

1) Describe the original intent of the grant project.

Our intent was to provide Wisconsin ginseng growers with a new tool to improve their competitive position in the global ginseng industry. Too often, ginseng growers have relied on poor or partial records of what production practices have been employed, what pesticides and fertilizers have been applied and what significant events have occurred that may have affected yield and quality of the ginseng crop.

We wanted to develop a system to record the large amount of data generated during the growing and harvest season and to provide a means to analyze and provide useful information from this data. The ginseng grower could then use this information to help them make better management decisions for reducing production costs and increasing crop yield and quality. The final result being a more profitable ginseng enterprise and a healthier ginseng industry in Wisconsin.

This new tool would be a computer software based ginseng record keeping and management system. The software would enable ginseng growers to accurately document production management practices used in their enterprise. It would allow them to record pesticide and fertilizer applications to comply with regulatory agencies. It would allow them to record planting, pest, harvest, post-harvest and marketing events that occurred in their ginseng enterprise. The software would simplify and streamline the record keeping process for ginseng growers. For the first time, valuable garden data would be organized in one location and could be readily accessed at any time to provide information to empower the ginseng grower to make better management decisions.

- **How was it projected to benefit Wisconsin Agriculture?**

Providing a tool to benefit one of Wisconsin's commodity groups would help preserve an industry that continues to face economic pressure and that must make adjustments to remain competitive. Ginseng production affects many areas of Wisconsin agriculture. Equipment manufacturers, fertilizer and chemical providers, the seasonal employee force and all the local businesses and services affected by those growing ginseng are greatly enhanced by a healthy ginseng industry.

By providing a tool that promotes the conservation of our environment, it also benefits the whole agricultural industry by showing that producers are concerned about the impact they have on the environment they share with their urban and non-agricultural residents.

- **Was it necessary to adjust the objectives during the project?**

Our priority was to design software that met the needs of the ginseng grower. The original objectives contained certain specifications and features that would be incorporated into the software. Some of these features were dropped entirely while others were expanded to perform more specific tasks. We found that as the software was being tested by ginseng growers we needed to make adjustments based on what was taking place in their actual operations.

As the project reached the final testing phase, we found the team members were not only interested in recording soil test data, but also needed to record tissue, seed viability, and disease test results. They also wanted to record soil topography and type information for each garden they had or were going to grow ginseng on. Because of this, new features were incorporated into the software.

2) Describe the work conducted in this project.

Most of the work involved in this project involved designing and writing the source code for the ginseng record keeping software.

Beginning in July of 1996, a development team was formed consisting of 6 area ginseng growers, a crop consultant, and the Marathon County Forage and Farm Management Agent. Meetings were held with this team for the purpose of obtaining input into how the software should be designed. We outlined what features should be incorporated into the software, what hardware and operating systems should be used, etc.

Development of the software program "GardenPro" took place beginning in July 1996 and continued through November of 1997 using the base set of features the development team had formulated. Development continued until a working prototype could be distributed to team members for the initial testing phase. The first prototype was released in March of 1997. After the team members used GardenPro for their own ginseng enterprises they reported any problems they encountered using the software and any additional ideas or enhancements they felt would improve the software.

Development team meetings were held to discuss the operation of the software and to focus on areas that needed improvement. Additional time was spent visiting with the individual team members who needed help installing the software on their own computers or had specific problems with the operation of the software.

• How did the grant funds assist you in this project?

The grant funds enabled us to develop this project without having to shoulder the entire development costs ourselves. Without the grant, this project would have never been completed. Grant funds were used to pay the salary of the programmer and clerical personal. Portions of the funds were used to help purchase a laptop computer used in demonstrating the software at workshops, trade shows, and seminars.

The grant funds were also used to purchase application specific programming libraries needed to complete this project. Funds were used for general office supplies, printing expenses, and shipping costs associated with mailing literature and trial versions of the software.

- **What successes did you achieve with the grant project?**

The main success of this project was developing a tool that has been needed for several years by ginseng growers. Without the grant, this tool would not be and probably never be available to ginseng growers. Because of the grant, Ginseng growers are becoming more aware of the availability and applicability of computer software for their businesses. Even if they decide not to use GardenPro, they will come away from workshops knowing that there is a better way of recording garden information and that it is important to record and use this information for their businesses.

- **What challenges did you face with your grant project?**

Our greatest challenge was scheduling the design and testing phases of the project around the work schedules of the ginseng growers testing the software. When the program was in the initial development phase, ginseng growers were involved in the hectic summer growing season and busy preparing their gardens for planting and did not have adequate time to learn how to use the new software. The same challenge was faced again when the harvest and marketing season came in the fall of 1997.

We have also faced a challenge in dispelling the fears many growers have about the use of computers. Because of their relatively new appearance in this industry, there is reluctance by some to trust their business records to a machine. Others feel they do not have the capacity to learn the new skills required when using computers in their business.

3) Describe the public outreach efforts of this project.

Our focus was to provide opportunities for ginseng growers interested in this new technology to get hands-on experience with the software. GardenPro was demonstrated at grower meetings sponsored by local supply cooperatives, at trade shows, and at software fairs and seminars.

The ginseng industry's main trade show gave us the opportunity to show GardenPro at a public display by vendors of ginseng equipment, supplies and professional services.

Locally held software fairs gave us the opportunity to show GardenPro to interested growers. We also sponsored seminars to show growers how they could benefit from using this new technology.

At each of these events, GardenPro was demonstrated using records from an actual ginseng enterprise. Growers could then ask specific questions regarding features and performance of the software. These events also gave us additional information regarding the needs ginseng growers have and how they could be addressed with GardenPro software.

- **What literature or educational materials were produced through this project?**

The publications produced for this project provide ginseng growers information about the specifications and benefits that the software will have for their business.

The software itself has a well-documented user's guide to explain how to use the software and to act as a reference guide in the case of problems while operating the software.

Those browsing the Internet for information can find several web pages describing the features and benefits of GardenPro. These pages have can be accessed from the web site URL <http://ariel.pcpros.net/profitsource/>.

- **What presentations, field days or other events were given related to this project?**

GardenPro was demonstrated at the Rib River Valley grower workshop, at the 1997 Ginseng Trade Show in Marathon City, at the Wisconsin Ginseng Growers Association meeting and at the Marathon County Agricultural Software fair.

Seminars specific to the use of GardenPro have been held to give hands-on experience to interested ginseng growers.

4) Describe the results of this project.

The result of this project was the completion of the very complete and user-friendly ginseng management software package, GardenPro. The software allows ginseng growers to record all their management and production data in one place in a quick and efficient manner. Because of this project, ginseng growers now have available to them another tool that can help them be more productive and profitable.

- **Did the grant project results meet your original expectations? Why or why not?**

Because of the nature of this project, the final outcome or results of this project are far from being totally realized at this point. There are approximately 30 growers who are now either using the registered version of the software or are using the trial version and will be making a decision on whether or not to purchase the software. There are many more growers that are not aware of the benefits of the software or do not yet have a computer in use at their business.

We did expect to expose this software to more ginseng growers than we have at this point. This is a problem that we are continuing to address. It has to do with the ongoing market depression the industry is facing. Since the grant was awarded, farm gate prices for ginseng root have fallen to historical lows. There is an attitude by many growers not to spend any money on new technologies or equipment until the market improves.

We hope to convince growers that even with a depressed market, GardenPro can help growers' track input costs and help them better manage their gardens. Although GardenPro cannot improve market conditions, it can help growers improve their operating efficiency and thereby improve profitability.

Those using the software tell us they are very pleased with its performance and applicability to their enterprise. In this way, the design and development objectives were certainly met.

- **What new agricultural products, technologies or production methods were developed through this project?**

GardenPro, a ginseng management software program was developed through this project.

- **What did you learn from you grant project? What conclusions can you make?**

We developed GardenPro software using a development team concept. This team approach has worked well for this project because the team members involved were committed to the idea of incorporating computer technology into their business. In the future, any new features incorporated into the software will first be tested by a core group of individuals who we know are committed to using and getting the most from this technology.

- **How will the grant results affect your business?**

Because of the grant we were able to develop software that has been needed for quite some time. As sales of GardenPro software to ginseng growers continue, our business will have to hire another employee to help handle the additional programming and technical support needs.

- **How will this project benefit the Wisconsin family farm?**

This project will certainly benefit a select group of Wisconsin family farmers if they are using GardenPro as a management tool.

- **What impact will this grant project have on the future of Wisconsin Agriculture?**

The recent leaps in computer technology and its application on Wisconsin's farms will continue. We hope the technology we have developed can at some time be modified to fit the needs of other specialty or management intensive crops as well.

Growers using GardenPro are better able to monitor the quantity and number of applications of pesticide and fertilizer applications. Their careful management of pesticides and fertilizers will help promote the image of Wisconsin agriculture and also benefit Wisconsin's environment and all of us that enjoy it.

5) How will the Wisconsin agriculture industry be able to use the information from this project?

Wisconsin's ginseng growers will be able to purchase GardenPro software for their businesses.

6) Include any research data the support your conclusions for this project.

N/A.

7) Include any other information you feel is appropriate.

A fully function evaluation version of GardenPro software is available upon request. This trial version will operate for 60 days from the date it was installed on a computer.