Thank you Chairman Conaway, Ranking Member Peterson and members of the Committee for the opportunity to share my perspective on the important topic of the impact and potential of technology and innovation in the specialty crop sector.

I am the owner of Wish Farms. My family has been marketing berries for family farms since 1922 and since 1987 we have also been farming. As a 4th generation family company, I am proud of our family’s legacy of producing strawberries and blueberries. I am also a co-founder of Harvest CROO Robotics, a start-up to develop harvesting technology. It is a collaborative effort with 8 other strawberry companies from Florida and California invested. I serve on the Executive Board of Florida Fruit and Vegetable Association, the Board of the Produce Marketing Association, and I am a member of United Fresh Produce Association, as well as the Florida Strawberry Growers Association.

I want to thank this committee for the support you have shown the fresh fruit and vegetable industry through effective policies that address key policy priorities in the Farm Bill. As you know, United Fresh coordinates the work of the Specialty Crop Farm Bill Alliance, a coalition of nearly 130 specialty crop organizations across the country, who come together during each Farm Bill reauthorization cycle to provide recommendations to Congress about specialty crop policy needs. I, and many other fresh produce providers, are grateful that you and your colleagues incorporated the Alliance’s recommendations for the 2014 Farm Bill, including:

- $75 million annually for the Animal Plant Health Inspection Service (APHIS) Section 10201 program to prevent the introduction or spread of plant pests and diseases that threaten U.S. agriculture and the environment, as well as ensure the availability of a healthy supply of clean plant stock;
- $9 million annually for the Technical Assistance for Specialty Crops (TASC) program and $20 million for the Market Access Program (MAP). Both of these programs are designed to address various barriers to agriculture exports;
• $184 million for the Fresh Fruit and Vegetable Program, which provides a fresh fruit or vegetable snack to four million low-income elementary school students in all 50 states. As the members of the Subcommittee may be aware, FFVP has been evaluated by outside experts and found to be highly effective at increasing students' fresh fruit and vegetable consumption;
• $75 million annually for the Specialty Crop Block Grant program to enhance the competitiveness of specialty crops; the 2014 Farm Bill also authorized funding for multi-state block grants;
• $80 million in annual funding for the Specialty Crop Research Initiative to develop and disseminate science-based tools to address the needs of specific crops and their regions.

As the Chairman has acknowledged, specialty crop production is a pivotal and growing sector of our agriculture industry. Toward that end, and given the current state of the farm economy, innovation and technology are essential for farmers to continue producing more food for our nation and building upon public-private partnerships top priorities to remain competitive in the marketplace.

Florida is the 2nd largest producer of specialty crops in the nation growing a wide variety of produce as the nation’s primary provider in the winter months. We are also the second largest strawberry producing state, with a farm gate value of approximately $300 million. However, in recent years, the industry as well as others in the specialty crop sector has been facing serious challenges. Most specialty crop growers will agree that the availability of labor is the greatest challenge that we are facing. The cost of rising labor is a secondary problem. I believe an impending crisis is at hand. Innovation can play a key role in solving this problem.

Strawberries, unlike most other fruits, do not ripen after being picked. They also do not ripen all at one time. In Florida and California, strawberries normally require picking every 3 to 4 days. If they are not picked on time, fruit becomes overripe and unmarketable. In Florida the harvest season lasts about 5 months and we typically pick a field 40 times. In California the season lasts even longer, requiring more passes over a field. The importance of picking strawberries on a strict harvest schedule, makes having a dependable way to do so of prime concern to growers. In recent seasons, my farm has had to abandon acreage for lack of labor. Labor shortages have cost us millions of dollars in lost opportunities. Having to walk away from a crop, after it is made is very painful.

Rising costs have been eroding the competitiveness of Florida strawberries and squeezing growers’ profit margins over the years. According to a University of Florida economic study, the total cost of producing strawberries in Florida had risen 30% over a 5 year period, ending in 2015. Labor costs were estimated at $8,432 per acre while the cost of labor production for
Mexican growers was a mere $3,842 per acre. The study concluded, “These challenges are not likely to narrow down in the foreseeable future without a major technological breakthrough, such as mechanization of strawberry harvesting. Given the wage differences and the dwindling migrant labor supply, it is imperative for the U.S. (and Florida) industry to develop labor-saving technologies and production systems”. This study was based on industry costs from two seasons ago. Our farm’s labor costs this past season were over $13,000 per acre. That is more than 50% higher than the costs illustrated in this UF study. Our farm’s labor cost are not dissimilar to other producers in Florida.

In California, labor availability and costs are rising at an even more alarming rate. Some of our affiliated farms are reporting paying workers piece rates that convert to over $35 per hour. Strawberries are primarily grown close to the coast because of the cooler microclimates. Housing costs in those coastal communities are expensive compared to housing further inland. Finding affordable H2A housing is difficult.

It should be noted that primary reason for the shrinking supply of farm labor is simple demographics. The majority of farmworkers come from other countries, particularly Mexico.

Throughout the history of our country, the jobs that Americans do not want to do have been filled by newly arrived immigrants. It is only the newcomers that are willing to do the hard jobs. Understandably, most workers eventually move into other occupations that are not as tedious. Furthermore, most harvesting jobs are not conducive to older people. Workers certainly are looking for a better life for their children and it is rare that the second generation stays on the farm. For years, American farms have depended on the newly arrived immigrants. Today growers are turning to H2A because the people are no longer coming in the numbers that they once did. Here is why; in the 1960’s the fertility rate in Mexico was 6.7. People were coming here because there were no opportunities at home. Twenty years ago it had dropped to 2.9. That shrinking birthrate mirrors the declining farm labor force we have seen over the last 10 years. Today, our 20 year old workers are represented by the 2.9% fertility rate of 1997. What should really scare growers is that the current fertility rate in Mexico is estimated to be at 2.1. That is a preview of what the next 20 years looks like. It is easy to extrapolate that the trend of a shrinking and aging labor force is going to continue, based on these demographics. The fact is there are many more opportunities for workers to stay in Mexico. They simply are not coming anymore. The Pew Research Center publish a paper in 2015 that concluded there are more people going back to Mexico than are coming to the U.S. The group of workers that we have is shrinking, aging, and becoming less productive.

The other point to conclude from these demographics is that Mexico could soon be short on agricultural labor, as well. Their specialty crop industry is expanding at a rapid pace. Before
long, Mexican growers will probably be short workers too. Mexico could eventually be one of the countries that is importing labor itself. When I first founded Harvest CROO Robotics, I did not believe that there was a need to prosecute patents in Mexico, because their labor costs were so low. Based on the current trend, I now believe that will change within the next 10 years. All of our patents have now been filed in Mexico.

It is also important to note that the farm labor shortage is a global problem. Every developed country in the world that is growing strawberries is importing labor from another less-advantaged country. I have had inquiries about our robotic harvester from growers in Canada, Mexico, the United Kingdom, Australia, Hungary, and Switzerland.

Currently our industry has no other option but to rely on foreign-born labor to do the essential jobs needed to get our commodities to the marketplace. The current federal program for agricultural guest workers, known as H-2A, has serious problems; too often, the program does not provide work authorizations for the necessary number of workers in a timely manner. To be clear: employers in our industry support appropriate, necessary enforcement of our nation’s immigration policies. But, those policies must reflect the reality of how vital a foreign-born workforce is to our nation’s ability to produce crops in this country and ensure an abundant supply of nutritious fresh fruits and vegetables for all Americans. H2A is viewed by most growers as a means of last resort and is badly in need of a major overhaul.

In my opinion, I believe that there is a very simple way to fix H2A as outlined here.

- USDA establishes quotas for the total number of workers needed monthly for all crops in the U.S.
- Agricultural work visas are issued to workers with agricultural work experience.
- The visas stipulates agriculture as the industry that they are allowed to work in and it stipulates the time they are allowed to stay.
- Workers are not tied to a specific employer and can freely move from farm to farm. This helps ensure fair treatment of workers, because they are not tied to one grower.
- E-verify is implemented.
- USDA establishes a clearinghouse to point workers to areas and farms where they are needed.
- H2A workers would find their own housing, the same as domestic workers do.
- Guest workers are paid the same wages as domestic workers, with one catch. There is a heavy amount of withholding from their wages that they only receive upon their return to their home country. While in the U.S., they would only receive a stipend to live on. This should ensure that workers do not overstay their visas.
This plan would eliminate costly and time consuming burdens growers are currently facing.

Many of the current Farm Bill programs provide the tools to enhance innovation and technology. However, there is a greater role for the private sector to play and I encourage the adoption of polices that recognize and enhance private industry involvement in vital research and farm bill programs. Currently in Florida there is no private access to research funds, without partnering with a university. This usually involves giving up intellectual property rights. This is problematic to our outside financial investors. We did apply for and receive a phase 1 grant from the National Science Foundation under SBIR. That program does not have strings attached. Collaborative private sector technology startups could advance at a faster pace, if given direct access to agricultural research funds.

I want to thank this Committee for the support shown to the fresh fruit and vegetable industry through effective policies that address key policy priorities in the Farm Bill. One common thread that runs through this set of priorities is the need to promote ingenuity and development. Innovation holds the promise of providing answers to our industry’s most persistent and fundamental challenge: securing an adequate labor force to bring crops from the fields to consumers. Through innovation, we will eventually be able to harvest a significant portion of our nation’s fruits and vegetables by automation, but such a time is not going to be reached for a number of years; depending on the commodity, it may take anywhere from five to ten years for automation technologies to be perfected to the point they can be utilized effectively in the field on a large scale.

The bottom line is this: Innovation will be the key to maintaining our nation’s ability to feed itself and this committee should fight for investments in technology and research for the specialty crop sector. Please consider that automation is a long range solution and we still depend on foreign workers to bridge the gap.

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