



INVITATION TO NEGOTIATE

***ITN22-02 - 'UF AlfPers 2015' Alfalfa Cultivar
(U.S. PVP Pending)***

Florida Foundation Seed Producers, Inc. (FFSP) invites all interested parties and stakeholders to submit comments and/or proposals for the exclusive licensing opportunities disclosed in this announcement. For more information, please contact FFSP at jholm@ffsp.net.

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ITN Description and Specifications

- **ITN Title:** 'UF_AlfPers_2015' Alfalfa Cultivar
- **ITN Number:** ITN22-02
- **ITN Territory:** As proposed by ITN respondents
- **ITN Announcement Date:** Monday, April 4, 2022
- **ITN Proposal Due Date:** Monday, May 16, 2022, 12PM ET
- **Cultivar Description:** 'UF_AlfPers_2015' Alfalfa Cultivar

'UF_AlfPers_2015' is a new non-dormant alfalfa cultivar developed for Florida and the southeastern U.S. 'UF_AlfPers_2015' showed greater dry matter yield and persistence than all commercial cultivars tested in Florida, while maintaining high nutritive value, and has similar yield and performance compared to most alfalfa cultivars tested in Oklahoma and Mississippi.

A variety trial was established in 2014 at the Plant Science Research and Education Unit (PSREU) in Citra, FL that compared the yield and persistence of 'UF_AlfPers_2015' to other commercially available alfalfa cultivars. As shown in Figure 1., 'UF_AlfPers_2015' had three years of consistently high dry matter yield compared to the other alfalfa cultivars tested.

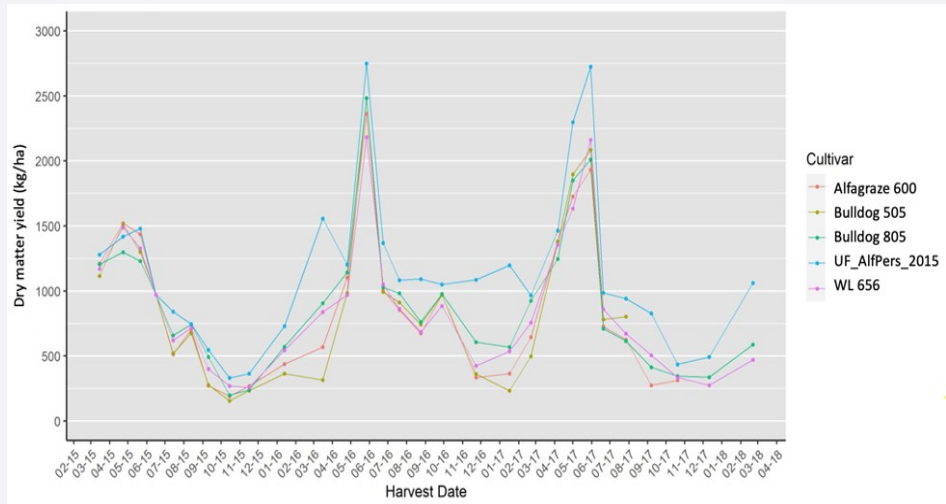


Figure 1. Dry matter yield (kg/ha) per harvest in Citra, FL for 4 commercial cultivars (Bulldog 805, Bulldog 505, WL 656, Alfagraze 600) and 'UF_AlfPers_2015'. Note: the best commercial cultivars are included in this graph .

'UF_AlfPers_2015' had greater persistence (Figure 2) and more plants per plot after 35 harvests (Figure 3) compared to other commercial alfalfa cultivars tested. 'UF_AlfPers_2015' showed its best potential to thrive under Florida's summer conditions during this three year trial.

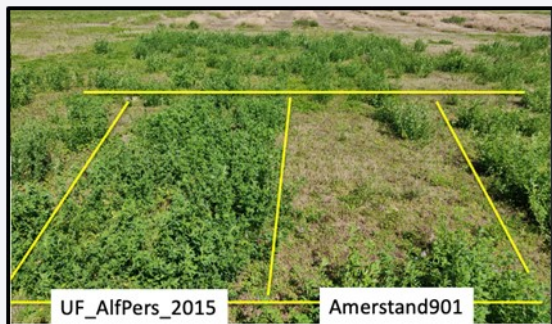


Figure 2. Contrasting plant persistence between 'UF_AlfPers_2015' (Left) and Amerstand901 (Right) after several harvests in Citra, FL.

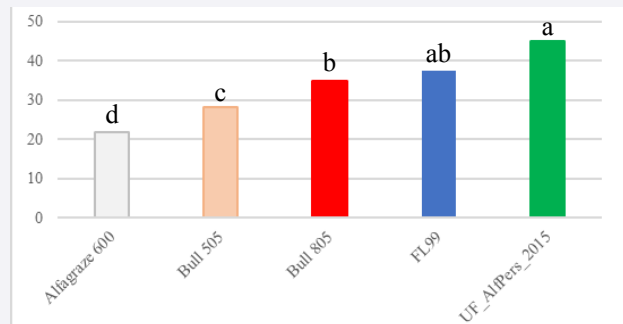


Figure 3. Number of plants per plot measured on February 8, 2018 after 35 harvests in Citra, FL.

ITN Description and Specifications

In a variety trial conducted in 2017 at PSREU, 'UF_AlfPers_2015' performed similarly to the commercial alfalfa cultivars Florida 99, Bulldog 805, and AmeriStand 901TS during the first three harvests. However, 'UF_AlfPers_2015' began to separate from the other lines starting in the fourth harvest (August 2017) and continued producing the greatest yield until the end of the trial. As shown in Figure 4., 'UF_AlfPers_2015' produced the highest total dry matter yield across ten harvests during this trial. Additionally, crude protein (%) and in-vitro true dry matter digestibility (IVTDMD) were statistically similar across the four entries (data not shown).

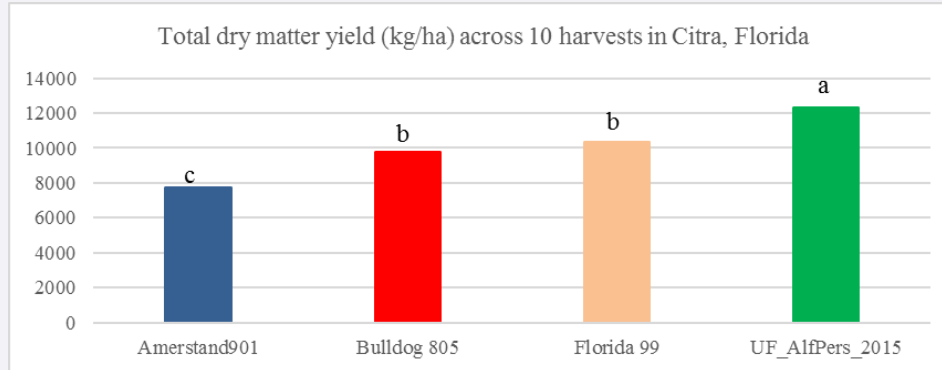


Figure 4. Total dry matter yield (kg/ha) per year in Citra, FL for 3 commercial cultivars Bulldog 805, Florida 99 and Amerstand901 and 'UF_AlfPers_2015'.

'UF_AlfPers_2015' was included as an entry in the Mississippi State University Alfalfa testing at the Brooksville and Newton research and education centers in October 2020 and harvested in 2021. As shown in Table 1., the comparison for dry matter yield (kg/ha) between Bulldog 505, which is the industry standard in Mississippi, and 'UF_AlfPers_2015' were similar during the first two harvests in 2021.

Table 1. Total yield (kg/ha) for the advanced breeding line 'UF_AlfPers_2015' in comparison with Bulldog 505 for two harvests within two locations in Mississippi.

	Brooksville			Newton		
	5/14/2021	7/16/2021	Total	5/21/2021	7/9/2021	Total
Bulldog 505	3500	2945	6445	1414	1791	3205
UF_AlfPers_2015	2326	3132	5458	1541	1077	2618
CV	37	35	36	38	33	32
LSD	NS	NS	NS	NS	NS	NS

*Mean Values within columns did not differ statistically (Fisher's Protected LSD, $P < 0.05$).

Table 2. Total yield (kg/ha) for the advanced breeding line 'UF_AlfPers_2015' in comparison with commercial cultivars across years and two locations.

Cultivar	Gene Autry, OK - 2017	Gene Autry, OK - 2018	Vashti, Texas - 2018
AlfaGraze 600RR	12,721 b	8,390 ns	6,690 ns
Bulldog 505	13,482 ab	8,385 ns	5,536 ns
Bulldog 805	13,689 ab	8,360 ns	6,376 ns
UF_AlfPers_2015	14,432 a	8,695 ns	5,931 ns

*Mean values within columns did not differ statistically (Fisher's Protected LSD, $P < 0.05$).

'UF_AlfPers_2015' was included in 2016 as an entry in the Noble Research Institute's Alfalfa Variety testing at Gene Autry, Oklahoma, and Vashti, Texas. Collection of dry matter yield data began in 2017 in Gene Autry, while data were collected in Vashti in 2018. As Shown in Table 2., dry matter yield (kg/ha) between Bulldog 505 and 'UF_AlfPers_2015' was similar during the first two harvests in 2021.

In Summary, 'UF_AlfPers_2015' has shown improved yield and persistence while maintaining a high nutritive value. These improvements are highly desirable for production systems in Florida and other southeastern states in the US. 'UF_AlfPers_2015' also performed well in yield trials in Oklahoma and Mississippi. Currently, there is 500 pounds of Breeders Seed available.

For additional information and data on this cultivar, please contact Dr. Esteban Rios (estebanrios@ufl.edu).

What is an ITN?

Newly developed cultivars, experimental lines, and plant germplasm are routinely approved for release through UF's Florida Agricultural Experiment Station (FAES). Florida Foundation Seed Producers, Inc. (FFSP), a non-profit corporation and direct support organization of the University of Florida, is continuously seeking strategic production and marketing companies in commercialization of a diverse portfolio of newly developed plant cultivars. For certain crops, several companies may express interest in an opportunity for an exclusive license for an improved plant cultivar. The Invitation to Negotiate (ITN), implemented in 2006, is a process which enables FFSP to fairly and objectively evaluate all commercial proposals and comments to effectively identify superior companies to deliver new cultivars to the public. In return, licensed companies provide royalties back to FFSP for reinvestment in the breeding and development of new, improved cultivars at the FAES.

The ITN process encourages an open engagement of all interested companies and stakeholders. Companies submitting proposals and/or comments to an ITN will be evaluated consistently and fairly by a review committee comprised of staff members of FFSP and expert faculty advisors from FAES.

FFSP strives to secure the partner/partners that best meet the needs of the State of Florida and its people, UF, and the FAES breeding program. Responders to the ITN will be evaluated using a consistent methodology, allowing review committee members to weigh core elements and objectively evaluate multiple proposals. The ITN specifications objectively guide critical responses in a proposal and are designed to explore the project's commercial scope for a sustainable business, consistent with the necessity to deliver FAES plant breeding products and technology to the public. The ITN requires interested companies to describe their prior experience and current business model. Companies are asked to describe a plan of action concerning the new business opportunity. The ITN also requests details of marketing and production plans which will successfully deliver a sound commercial operation and ensure that sustaining royalties are returned to support the FAES breeding program. Initiation of an ITN and the participation by a company in an ITN process does not mean an exclusive agreement will be eventually awarded; only that responsive companies will receive consideration and a fair evaluation of proposals and comments submitted.

At the conclusion of the ITN process, it is everyone's hope that most details can be mutually agreed upon, resulting in an award of a license to a qualified and successful partner.

Please refer to the general conditions of this ITN for specific specifications and instructions.

Instructions for Submitting Comments and/or Proposals

If you or your company is interested in commenting on and/or submitting a proposal for this exclusive licensing opportunity, please complete the three steps on this list:

Step 1: Carefully read the general conditions of this announcement.

Step 2: Complete and sign the Acknowledgment Form(s) of this announcement and mail or fax to: Florida Foundation Seed Producers, Inc., Attn: Jim R. Holm (By Email: jholm@ffsp.net; By U.S. Mail: 3760 NW 83rd St., Ste. 2, Gainesville, FL 32606; or By fax: (877) 839-9162)

Step 3: After FFSP receives the Acknowledgment Form(s), you will receive a sample questionnaire which you may use to submit your proposal(s). If you are only interested in commenting, please indicate such on your Acknowledgment Form(s), and submit your comments upon returning the Acknowledgment Form(s). All proposals and comments must be received by Florida Foundation Seed Producers, Inc. (By Email: jholm@ffsp.net; By U.S. Mail: 3760 NW 83rd St., Ste. 2, Gainesville, FL 32606) prior to the ITN Proposal Due Date specified in the ITN Description and Specifications of this announcement.

All proposals and comments will be objectively and confidentially evaluated. FFSP is committed to evaluating proposals and comments using the following four (4) principles of the ITN process:

- 1. What is good for the State of Florida and its people?**
- 2. What is good for UF/IFAS?**
- 3. What is good for the breeder and the breeding program?**
- 4. In the case of world food crops, what is good for world food security?**

NOTICE: Late proposals and/or comments will not be accepted or considered.

If you or your company is interested in commenting on and/or submitting a proposal for these exclusive licensing opportunities, please complete and sign this Acknowledgment Form agreeing to the terms and conditions of the ITN and fax it back to Florida Foundation Seed Producers, Inc. FFSP will then send your company a sample questionnaire which may be used for submission of your proposal.

SUBMIT ITN RESPONSE AND COMMENTS TO:
FLORENDA FOUNDATION SEED PRODUCERS, INC.
 Attn: Jim R. Holm
 By Email: jholm@ffsp.net
 By U.S. Mail: 3760 NW 83rd St., Ste. 2, Gainesville, FL
 32606 By Fax: (877) 839-9162

Acknowledgment Form



INVITATION TO NEGOTIATE

ITN NUMBER: ITN22-02	
ITN TITLE: 'UF_AlfPers_2015' Alfalfa Cultivar	
PROPOSER NAME/COMPANY NAME:	PROPOSER CONTACT (NAME):
PROPOSER'S MAILING ADDRESS (Phys.):	CITY – STATE – ZIP CODE - COUNTRY:
TELEPHONE NO.:	EMAIL:
ALTERNATE TELEPHONE NO.:	WEBSITE:
FAX NO.:	

Is it acceptable to send your ITN sample questionnaire via e-mail? _____ Yes _____ No

If no, what method should be used? _____

I certify that this ITN Proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting an ITN Proposal for the same materials and is in all respects fair and without collusion or fraud. I agree to be bound by all terms and conditions of this ITN and certify that I am authorized to sign this acknowledgement form and submit an ITN Proposal for the Proposer.

SIGNATURE

DATE

NAME (TYPED), TITLE