Review of the University of Florida's Institute of Food and Agricultural Sciences and Florida Foundation Seed Producers, Inc. Processes for Intellectual Property Management, Cultivar Release, and Licensing

April, 2013

Dear Friends,

University of Florida IFAS values its long-term relationships with Florida's agriculture producers, commodity associations, and professional organizations. Together we work to grow Florida's diverse and abundant agricultural economy. Our mission of bringing the most innovative research to the agricultural industry that in turn partners with UF plant breeders to advance scientific knowledge of modern production techniques has resulted in new businesses, increased yields, expanded markets, higher profits, and more accessible food and feed to not only Florida residents but global customers.

Florida Foundation Seed Producers, Inc. [FFSP] is a UF direct support organization that works to produce Foundation seed and nursery stocks and license new cultivars and germplasm to the industry, bringing the work of UF breeders to the marketplace. Over the last decade, the number of new cultivars that FFSP has transferred has increased and the policies and procedures followed have been adapted to better serve a growing number of industries and commercial partners.

In the interest of continuous improvement, UF/IFAS leadership undertook a review of these procedures to help ensure that IFAS and FFSP continue to provide excellent performance and equitable service. John Hoblick, President/CEO of Florida Farm Bureau, graciously agreed to chair the committee and led a thorough review of IFAS' and FFSP's policies, procedures, and how they compared to peer operations across the country. We are indebted to John for his leadership and many thoughtful contributions to this project.

The following is a summary of the review findings and recommendations as we move forward. I look forward to an ongoing dialogue on how UF/IFAS and Florida's agricultural leaders may continue to work together to keep Florida agriculture moving forward.

Sincerely,

Janm. Pogra

Jack M. Payne Sr. Vice President for Agriculture and Natural Resources University of Florida IFAS

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Executive Summary

University of Florida Sr. Vice President Jack Payne convened a committee to conduct a review of the UF/IFAS' and Florida Foundation Seed Producer's [FFSP] cultivar release and licensing programs to evaluate protocols used and help ensure that the needs of the agricultural community and program stakeholders are met.

The task consisted of a review of: 1) the FFSP licensing processes; 2) the UF/IFAS cultivar development and release process; 3) the history and relationship of UF/IFAS, the Florida Agricultural Experiment Station [FAES], breeders and industries; 4) methods of protecting plant varieties; 5) and the UF intellectual property policy. The review project also consisted of a survey of peer institutions and a statewide symposium for industry, UF faculty and staff and agricultural leaders. Details of the review, symposium presentations and this report are available at http://ifas.ufl.edu/FFSP-symposium.shtml.

The results are a better understanding of the mutual interests of all partners and participants, clarification of the process for licensing new cultivars and how interested parties can participate in the process, and many recommendations for enhanced communications and operations.

FFSP Purpose

- FFSP is formed for and shall operate exclusively for agricultural, scientific and educational purposes in the State of Florida which shall include but not be limited to the following purposes:
- (1) To make available annually to Florida farmers and producers of crop seed and nursery stock, foundation seed stock of the best known varieties adaptable to Florida climate and soils in adequate quantities and at reasonable prices.
- (2) To cooperate with the Florida Agricultural Experiment Station of the University of Florida in making available to residents of Florida new and improved varieties of crop seed and nursery stock and to obtain such improved seeds stocks by purchase, barter, lease, or gift; to propagate and increase the same through any agency and particularly by contracting with producers and institutions; and to disseminate such increased stocks to its members and others.
- (3) To receive, hold, invest and administer property and to make expenditures to or for the benefit of the University of Florida.
- FFSP Articles of Incorporation

Committee Members

John Hoblick, President/CEO of Florida Farm Bureau Federation, Chair

Mike Stuart, Executive Director of Florida Fruit and Vegetable Association

Dr. Joe Joyce, Senior Associate Vice President of UF/IFAS

Dr. John Hayes, UF/IFAS Dean for Research and Director of the Florida Agricultural Experiment Station

Dr. Fred Gmitter, UF/IFAS Professor, citrus breeder and Past Chair of the UF/IFAS Plant Breeders' Working Group.

Committee support

Dr. Ruth Hohl Borger, UF/IFAS Assistant Vice President for Communications

John Beuttenmuller, Executive Director of FFSP

Committee Focus

The overall goals of the Committee were:

- To review the FFSP mission and licensing operations
- To evaluate the effectiveness of FFSP and Florida Agricultural Experiment Station (FAES) policies and procedures used to license IFAS cultivars
- To evaluate the relationships between breeders, stakeholders, and FFSP, and advise on ways to improve them
- To develop guidance on an optimal administrative structure and interface between FAES and FFSP
- To provide guidance on goals, organizational structure, and operational approaches and procedures for FFSP with respect to certain licensing activities

The Following Questions were to be Addressed by the Committee

- Does the organizational structure and operation of FFSP function effectively to carry out its mission and to be productive? Are there alternative structures that may improve the effectiveness of FFSP?
- What are the current strengths of FFSP, and how can they be built upon to maximize future impacts of the organization?
- How can the FFSP and FAES relationship be properly defined (legally and functionally) and strengthened?

- Are current licensing policies adequate to protect the interest of Florida growers and businesses when licenses are negotiated for cultivars distributed nationally and internationally?
- What additional mechanisms, procedures, and policies can be implemented to simultaneously meet the needs of IFAS stakeholders, protect the University's intellectual property rights, and generate adequate funds to operate and promote UF breeding programs?
- What is the balance between licensing income and providing new varieties to Florida agriculture in a period of declining state support?
- Is the UF/FAES Material Transfer Agreement (MTA) appropriately managed and does it provide adequate access to and protection for germplasm?
- What additional mechanisms, procedures, and policies can be implemented to ensure that the needs of IFAS plant breeders and their programs are adequately met?
- What improvements in licensing processes should FFSP engage in to fully take advantage of future opportunities?

Committee Process

The Committee was formed in January 2012 and met several times between February 2012 and June 2012. They reviewed and approved a review syllabus prepared by FFSP staff, which contained:

- an overview and history of UF/IFAS plant breeding programs,
- the processes of developing new plant germplasm and cultivars,
- the UF/IFAS cultivar release process,
- an overview of FFSP and its history and relationship with UF/IFAS,
- a summary of the Bayh-Dole Act and the University of Florida Intellectual Property Policy,
- a summary of the ways to protect new plant varieties through different means of intellectual property protection,
- an overview of the different methods for the release of new plant varieties, and
- an overview of the FFSP licensing process.

The Committee also structured and reviewed a peer institution survey to compare UF/IFAS' and FFSP's processes and procedures to those of other programs (Appendix A). This was initiated to gain information about how other land grant universities and research institutions are releasing and licensing new plant varieties and germplasm.

A day-long symposium was held at the University of Florida's Gulf Coast Research and Education Center in Balm, Florida on August 6, 2012. The symposium was designed to facilitate two-way flow of information, providing stakeholders with an overview of

UF/IFAS' and FFSP's processes and procedures, legal requirements pertaining to new inventions, the results of the peer institution survey, and providing FAES and FFSP leadership with feedback, concerns, and suggestions from stakeholders. Invitations to this symposium were sent to all major program stakeholder and agricultural commodity groups in Florida, UF/IFAS administrators and faculty, peer institutions, and FFSP licensees. Approximately 120 people attended the symposium.

Several written comments from diverse stakeholders were reviewed and included in the analysis.

Action Items Resulting from the Review

The review of UF/IFAS' and FFSP's programs resulted in development of a suite of activities that we are adopting to improve our service to Florida stakeholders and support for UF/IFAS plant breeders. The following are the action items generated in response to this review are being undertaken by FFSP and FAES:

- Five white papers describing FAES and FFSP process and policy regarding key issues in cultivar licensing and development will be completed in 2013. These white papers will address:
 - Exclusive vs. non-exclusive licensing and the use of the Invitation to Negotiate (ITN) process
 - Protected releases vs. public releases
 - Commercialization in Florida vs. outside of Florida (domestically and internationally)
 - o Sponsored Research agreements
 - Material Transfer Agreements (MTAs)
- A comprehensive communications plan to improve practices both internally within UF and externally with agriculture stakeholders will be produced in 2013. A key element of this plan involves enhanced communications with ITN respondents regarding the status of their ITN proposals to enable a clear understanding of the status of their proposal and the ITN award. Status updates for previously issued ITNs have been added to the FFSP website and will continue to be updated as statuses change.
- Renewed and enhanced commitment to transparency about ITN awards and decision making practices.

An Overview of the UF/IFAS Cultivar Release Process

• Any new cultivar proposed for release must demonstrate potential to make a significant contribution to food security, Florida agriculture, or the public, including characteristics such as increased yield potential, disease

resistance, extended market window, improved market qualities, or other desirable traits. Among the questions considered in assessment of potential benefits of the new cultivar include:

- Do advantages over existing cultivars outweigh disadvantages?
- Are growers likely to use the new cultivar?
- Following proposal for release by a breeder, a Cultivar Release Advisory Committee (CRAC), established for specific crops, reviews the case for a new cultivar and establishes recommendation.
- If recommended for release by the CRAC, the IFAS Cultivar Release Committee (CRC) reviews the recommendation and additional information and evidence provided by the breeder, and considers the cultivar for release.
- Based on the advice of the CRC, the Director of FAES determines if the cultivar warrants release.
- For cultivars selected for release, intellectual property protection is filed.
- The cultivar is then licensed through FFSP.
 - If non-exclusive licensing is pursued, non-exclusive licenses are granted by FFSP to qualified licensees.
 - If an exclusive license is sought by an interested party, an Invitation to Negotiate (ITN) is announced to invite all interested parties to propose or comment on the exclusive opportunity.
 - ITN proposals and comments are submitted to FFSP.
 - An ITN Review Committee comprised of the breeder of the germplasm/cultivar, the FFSP Executive Director, a FFSP Licensing Associate, an independent FAES plant breeder, and the statewide research program leader (when applicable). The ITN Review Committee reviews all proposals and comments submitted to the ITN and makes a recommendation to the Director of the FAES as to the entity with whom FFSP is to negotiate for an exclusive license.
 - If the recommendation of the ITN Review Committee is approved by the Director of the FAES, FFSP proceeds to negotiate an exclusive license agreement. If the

recommendation is not approved by the Director of the FAES, the ITN Review Committee reconvenes.

Findings: Review of Peer Institutions and Programs

The committee conducted a survey of U.S. land grant universities and research programs (USDA/ARS) with active plant breeding programs to compare and contrast FFSP's policies and procedures with those of others. The survey consisted of 17 questions focused on cultivar release processes, breadth of plant breeders and programs, licensing processes, and royalty distribution polices.

Respondents included: Rutgers University, University of Wisconsin, Auburn University, Iowa State University, Washington State University, North Carolina State University, University of Arkansas, USDA/ARS, Oregon State University, University of California Davis, University of Georgia, and Louisiana State University.

- Complete results of the survey are presented in Appendix A. Key findings of the survey are presented below. UF and FFSP are similar to other institutions in the use of exclusive and non-exclusive license agreements and the method for establishing royalty rates in license agreements.
- The UF and FFSP process of seeking and evaluating potential exclusive licensees is somewhat more formal, but not dramatically different from the processes (bid solicitations, etc.) used by other programs.
- UF/FSP has the most aggressive royalty reinvestment policy of any of the peers surveyed, with 70 percent of royalties reinvested for plant breeding research and new cultivar development. This strategy of significant reinvestment in breeding and research has been key to success of the breeding programs at UF.
- The overhead rate charged by FFSP (10 percent) is the lowest of all institutions surveyed, allowing maximization of funds reinvested to support breeding research and cultivar development.
- All institutions surveyed license both exclusively and non-exclusively. 58 percent of respondents indicated that the decision as to whether cultivars are licensed exclusively or non-exclusively are made by the institution's cultivar/variety release committee with input sought from the office of technology transfer/licensing agent. Most other respondents indicated that these decisions are made by the technology transfer office/licensing agent.

- Average number of full-time equivalent staff handling intellectual rights for plant varieties in 2011 2.45 FTEs per institution.
- All survey respondents use Memorandums of Understandings or Material Transfer Agreements [MTA] to transfer unreleased experimental lines and germplasm to external parties; 31 percent use license agreements; 54 percent use the Uniform Biological Materials Transfer Agreement (UBMTA).
- Exclusive arrangements are often sought when specialized marketing effort is required.
- Royalty rates, license fees and annual minimum royalty rates for plant varieties and germplasm are established by a variety of means:
 - 92 percent use historical precedent, industry standards, rates of other commercial varieties;
 - o 17 percent use margins;
 - 58 percent use a market approach, establishing the rate based on assessment of what market will bear;
 - 42 percent use advice of inventor, and internal release and licensing committees.
- FFSP uses an Invitation to Negotiate [ITN] process to announce exclusive license opportunities and to evaluate commercial proposals and comments. Other institutions use:
 - Bid solicitation, with bids evaluated by committee based on multiple criteria;
 - No announcement, seeking out industry leaders and potential licensees directly;
 - o Classified ad and Federal Register posting;
- The ITN process was found to have a both advantages and disadvantages relative to other approaches. Among the advantages are:
 - ultimate transparency in exclusive opportunities all interested parties are made aware of exclusive opportunities and have the ability to propose and/or comment on the opportunity;
 - the ITN process is a formal mechanism to evaluate competing proposals;
 - ITNs allow for licensing staff, the lead breeder, an independent breeder, and the statewide research program leader all to be involved in the review and recommendation of exclusive opportunities;

- in comparison with classified ads, the targeted method of dissemination of the ITN announcement (sent directly to contacts interested in a particular crop) maximizes its reach and provides a convenient way for interested stakeholders to be directly notified of exclusive opportunities.
- Among the disadvantages of ITN approach in comparison to other methods are:
 - the ITN could potentially suppress innovative business approaches, as a commercial partner might not want a exclusive opportunities to be openly announced to their competitors;
 - the ITN process can be more time consuming and human resource intensive than some alternative approaches.
- All respondents indicated that they have international demand for their cultivars and an interest in licensing internationally.
- All institutions that license internationally predominately do so using exclusive licenses.
 - Many institutions use Variety release committees or licensing committees to evaluate exclusive license proposals.
- The majority of institutions surveyed (92%) use both exclusive and nonexclusive licensing for domestic licenses, although a one only licenses non-exclusively for domestic releases.
- For international licensing,
 - Some programs give preferential or reduced royalty rates to domestic partners; some reinvestment of international royalties into in-state programs;
 - All programs licensing internationally seek Intellectual property protection to ensure that royalties can be collected;
 - For some programs and some crops, programs delay international licensing 2 to 5 years to enable competitive advantage of domestic partners;
 - Programs generally allocate limited stocks to in-state producers before allocating internationally.
- 77% of survey respondents house their plant intellectual property rights office within a central university/research administration office such as a university research foundation. One respondent houses their plant intellectual property rights office within its Experiment Station. UF is unique in that plant intellectual property rights and variety licensing is managed by the foundation seed organization.

Findings: Symposium Feedback

A day-long symposium was hosted to review the status of the FFSP and the UF/IFAS Plant Cultivar Licensing Programs for producers, commodity groups leaders and breeders on August 6, 2012 at the Gulf Coast Research and Education Center in Balm, Florida. Roughly 120 people attended to hear presentations and engage in a strategic dialogue about the FFSP and UF/IFAS cultivar development, release, and licensing program.

Key feedback from stakeholders

- Stakeholders indicated that they need for more information on status of ITN proposals throughout the review and negotiation process;
- Increased communication throughout MTA processes would improve service to the agricultural community;
- It would be beneficial to speed up the licensing process, especially as it impacts deadlines for filing plant breeders rights applications in international territories;
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- Getting experimental material out quicker for testing would be beneficial and facilitate adoption by the agricultural community;
- FFSP and FAES should explore a volunteer royalty program for some releases where cultivars would be released publicly (i.e. no intellectual property protection) and companies would pay voluntary royalties;
- FFSP and FAES should consider creating industry advisory boards to direct, inform, or contribute to the MTA and ITN processes and decision making;
- Open forums, such as that used in this review are beneficial FFSP and FAES should continue and increase use of formal and informal exchanges between FFSP, FAES, and industry to promote transparency, understanding, and collaboration;
- FAES and breeders should consider if UF/IFAS is flooding the market with too many releases.

Granting exclusives

 There remains lack of information and misinformation regarding the processes used by FFSP in granting of exclusive licenses, some of which may have been granted prior to the implementation of the public ITN process in 2006. Perceptions of how exclusivity to certain varieties was granted has eroded some trust in FFSP and its policies and procedures among some stakeholders. To address this concern, FFSP will work to increase communication and clarification of practices with stakeholders. As has been the process for several years, all future exclusive licenses will be granted through the ITN process in accordance with the ITN policy.

Granting International Licenses/International Distribution

- FAES and FFSP should continue to explore how to distribute and license varieties to international markets while protecting intellectual property and avoiding negatively impacting domestic markets;
- FAES should consider approaches to assist developing nations and enhance global food security, while simultaneously protecting the interests of domestic stakeholders
- FFSP should review timing and coordination of international releases, especially in relation to timing of domestic releases
- The model used by the strawberry industry for release of "Strawberry Festival" provided an important learning opportunity and may be a successful model for international releases of other crops.

Protecting Florida agricultural interests

- FAES and FFSP should explore ways to ensure the interests of Florida stakeholders are met and not inadvertently enhancing the competitive advantage of competitors.
- FAES and FFSP should explore creating a preferential position for Florida growers, perhaps fixed rates and rates excluded from the ITN process.

Findings: Answers to Review Questions

Does the organizational structure and operation of FFSP function effectively to carry out its mission and to be productive?

 Yes, the organizational structure and operation of FFSP is effective, however policies and procedures need to be developed and communicated with stakeholders.

Are there alternative structures that may improve the effectiveness of FFSP?

While the fundamental structure is sound, FFSP will continue to evaluate the need for additional staffing to meet the demands of an increased number of license agreements and an increasing number of released cultivars. This effort will be aided by generation of program metrics to track and assess efficacy of program activities.

What are the current strengths of FFSP, and how can they be built upon to maximize future impacts of the organization?

- Outside of its production operations, FFSP focuses exclusively on plant cultivar development and licensing. Cultivar licenses at many other land grant institutions are managed out of a central technology transfer or research foundation office that is responsible for all institutional technology transfer policy and licensing.
- FFSP has a strong linkage with the FAES and faculty plant breeders.
- The unique royalty distribution model (70/20/10) allows FFSP's licensing efforts to generate a maximum return to the IFAS plant breeding programs. 70 percent of net royalties are allocated to the Cultivar Development Research Support Program, 20 percent of net royalties are allocated to the inventor/developer, and the remaining 10 percent of net royalties are retained by FFSP for program administration.
 The Cultivar Development Research Support Program funds (the 70 percent) are distributed per cultivar per year as follows:
 - 100 percent of the first \$50,000 goes directly to the breeding program that developed the cultivar;
 - For the next \$100,000:
 - 50 percent is allocated to the breeding program,
 - 25 percent is allocated to the breeder's home unit (Department or Research and Education Center), and
 - 25 percent is allocated to FAES.
 - For all revenues above \$150,000:
 - 33 1/3 percent is allocated to the breeding program,
 - 33 1/3 percent is allocated to the Unit, and
 - 33 1/3 per cent is allocated to FAES.
- It is FAES policy to maximize program support to the total UF/IFAS plant breeding effort to ensure long-term support and sustainability of these programs.
- The FFSP Board of Directors provides guidance, governance, and feedback valuable to maintain high quality programming. The Board is comprised of stakeholders and UF administrators, including nine stakeholders, the UF/IFAS Dean for Research, the UF/IFAS Dean for Extension, a designee of the University of Florida Board of Trustees, and a designee of the President of the University of Florida.
- IFAS has a diverse group of highly successful plant breeding faculty members and plant breeding programs partially supported by the FFSP licensing program.

How can the FFSP and FAES relationship be properly defined (legally and functionally) and be strengthened?

 Many aspects of this relationship are determined by UF administrative policy and the FFSP charter. FFSP is a direct support organization (DSO) of the University of Florida. As defined in the Florida Statutes, a "University direct-support organization" means an organization which is:

1. A Florida corporation not for profit incorporated under the provisions of chapter 617 and approved by the Department of State.

2. Organized and operated exclusively to receive, hold, invest, and administer property and to make expenditures to or for the benefit of a state university in Florida or for the benefit of a research and development park or research and development authority affiliated with a state university and organized under part V of chapter 159.

3. An organization that a state university board of trustees, after review, has certified to be operating in a manner consistent with the goals of the university and in the best interest of the state. Any organization that is denied certification by the board of trustees shall not use the name of the university that it serves.

- Plant germplasm that has been approved for release by IFAS are released and managed by FFSP, including issues regarding intellectual property protection, license agreements, royalty collection and distributions, and others.
- FAES is the research arm of the overall Institute of Food and Agricultural Sciences in partnership with the College of Agricultural and Life Sciences [CALS] and Cooperative Extension Service.
- Matters regarding "pre-release" aspects, including issues regarding experimental plant germplasm that has not yet been released and is under non-commercial evaluation, are managed by FAES. This includes MTAs and oversight of the breeding programs.
- The relationship between FFSP and FAES is adequately and properly defined, but efforts will be made to better communicate the nature of this relationship to program stakeholders.

Are current licensing policies adequate to protect the interest of Florida growers and businesses when licenses are negotiated for cultivars distributed nationally and internationally?

- The domestic industry has first access and opportunities for commercialization, and the timing of commercialization of cultivars in international territories is often delayed. If intellectual property protection is not sought in international territories, cultivars legally or illegally released in those territories eventually become part of the public domain. Seeking international licenses allows FFSP to generate royalties to reinvest back into the UF breeding programs in Florida, and protects the university's intellectual property. If intellectual property protection and licensees are not sought, cultivars can be freely and openly commercialized in international territories with no reinvestment back into the UF breeding programs and no control of the potential competition of these cultivars from international competitors.
- International commercialization is typically delayed due to phytosanitary controls and quarantines and the need for regional trials to determine the adaptability and suitability for a new cultivar in a new region.
- FFSP often awards domestic licenses preferential royalty rates relative to internatonal rates.
- These policies will be further developed and articulated in the IFAS and FFSP strategy and policy statement document to be developed in 2013.

What additional mechanisms, procedures, and policies can be implemented to ensure that the needs of IFAS stakeholders are adequately met, while at the same time protecting the University's intellectual property rights and generating adequate funds to promote UF breeding programs?

- IFAS and FFSP are developing and articulating strategy and policy statements for materials transfer agreements (MTAs), research agreements, and license agreements. This document is anticipated will be completed in 2013 and will increase transparency and understanding of policies, procedures, and decisions to stakeholders, establish guidance and direction for decisions relative to exclusive and nonexclusive licensing, trialing (MTA) and licensing in Florida, domestically, and internationally;
- FAES and FFSP will provide a platform for future revisions and restructuring of policies as needed;
- FAES will clarify opportunities for sponsors to fund plant breeding projects under research agreements; and

 Programs will be structured to maximize benefits of the UF plant breeding programs to the state of Florida, Florida's agricultural industry, and global health and food security.

What is the balance between licensing income and providing new varieties to Florida agriculture in a period of declining state support?

- The current program leverages salaries provided by the state of Florida, UF/IFAS infrastructure support, and program support generated through royalties and licensing activities.
- Based on information obtained during the peer review survey [see Appendix A] royalty rates and costs are reasonable and on par with rates of other land grant institutions.
- Due to the unique royalty distribution model, IFAS is able to maintain plant breeding programs during a period of declining state support. Maintaining these programs allows for the programs to continue developing new cultivars to help maintain the competitiveness of the agricultural industries. Licensing domestically and internationally allows for the international use of the cultivars to generate royalties which are re-invested back into the Florida-based breeding programs.

Is the UF/FAES Material Transfer Agreement (MTA) appropriately managed and does it provide adequate access to and protection for germplasm?

 Yes. However, additional mechanisms, procedures, and policies will be further developed and articulated in the IFAS and FFSP strategy and policy statement documents.

What additional mechanisms, procedures, and policies can be implemented to ensure that the needs of IFAS plant breeders and their programs are adequately met?

 Additional mechanisms, procedures, and policies will be further developed and articulated in the IFAS and FFSP strategy and policy statement documents to be completed in 2013.

What improvements in licensing processes should FFSP engage in to fully take advantage of future opportunities?

 FFSP should increase communications using more web-based mechanisms and should expand its website to include all of the varieties available for licensing and a listing of existing licensees.

- Specific comments were made about the need for increased communication through the Invitation to Negotiate (ITN) process.
 FFSP has since added status updates on previous ITNs so that interested parties can see the status of ITNs that have been offered.
- Although FFSP licenses a wide diversity of crop species, additional efforts should be made to use template license agreements to streamline the licensing process.
- IFAS and FFSP will engage appropriate shareholder groups such as the Florida Agriculture Council and Regional Advisory Committees to keep stakeholders and industry leaders apprised of IFAS plant breeding programs, policies, and FFSP licensing activities.
- FFSP should continue to encourage participation throughout the ITN process by expanding its database of grower contacts by commodity.

The figures below each need a figure caption describing the salient points that the figure is intended to make.



 Figure 1. An increasing number of cultivars released by FAES in recent years. The implementation of the cultivar royalty distribution policy has fueled the increase in cultivar releases by providing a funding mechanism for the breeding programs and creating personal incentives for breeders.



Figure 2. FFSP Royalties

- Figure 2. Paralleling increases in number of commercially successful cultivars released and the increase in FFSP licensing staff, the royalties generated have increased over time.
- As royalties have increased, the amount of funding returned to the UF breeding programs has increased, providing these programs with the funds necessary to develop and release new and improved cultivars.

LEXICON

IFAS	Institute of Food and Agricultural Sciences
FAES	Florida Agricultural Experiment Station
FFSP	Florida Foundation Seed Producers
ITN	Invitation to Negotiate
MTA	Material Transfer Agreement

APPENDIX A

Complete survey findings may be found at the following website:

http://ifas.ufl.edu/docs/pdf/symposium/Peer-Review-Survey-Summary.pdf.