a broad array of stresses caused by outside factors in the production cycle. Our technology has demonstrated an ability to enhance overall plant health and to activate plants natural self-defense and stress-relief systems, all of which help to assist in defense against a broad spectrum of stresses caused by certain disease and cultural practices when used as part of an Integrated Pest Management program.

Suppress nematode egg reproduction per root weight. Our technology has demonstrated the ability to reduce nematode egg reproduction when used as a seed treatment, foliar application, or expressed in modified plants.

Effectiveness across a wide array of crops. Our technology has proven effective in activating natural, innate, interrelated physiological processes for self-defense, stress-relief, and growth systems in over 40 crops, including high-value crops such as citrus, grapes, tomatoes, peppers, cucumbers, melons, stone fruits, tobacco and strawberries; traditional field crops such as cotton, wheat, rice and corn; and ornamental crops such as roses.

Reduced risk of environmental damage and improved worker safety. Based on independent toxicology studies, in-house laboratory tests and extensive field-testing, we believe harpin protein has little, if any, impact on the environment. As a result, we believe Harp-N-Tek products have significant advantages over traditional chemical pesticides in terms of worker safety and environmental consequences.

Reduced likelihood of pest resistance. Over time, the direct killing function associated with chemical pesticides sometimes results in pest and pathogen resistance. Because the mode of action of our technology has no direct effect on the environment and works through the initiation of the plant s own natural responses, we believe it is less likely that pests and pathogens will develop resistance to our products.

#### **Our Business Strategy**

Our objective is to utilize our proprietary technology to develop, manufacture and market Harp-N-Tek products that enhance crop yield, quality, and/or shelf life and that improve plant health and the plant s ability to defend itself from predictable stresses. We plan to achieve this goal by implementing the following key strategies:

Introduce and commercialize new Harp-N-Tek products, continue to commercialize existing products, build and expand on the successful introduction of Messenger in Spain, and seek new market opportunities outside the United States. We plan to continue to commercialize N-Hibit, ProAct, and existing MightyPlant products, and explore opportunities for new MightyPlant products while we continue our efforts with Messenger STS, Messenger for Home and Garden, and employ in the United States. We will increase our activities related to Messenger in Spain and expand from this sales base into other European countries. We initiated sales of Messenger in Turkey and Greece in 2005. We will

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also move to introduce new Harp-N-Tek products and Harp-N-Tek inside foliar fertilizer formulations in other countries. We are conducting marketing activities designed to promote the distribution and sale of our products. We plan to commercialize present products and any future products we may develop by beginning sales in the United States and expanding to foreign countries over time as we obtain regulatory approvals and establish business relationships.

Promote the benefits of our Harp-N-Tek products and of harpin-related technology. We intend to use our existing and growing body of field trial results to promote the use of our existing commercial Harp-N-Tek products and the benefits of our proprietary technology. We plan to build market awareness through a wide range of distributor and grower education activities, advertising, field demonstration programs, materials and events, including conference and trade show appearances and the dissemination of sales literature and promotional materials.

Continue to develop new products that utilize our harpin technology, activate natural plant growth and defense systems; and enhance overall plant health. We plan to focus our research and development activities on developing formulations that allow us to add our harpin technology to existing products and create new value added Harp-N-Tek products. We will concentrate our Field Biology and Development activities on commercializing our existing Harp-N-Tek products; on using them in conjunction with existing cultural practices; and exploring the potential of the harpin $_{\alpha\beta}$  protein in current Messenger markets. We have also found that the value of our technology is best expressed when applications are made to coincide with physiologically significant events or in anticipation of stress-defense events. Physiologically significant events in the plant s life cycle are critical stages such as bloom initiation or peak nutrient utilization while stress events are often a result of cultural practices or uncontrollable weather events.

Control and protect our technology. We own or have obtained exclusive worldwide rights to patents and patent applications that cover harpin proteins, genes encoding harpins and their use and other related technologies. We plan to aggressively protect our control of these technologies by enforcing our current patents and filing additional patent applications as warranted.

Maintain control over product manufacturing. In order to control the quality and supply of our current products and any future products we may develop and to help maintain our proprietary position, we intend to retain control over the manufacturing of these products. We have established comprehensive and detailed quality control and assurance systems to ensure that we sell the highest quality products. We will use independent manufacturing arrangements only when we can satisfy ourselves that we can maintain our quality standards.

#### **Core Technology Platform**

The active ingredient in Harp-N-Tek products is or comes from the manufacture of one of a class of environmentally safe, nontoxic proteins called harpins, which were discovered by Dr. Zhongmin Wei, our Vice President of Research and Chief Scientific Officer, and his colleagues while at Cornell University. *Science* magazine published the related study as its cover story in July 1992. The USDA also recognized the discovery, describing it as a scientific breakthrough in understanding how plants respond to pathogens.

Plants have powerful natural defense mechanisms. Plants generally resist pathogens, or restrict their proliferation, by causing localized necrosis, or death of tissues, to a small zone surrounding the site of infection. This resistance by the plant is called the hypersensitive response. In addition to the localized hypersensitive response, plants respond to infection by activating defenses in parts of the plant that were not infected by the original pathogen, increasing resistance to further or secondary infections by the same and other pathogens. The activation and maintenance of defense systems in the uninfected regions of a plant are referred to as systemic acquired resistance. Systemic acquired resistance confers

long-lasting systemic disease resistance against a broad spectrum of pathogens.

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Researchers have studied these natural defense mechanisms for over 30 years seeking to understand how plants recognize an infection and what activates their defense systems. Dr. Wei and his colleagues were able to isolate and characterize the harpin protein, a previously undescribed class of proteins associated with activating these responses. They established that when certain bacterial infections occur, the bacteria secrete a harpin protein, which, in turn, signals the plant to generate a defense against the infection. Later they discovered that direct topical application of trace amounts of harpin to the surface of the plant leaf or seed signals the plant to activate multiple stress-defense and growth-enhancing responses without visible hypersensitive response.

### **How Harpin Works**

The harpin protein serves to initiate several key plant reactions that generally result in improved plant health. Once harpin protein is applied to a plant and binds to a plant receptor, production of hydrogen peroxide, an important mechanism of plant defense, is induced in plant cells and a series of ion exchanges are stimulated in the cell membrane. Then, a series of signal transductions occur that result in the following benefits:

Improved plant health. Harpin is able to induce the expression of many plant growth, self-defense, and stress-relief related genes, such as systemic acquired resistance, stress resistance, cell elongation, ion channels, cell wall development, photosynthesis proteins, flowering initiation and fruit size. Activation of plant growth pathways can result in increased photosynthesis, nutrient uptake, biomass and root development. Activation of stress-relief and self-defense pathways enhances the plant s natural abilities to suppress diseases and overcome other environmental stresses.

*Improved marketable yield, quality, and shelf-life.* Harpin initiates a reinforcing cycle of plant responses that enhance plant health and subsequently enhance the plant sability to respond to stresses and to grow. This beneficial, reinforcing cycle of plant health results in production benefits related to improved marketable yields, quality and shelf-life.

The first harpin was isolated from *Erwinia amylovora*, a pathogenic bacterium that causes fire blight in apple, pear and other rosaceous plants. Since then, Eden Bioscience and Cornell University, as well as other research institutions, have isolated several harpin or harpin-like proteins from other major groups of plant pathogenic bacteria. We believe we own or have licensed the exclusive right to use the harpin family of proteins.

#### **Our Products**

We have developed a line of Harp-N-Tek products based on Eden Bioscience s proprietary harpin protein technology and manufacturing processes. Harpins are naturally occurring proteins produced by disease-causing bacteria that attack plants. Harpin proteins are not a part of the destructive disease complex but instead serve the beneficial purpose of alerting plants to the fact that they are under attack. They activate signaling receptors present in all plants designed to specifically detect the presence of harpin proteins. This warning signal is transmitted throughout the plant and turns on the plant s intrinsic ability to protect itself by deploying both growth and defense responses. Eden Bioscience s Harp-N-Tek products provide these harmless yet potent signal-inducing harpin proteins and protein extracts, which trigger beneficial responses designed to protect plants, to help plants grow through stress, and to enhance the overall level of plant health. We have developed seven EPA regulated products, Messenger, Messenger for Home and Garden, Messenger Seed Treatment for Home & Garden Messenger STS, N-Hibit, N-Hibit CST, and ProAct. The mode of action of these products different from other plant health and protection products. They work by turning on the plant s own natural inside-out growth and defense capabilities. In the absence of growing plants, these products have no activity. They have no direct effect on any pest or on the plant s external environment. Even when sprayed on a plant, these products do not enter the plant. They bind with the plant s external harpin protein receptors. Since these products rapidly biodegrade, they do not persist on the plant or in the environment, nor leave any detectible residue. All effects are a result of activating the plant s natural mechanisms. We have also developed four products that are regulated under state nutritional laws, employ, MightyPlant 18-18-18,

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pathways.

Harp-N-Tek products are either water-soluble granules or powders that are topically applied either independently or in conjunction with certain traditional agricultural chemicals or that are water insoluble powders used as seed treatments. We believe these products provide all the advantages of our core technology, including:

simultaneous activation of natural plant systems to improve plant health, leading to improved marketable yield, quality, and shelf-life; effectiveness across a wide array of crops; reduced risk of environmental damage; increased worker safety; and reduced likelihood of pest resistance.

In addition to these key advantages of our proprietary technology, we believe Harp-N-Tek products provide the following additional benefits:

Low dosage and quick activation of plant systems. Generally, only one-half to four grams of harpin protein, the active ingredient in Harp-N-Tek products, are required to treat one acre of crops. Upon application, harpin proteins quickly initiate the activation of the plant s growth and stress-defense systems, with full activation occurring within three to five days. The quick response to harpin protein reduces the need for re-application when rainfall occurs shortly after application.

Simple application. Harp-N-Tek products can be applied using standard equipment and a variety of simple application methods, such as direct foliar sprays, seed treatments and soil drenches. For foliar spray applications, Harp-N-Tek products are mixed with water, either alone or in combination with certain other plant treatments, and applied using conventional spray equipment. In contrast to many traditional pesticides, which generally require that each individual plant leaf be sprayed, it is not necessary to spray the entire plant for harpin proteins to be effective.

Extended effect. In certain crops, such as corn, wheat and rice, we believe repeat applications of Harp-N-Tek products are not necessary. For other crops, such as fresh vegetables and ornamentals, repeat applications have been shown to enhance the growth and stress-relief and self-defense benefits.

Reduced use restrictions and ease of disposal. Many chemical pesticides have restrictions that prohibit farm workers from re-entering treated fields or greenhouses for periods of 24 to 48 hours, which may cause significant delays in grower activities. Harp-N-Tek products, on the other hand, qualify for the EPA s minimum restricted entry interval of four hours. Similarly, many chemical pesticides are subject to restrictions that impose minimum time periods, ranging from a few days to several weeks, between the product s last application and the time of harvest. Because Harp-N-Tek products are virtually nontoxic and leave no detectable residues on treated crops, there is no pre-harvest interval. In addition, in contrast to most traditional chemical pesticides, personal protective equipment, such as respirators, rubber gloves, boots and complete suits of protective outerwear, is generally not required for workers applying Harp-N-Tek products, although approved Messenger product labels in some foreign countries may recommend the use of additional protective clothing and gloves. Unlike products containing toxic chemicals, Harp-N-Tek products packaging materials can be disposed of in traditional municipal or county waste collection systems, although some foreign countries may require specific disposal methods.

Harp-N-Tek products Performance in Field Trials

We conduct both small scientifically oriented field trials and large demonstration field trials to test the efficacy and performance of our products, to educate growers and their advisors regarding the benefits and use of these products, and to generate data to enable us to improve application rates and timing. In addition, we

conduct field trials in connection with our research and development of new products. Field trials are conducted with major growers, universities and consultants. Generally, we pay these independent third parties to execute, evaluate and report on our trials pursuant to specific protocols agreed to by such parties. Cooperator compliance with agreed protocols is monitored by our field development scientists.

Since 1996, we have completed in excess of 1,200 field trials on over 40 crops in the United States, Spain and other European countries, the People s Republic of China, Mexico, Africa, the Middle East and other countries and regions of the world. The majority of trials were conducted on citrus, cotton, cucumber, peppers, strawberries, tobacco, tomatoes, grapes and corn. Our field trials generally demonstrated that Harp-N-Tek products deliver one or more of the targeted benefits of increased marketable yield, enhanced quality and extended shelf-life. employ and MightyPlant have been tested for enhancing nutrient uptake in the agricultural crop market and the Home and Garden market, respectively.

Field trials are subject to numerous environmental and human circumstances beyond our control and results can vary significantly. Not all the trials we have conducted have shown commercially significant results. As resources allow, we plan to continue to research the crops that may prove to be unresponsive to Harp-N-Tek products as we learn more about agronomic growing practices and plant biochemistry through our research programs.

Harp-N-Tek products Safety

Independent toxicology studies, in-house laboratory tests and our extensive field-testing experience demonstrate that Harp-N-Tek products are virtually nontoxic to humans and the environment. The following is a summary of the human health and environmental safety attributes of Harp-N-Tek products:

*Negligible human dietary and environmental exposure*. There is virtually no human dietary or environmental exposure to Harp-N-Tek products resulting from application of the products. Product residues on treated crops are rapidly degraded by sunlight, rain and microorganisms and are undetectable within three to ten days following application, even when applied at rates far above our recommended application rates.

Safe for animals. The EPA requires that toxicology studies be conducted to evaluate the impact of products on selected animals. The EPA-required mammalian toxicology testing placed Harp-N-Tek products in the EPA s Toxicity Category III or IV, designations reserved for materials with lower hazard potential. Unlike many plant protection and yield enhancement products, Harp-N-Tek products require no label warnings or special use restrictions to protect animals.

*Nontoxic to plants*. Harp-N-Tek products have never been observed to cause phytotoxicity or any other adverse effects in plants during the course of hundreds of field trials conducted on a variety of crops under a wide range of environmental conditions. Also, we have not observed any adverse effects attributable to Harp-N-Tek products in numerous controlled laboratory studies to evaluate their effects on seedling germination and emergence.

Safe for use in sensitive habitats. The EPA has expressed concern about the use of crop protection products in or around highly sensitive habitats such as estuaries and areas inhabited by threatened or endangered plants or animals. Because Harp-N-Tek products exhibit such a high degree of safety to plants and non-target organisms, we believe they are ideal candidates for use within and adjacent to environmentally sensitive areas and the Harp-N-Tek products labels bear no restrictions or precautions regarding such use.

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#### Sales, Marketing and Distribution

Our marketing activities are designed to promote and demonstrate the benefits of our Harp-N-Tek products to growers, distributors, crop experts, and other interested parties. We market and sell our EPA registered products as plant health regulators to be used in growers integrated crop production programs. We sell our nutritional products to be used in conjunction with or as a replacement for existing nutritional sprays.

In the commercial agriculture market, our 2005 efforts focused on the introduction of N-Hibit, ProAct, and MightyPlant products as well as the continued expansion of our Messenger products business. Our efforts in the US were more focused on row crops than in past years with the registration of N-Hibit and ProAct while our efforts in high value crops expanded to include MightyPlant products. This crop concentration was chosen based on market size, consistency of product performance, geographic concentration, grower concentration and our ability to communicate the benefits of our products to distributors and growers. In addition, we are focusing on leading commercial growers who have

significant purchasing power and are generally considered early adopters of new technologies. We are working with these growers and their consultants in field demonstrations, enabling them to become familiar with our products and to experience their benefits firsthand. Our efforts in 2006 will be focused on consolidating and expanding our 2005 gains in row crops and the Home & Garden market in the United States and high value crops in Spain.

Our experience indicates that it is important for our representatives to follow-up with distributors, consultants, and growers so that benefits of using Harp-N-Tek products are fully understood by them. We believe that success in growers adoption of our products is dependent on educating growers and gaining on-farm validation of their benefits. This process requires an intensive on-farm effort lead by us and supported by the trade channel and other interested parties, such as the national Corn Grower's Association. We maintain a team of sales specialists to educate growers and distributors on the use and benefits of Harp-N-Tek products. These specialists possess a high level of technical expertise and knowledge regarding our products and harpin-related technology, as well as competing plant protection and yield enhancement products and techniques. This team maintains close relationships with growers and distributors through the growing seasons to collect product performance information and to position our products for expanded use in the following seasons.

We conduct a number of marketing and awareness programs to support the sale and distribution of Harp-N-Tek products, including programs that promote the initial usage of products and programs for repeat users to expand their usage. We use integrated marketing campaigns in our targeted crops and regions aimed at increasing brand awareness among the trade channel, crop consultants, and growers. These include crop specific advertising, targeted direct mail promotions, publicity articles and trade show promotions. In addition, we have programs that are designed to educate distributors, major commercial growers and their production advisors about the benefits of Harp-N-Tek products. Our field development scientists conduct field trials with these influential groups to further evaluate product efficacy, timing of application, combination treatments incorporating other agricultural chemicals and use in integrated crop management programs.

We also target crop specialists and university agricultural research personnel in an effort to increase industry awareness of our harpin and harpin-related technology and its potential benefits. We have sponsored field trials for these groups, who independently test Harp-N-Tek products, report their results to us and make recommendations to growers on inclusion of these products in integrated crop management programs.

In the second quarter of 2003, it became apparent that we would not reach our sales targets. We initiated market research to determine what other actions were necessary for increasing our rate of growth. This research suggested that a new value proposition with Messenger would increase the rate of growth in grower usage. In September of 2003, we implemented a buy one, get one free promotion in cooperation with our distributors to observe the effects of a new pricing model. We then used what we learned from this test market in planning the introduction of our improved STS formulation of Messenger in January 2004. We believe the outcome of this program supported the hypothesis that growth in grower usage was achievable with a new value proposition. We targeted the same grower price per-acre in 2004 that was available under our fall buy one, get one free promotion. This action required adjusting the value of existing distributor

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inventories to make this new pricing available to growers immediately and was accomplished by making additional products available to our distributors at no charge. A total of 470,000 ounces of product were given to distributors in 2004 at no charge, which had a negative impact on our sales to distributors. Our growth rate in the usage of Messenger STS was below our expectations. This is a clear indication that our repositioning of Messenger products has not yet taken hold in the original US fruit and vegetable markets that we targeted; although, we did see substantial growth in strawberries and the US row crop markets with the new Messenger positioning and pricing. The ability to grow in US row crop markets with the right pricing and market positioning was confirmed in 2005 with the introduction of ProAct and N-Hibit. Sales in Spain, where Messenger was introduced in 2004 as a plant health regulator, have continued to grow.

We plan to continue employing established industry methods to distribute all of our Harp-N-Tek products. Our independent distributors have developed positive working relationships with growers over many years and provide us with valuable marketing and sales assistance in the continuing introduction of our new technology. We have engaged several independent distributors in the distribution and sale of our products, ranging from large, nationwide distributors with multiple locations to local independent distributors with one location. We believe our distributors have the opportunity to achieve attractive profit margins by selling our products and, therefore, will have an incentive to promote and sell them and any other products we may develop. We may also offer volume discounts, extended payment terms or establish other programs designed to appeal to our distributors and growers.

Over time, we intend to continue to pursue selected international opportunities by establishing relationships with individuals or companies having experience in selected foreign markets, conducting additional international field trials, pursuing regulatory approval in international markets with concentrations of our targeted crops and establishing relationships with foreign distributors in an effort to capitalize on global opportunities. In 2004 and 2005, sales of Messenger in Spain represented a substantial percentage of our business. Our international sales for

2005, 2004, and 2003 are provided in the section on this report captioned Management's Discussion and Analysis of Financial Condition and Results of Operations Results of Operations. We believe international sales will increase in 2006 due to increased sales in Spain and new customers in other markets.

In March 2003, we began marketing Messenger for Home and Garden through retailers and over the Internet, concentrating primarily on roses. In the Home and Garden market, we are also concentrating on leading authorities that test and advise gardeners regarding the use and expected results from new product introductions. In April 2004, we began test marketing of MightyPlant 18-18-18, a Harp-N-Tek inside fertilizer. This allowed us to examine our participation in the Home and Garden nutritional market and those results led us to introduce MightyPlant 18-18-18 to the wider US agricultural market through sales to our distributors in 2005. In January of 2005, we expanded the MightyPlant line of products to include 15-0-40 CitrusSet. In November of 2005, we introduced MightyPlant 11-41-08 for turf. In January of 2006, we introduced Messenger Seed Treatment for the Home & Garden market.

As of February 28, 2006, we had 11 full time technical sales representatives and four part time sales consultants reporting to the Director of Sales and Marketing and three full time technical sales representatives comprising the Home and Garden Business Unit in the United States. We have a Business Manager for Europe and Latin America and three sales consultants in Europe

#### Manufacturing

In 2001, we completed a significant expansion of our manufacturing facility and now have the capacity to manufacture approximately 25 million ounces of our EPA-regulated products annually. To help ensure the quality and supply of our products and to protect our proprietary technology, we intend to retain control over the manufacturing process. We have established comprehensive and detailed quality control and assurance systems designed to ensure that we sell the highest quality products. We currently conduct numerous quality control tests on each Harp-N-Tek product production lot. We will use independent manufacturing

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arrangements only when we can satisfy ourselves that our strict quality standards will be maintained. When we are manufacturing harpin<sub>EA</sub>, we depend on independent manufacturers for large-scale fermentation services and to perform certain other portions of our production process. We currently perform all the functions necessary for the manufacture of harpin<sub> $\alpha\beta$ </sub> in-house.

We have designed and developed a water-based fermentation process to manufacture the active ingredients used in Harp-N-Tek products. First, we place the harpin gene into a benign form of common laboratory bacterium, *Escherichia coli*, which is frequently used in pharmaceutical production and is nonpathogenic, nutritionally deficient and cannot survive in outdoor environmental conditions. Once the harpin protein has been produced, the bacteria are destroyed and the harpin protein is extracted and dried. We do not create harmful intermediates in the production of Harp-N-Tek products. Further, waste materials are biodegradable and are easily disposable. The raw materials used in the manufacture of our products are readily available from multiple sources. We do not currently depend on any single supplier for the raw materials necessary for the manufacture of Harp-N-Tek products.

Over the last year, we have reduced the number of outside leased facilities associated with warehousing and as of January 2006 we have manufacturing and warehousing consolidated in one facility. The manufacturing portion of our facility is monitored and regulated by a number of different governmental agencies including local, state and federal authorities. We believe that we are in compliance with all regulatory requirements relating to our facilities.

#### **Research and Development Programs**

Our research and development efforts utilize protein and organic chemistry, analytical chemistry, recombinant technologies and traditional water-based fermentation techniques. As of March 14, 2005, we employed five researchers and support staff in Bothell, Washington and other locations, four of whom hold doctoral degrees. These employees work in the following functional areas: three researchers and support staff who perform research and quality control relating to new product and formulation development in Bothell, Washington; one field biology and development scientist whose primary responsibility is to plan, coordinate and oversee Harp-N-Tek product field trials in the U.S. and Europe; and one employee that handles regulatory affairs worldwide. Through our extensive knowledge of harpin effects and harpin receptors and our research program, we discovered the next generation of harpin protein for commercial development, harpin $_{\alpha\beta}$ , which received full EPA registration in February 2005. The harpin  $_{\alpha\beta}$  protein was made by incorporating four growth domains from four different harpin proteins into a single protein. The amino acid chain of the harpin $_{\alpha\beta}$  protein overlaps about 60% with the harpin $_{EA}$  protein used in Messenger. We believe that we will continue to discover and develop new products that will improve yield enhancement and plant protection in the future. Our research and development efforts are focused on reducing product costs, expanding and improving product formulations, increasing product efficacy,

developing new markets and demonstrating biological activity. Our primary projects are:

Conducting Harp-N-Tek product field trials. We are conducting field trials to further evaluate Harp-N-Tek product s efficacy in certain crops and regions, provide additional product information to growers, support sales and marketing in focus crops and expand our knowledge base of current and potential new focus crops. Our major emphasis in 2005 was on cotton and corn, while implementing studies in soybeans. We believe of field trials show a favorable return on investment for growers that use our products. Trials in peaches and melon crops also indicated that ProAct can provide similar or better performance than Messenger STS in high value crops. We also continued to explore new markets and applications such as post-harvest benefits from pre-harvest applications of Harp-N-Tek products and Home and Garden uses. Some of these trials are necessary to obtain and support registration of Harp-N-Tek products.

Developing new formulations. We have developed new formulations, such as Messenger STS, that offer tolerance to chlorinated water, slower degradation in the application tank after mixing with water and

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longer shelf life in the product container after opening. We have used the knowledge gained to incorporate these characteristics into new Harp-N-Tek products. We are seeking to develop a liquid formulation of the next generation harpin $_{\alpha\beta}$  protein and initial field testing in 2005 indicates that we can create a liquid formulation that performs similar to ProAct. We have also developed a dry, dusting treatment for seed. This product was introduced in row crops in 2005. Because of the favorable risk profile of Harp-N-Tek products, we have introduced the seed treatment into the Home & Garden market in 2006.

In addition, we conduct limited research and development activities using harpin-related technology for the genetic modification of plants. However, we do not possess the seed technology necessary to commercialize genetically modified crops. As a result, these products could be brought to market only with the assistance of companies that possess this technology.

#### **Continuing Cornell University Relationship**

In May 1995, we entered into a license agreement with the Cornell Research Foundation whereby we acquired worldwide exclusive rights to Cornell University's technology relating to harpin proteins and related genes. The license agreement grants us exclusive rights to make, have made, use and sell any product or use claimed in the licensed patents and patent applications, or that incorporates the licensed biological materials. In consideration of these exclusive rights, we agreed to fund research and development activities at Cornell University, and we issued the Cornell Research Foundation 400,000 shares of our common stock. We further agreed to pay a royalty on net sales of licensed products and to make certain minimum annual royalty payments.

Currently, we own or have exclusive rights under the license agreement to 31 U.S. and foreign patents and 47 U.S. and foreign patent applications. The patents and patent applications include claims that protect any harpin-derived products such as Messenger, Messenger STS and ProAct, and accordingly, our ability to market and sell products based on the license agreement. Future inventions may be added to the license agreement based on inventorship, our funding of the research at Cornell that produced the invention and the relationship of potential patent claims of the invention to the claims of the licensed patents or licensed patent applications.

The license agreement terminates on the expiration date of the last-to-expire licensed patent. Currently, the last-to-expire licensed patent will expire in February 2018. However, if additional patents are added to the license agreement in connection with the development of future products, the term of the license agreement would be extended to the date of the last-to-expire of the additional patents. The Cornell Research Foundation may terminate the license agreement prior to the expiration of the term, but only if we are in substantial noncompliance with any of the material terms and conditions of the license agreement and we fail to remedy the noncompliance within six months after being notified in writing of the noncompliance.

We are currently responsible for the management of patent prosecution and maintenance activities relating to the licensed patent applications and any patents issuing there-from. We are obligated to pay all expenses of this prosecution and maintenance, both in the United States and in the foreign jurisdictions that we designate for filing counterpart applications.

#### **Patents and Proprietary Rights**

We own or have exclusive rights to approximately 74 U.S. and foreign patents and patent applications, consisting of 33 U.S. and foreign issued patents and 41 patent applications pending in the U.S. and abroad. All of these patents and pending patent applications are either owned solely

by Eden Bioscience or by Cornell Research Foundation or jointly owned by Eden Bioscience and Cornell Research Foundation. Protection of our proprietary rights is vital to our business. In addition to our policy of seeking patents on our inventions, we rely on trade secrets, know-how that is not patented and continuing technological innovation to develop and maintain our competitive position. In addition, we maintain a policy of acquiring licenses under selected patents or patent applications from third parties, and entering into confidential information and invention assignment agreements with our employees, consultants and other third parties.

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Our Harp-N-Tek products are covered by the U.S. patents to which we have exclusive rights. These patents include claims for the harpin family of proteins generally, for various specific harpins, and for the use of harpin proteins to impart disease or insect resistance or to enhance plant growth or improve yields. They will expire between 2013 and 2018. We believe these patents preclude our competitors and other entities from making, using or selling harpin proteins and using harpin proteins to impart disease or insect resistance or to improve yields or enhance plant growth.

Our pending patent applications include claims to several specific harpin proteins, methods to apply harpin proteins to seeds, the insertion of the harpin genes into plants to impart disease resistance and the use of harpin proteins to prevent post-harvest disease in fruits and vegetables and desiccation in ornamental cuttings. In addition, we have filed for patent protection for imparting tolerance to environmental or chemical stress, segments of harpin proteins and their uses and harpin protein binding molecules, as well as the activation of specific plant genes and gene families by harpin proteins.

Patent law is still evolving relative to the scope and enforceability of claims in the fields in which we operate. Like many biotechnology companies, our patent protection is highly uncertain and involves complex legal and technical questions for which legal principles are not firmly established. Therefore, our patent applications may be rejected. Even if we are issued patents, they may be insufficient to protect the technology underlying our products.

Eden Bioscience® is a registered trademark licensed from Eden Foods. Messenger® and Messenger® STS are registered trademarks in the United States, the People s Republic of China, Mexico, the European Union and other key foreign countries. Applications to register those trademarks are pending in other key foreign jurisdictions. Applications to reg