



INVITATION TO NEGOTIATE

ITN22-13 - ‘UFCC17’ Crimson Clover 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:** ‘UFCC17’ Crimson Clover Cultivar
- **ITN Number:** ITN22-13
- **ITN Territory:** As proposed by ITN respondents
- **ITN Announcement Date:** Wednesday, October 12, 2022
- **ITN Proposal Due Date:** Wednesday, November 23, 2022, 12PM ET
- **Cultivar Description:** ‘UFCC17’ Crimson Clover Cultivar

‘UFCC17’ crimson clover is a new crimson clover cultivar developed by the forage breeding program at the University of Florida. ‘UFCC17’ was selected for early flowering and early biomass yield. ‘UFCC17’ is much earlier flowering than other cultivars tested in these studies. Given these traits, ‘UFCC17’ could extend the production window while minimizing competition from regrowth when overseeded with perennial warm-season grasses. ‘UFCC17’ has shown great potential for use as a cover crop, forage crop, use in roadside applications, and as a pollinator attractor when seeded between rows of annual and perennial fruit crops.

Early Flowering

‘UFCC17’ generally matures two weeks earlier than ‘Dixie’, and one to two weeks earlier than ‘Flame’ and ‘Sunrise’ when grown in Citra, Marianna, and Hague, Florida (Table 1, Figure 1). This early flowering behavior provides an extended flowering window for pollinators and enhances the aesthetic value of the crop.

Table 1. Early maturity of UFCC17 crimson clover in Citra, Hague and Marianna, FL across multiple years. Scale: visual ratings for flowering where 0 indicates vegetative stage with no flowers, 6 is full bloom, and 9 indicates seedheads becoming brown and seed near maturity.

	Citra, FL		Citra, FL		Hague, FL				Marianna, FL
Cultivar	2/22/18	4/25/18	3/14/19	4/14/19	2/23/21	3/16/21	3/24/21	4/7/21	3/31/21
Dixie	0 b	7 b	0 b	6 b	0 b	0 c	1 d	6 c	2 d
Flame	0 b	7 b	1 b	7 b	0 b	1 c	3 c	7 b	4 c
AU Sunrise	0 b	6 b	1 b	8 a	0 b	5 b	7 b	9 a	6 b
UFCC17	6 a	9 a	6 a	9 a	6 a	9 a	9 a	9 a	9 a

*Mean values within columns sharing the same letter do not differ statistically ($P \leq 0.05$) by Tukey HSD Test.

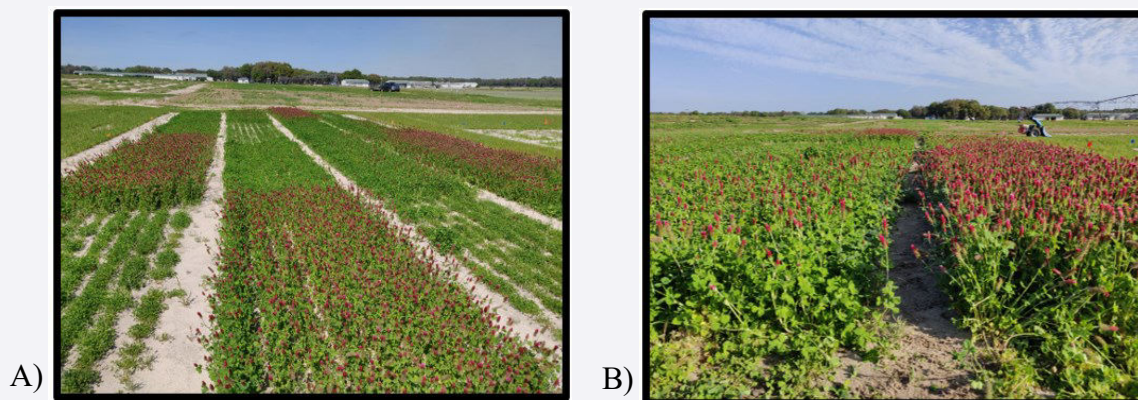


Figure 1. Early maturity of ‘UFCC17’ in Citra, FL in 2018. A) Randomized complete block design experiment with 4 blocks and five entries on March 14, 2019: ‘UFCC17’ (rating of 6 as shown in Table 1.), ‘Dixie’, ‘Flame’, ‘AU Sunrise’, and ‘Balansa Clover’. B) ‘AU Sunrise’ at early bloom (left) and ‘UFCC17’ showing early flowering uniformity (right).

ITN Description and Specifications

Forage performance in Florida and Tennessee

The early maturing characteristics of ‘UFCC17’ make it an ideal forage and cover crop for early-season production. ‘UFCC17’ had the greatest dry matter yield (kg ha⁻¹) in the first harvest in all locations and years in Florida (Table 2). Its early forage production provides opportunities for an extended grazing season, as well as making ‘UFCC17’ a good candidate for cover crop applications. The ability of ‘UFCC17’ to concentrate dry matter yield production in early to mid-March provides a greater window for planting summer cash crops following ‘UFCC17’.

Table 2. Dry matter yield (kg ha⁻¹) of UFCC17, Dixie, Flame, AU Sunrise crimson clover in Citra, Hague, and Marianna, Florida across multiple years.

Cultivar	Citra, FL			Citra, FL			Hague, FL	Marianna, FL		
	2/22/18	4/25/18	Total 2018	3/14/19	4/14/19	Total 2019	4/7/21	4/1/21	5/14/21	Total 2021
Dixie	2148 a	2137 a	4296 a	0 b	4408 a	4408 a	1218 b	1801 b	2401 a	4202 a
Flame	1168 b	1644 a	2812 b	0 b	3892 b	3892 a	1138 b	1938 b	2214 a	4152 a
AU Sunrise	1390 b	1849 a	3239 b	0 b	4424 a	4424 a	1589 a	1928 b	2155 a	4083 a
UFCC17	2064 a	951 b	3014 b	2628 a	1875 b	4503 a	1666 a	3051 a	0 b	3051 b

*Mean values within columns sharing the same letter do not differ statistically ($P \leq 0.05$) by Tukey HSD Test.

‘UFCC17’ has shown early flowering in Knoxville, TN and Spring Hill, TN. ‘UFCC17’ had similar dry matter yield production compared to ‘Dixie’ and ‘Kentucky Pride’ in both locations in Tennessee during the first harvest in April 2021 (Table 3). ‘UFCC17’ had a slightly greater canopy cover in February 2020 in Spring Hill and a slightly lower canopy cover in Knoxville compared to ‘Dixie’ and ‘Kentucky Pride’.

Table 3. Dry matter yield (kg ha⁻¹) and canopy cover (%) of ‘UFCC17’, ‘Dixie’, and ‘Kentucky Pride’ in Knoxville, TN and Spring Hill, TN in the 2020-2021 season.

Cultivar	Dry matter yield (kg ha ⁻¹) April 2021		Dry matter yield (kg ha ⁻¹) May 2021		Canopy cover (%) February 2020	
	Spring Hill	Knoxville	Spring Hill	Knoxville	Spring Hill	Knoxville
UFCC17	1383 a	1318 a	2194 b	3586 b	51 a	48 b
Dixie	1494 a	1494 a	4010 a	5290 a	46 b	55 b
Kentucky Pride	1722 a	1699 a	3216 b	4024 b	47 b	59 a

*Mean values within columns sharing the same letter do not differ statistically (Fisher's Protected LSD, $P < 0.05$).

‘UFCC17’ showed very similar forage nutritive values compared to ‘Dixie’ and ‘Kentucky Pride’ (Table 4). However, ‘UFCC17’ showed greater acid detergent fiber (ADF) and greater neutral detergent fiber (NDF) due to its early maturity and greater fiber production compared to ‘Dixie’ and ‘Kentucky Pride’.

Table 4. Crude protein (%), ADF and NDF of ‘UFCC17’, ‘Dixie’, and ‘Kentucky Pride’ in Knoxville and Spring Hill, TN in the season 2020-2021.

Cultivar	Crude protein [†] (%) in April 2021		ADF [‡] (%) in April 2021		NDF [‡] (%) in April 2021	
	Spring Hill	Knoxville	Spring Hill	Knoxville	Spring Hill	Knoxville
UFCC17	20.4 a	14.7 a	21.7 a	25.9 b	26.4 a	38.5 a
Dixie	21.3 a	14.9 a	19.4 b	23.1 b	24.2 b	35.4 b
Kentucky Pride	21.9 a	15.7 a	18.7 b	26.3 a	22.9 b	35.5 b

*Mean values within columns with the same letter do not differ statistically (Fisher's Protected LSD, $P < 0.05$). [†]Analyzed using near infrared spectroscopy (NIRS) with the appropriate calibration for each species. Reported on a 100% DM basis.

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 return to Florida Foundation Seed Producers, Inc., Attn: Jim R. Holm (By Email: jholm@ffsp.net; By U.S. Mail or Express Courier: 3760 NW 83rd St., Suite 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 or Express Courier: 3760 NW 83rd St., Suite 2, Gainesville FL 32606; or By fax: (877) 839-9162) 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.

Florida Foundation Seed Producers, Inc. (FFSP), a non-profit corporation and direct support organization of the University of Florida (University) offers the following Invitation to Negotiate (ITN).

GENERAL CONDITIONS:

ITN FORM. All proposals should be submitted after submitting the FFSP ITN Acknowledgment Form. All proposals should be submitted with one (1) complete original proposal and three (3) complete photocopies in a sealed envelope, with the following information on the outside of the envelope: ITN number, date and time of ITN closing (as stated on Acknowledgment Form), and company name. All ITN responses must be executed and submitted in a sealed envelope. (DO NOT INCLUDE MORE THAN ONE ITN RESPONSE PER ENVELOPE)

1. **EXECUTION OF ITN.** The ITN Acknowledgment Form must contain a manual signature of an authorized representative in the space provided. ITN proposals must be typed or printed in ink. Use of erasable ink or pencil is not permitted. All corrections made by Proposer must be initialed. All ITN proposals are subject to the conditions specified herein and those which do not comply are subject to rejection.

2. **NO ITN SUBMITTED.** If not submitting an ITN, respond by returning only the ITN Acknowledgment Form, marking it "NO ITN RESPONSE", and explain the reason in the space provided along with any comments. Failure to respond three (3) times in succession without justification may be cause for removal of your company's name from the ITN notification list. NOTE: To qualify as a respondent, Proposer must submit a "NO ITN RESPONSE", and it must be received no later than the stated ITN closing date and hour.

3. **ITN DELIVERY.** If ITN proposals are mailed through the U. S. Postal Service as regular mail, address the proposal to the PO Box as shown on the Invitation to Negotiate Acknowledgment Form; or if the ITN proposal will be delivered by a service other than the U. S. Postal Service regular mail, i.e., Federal Express, Airborne, United Parcel Service, Courier, U. S. Postal Express Mail, etc., address the proposal to the building and room number as shown on the ITN Acknowledgment Form.

4. **ITN OPENING.** Proposals shall be opened after the closing date and time specified on the ITN Acknowledgment Form. Proposers shall be responsible to assure that the ITN response is delivered at the proper time and place prior to the ITN closing. ITN responses, which for any reason are not so delivered, will not be considered. NOTE: ITN Notice of an unspecified award may be posted electronically at <http://FFSP.net> listed as ITN.

5. **PROPOSAL WITHDRAWAL.** A Proposer may withdraw a submitted proposal at any time up to the ITN closing. To withdraw a proposal, the Proposer must submit a written request, signed by an authorized representative, to FFSP before the ITN closing. After withdrawing a previously submitted proposal, the Proposer may submit another proposal at any time up to the ITN closing.

6. **INQUIRIES.** All changes, if necessary, shall be made by written addendum to the ITN. Any explanation desired by Proposers must be requested of FFSP in writing, and if an explanation is necessary, a reply shall be made in the form of an addendum, a copy of which will be forwarded to each Proposer who has submitted an Acknowledgment Form to FFSP. FFSP will not give verbal answers to inquiries regarding the specifications, or verbal instructions prior to or after the award of this ITN. A verbal statement regarding same by any person shall be non-binding. FFSP is not liable for any costs or actions resulting from the Proposer accepting verbal direction.

7. **ERRORS.** FFSP is not liable for any errors or misinterpretations made by the Proposer in responding to this ITN.

8. **AMENDMENT AND CLARIFICATION.** FFSP reserves the unilateral right to amend this ITN in writing at any time. FFSP reserves the right to cancel or reissue the ITN at its sole discretion. Proposers shall respond to the final written ITN and any exhibits, attachments, and amendments.

9. **ITN INTERPRETATION.** Interpretation of the wording of the ITN document submitted by the Proposer will be the responsibility of FFSP and that interpretation will be final and binding.

10. **PROPOSAL REJECTION.** FFSP shall have the right to reject any or all ITN proposals and in particular to reject a proposal not accompanied by data required by the ITN or in any way incomplete or irregular, including omission of financial considerations. Conditional ITN proposals will not be accepted.

11. **PRICES, TERMS.** Proposers are expected to examine the project scope, specifications, schedule, proposed terms, and all instructions pertaining to the ITN. Failure to do so will be at Proposers' risk. Prices proposed will govern in the award, however, Fees, Royalties and Price are not the only considerations in selection for the award.

12. **CONFLICT OF INTEREST.** Proposers must disclose with their proposal any actual or potential conflicts of interest. All Proposers must disclose with their ITN the name of any officer, director, or agent who is also an employee of FFSP or University or any State Employee. Further, all Proposers must disclose the name of any State employee who owns,

directly or indirectly, an interest of five percent (5%) or more in the Proposer's firm or any of its branches.

13. **PERFORMANCE INVESTIGATIONS.** As part of the proposal evaluation process, FFSP may make inquiries and investigations, including verbal or written references from Proposer's customers, to determine the ability of the Proposer to offer service.

14. **INDEPENDENT CONTRACTOR.** Nothing herein is intended or shall be construed as in any way creating or establishing the relationship of co-partners between the parties or in any way making the Proposer an agent or representative of FFSP for any purposes in any manner whatsoever. Proposer is, and shall remain, an independent contractor with respect to all services performed under any License or Research Agreement awarded as a result of this ITN.

15. **SELECTION.** As the best interest of FFSP acting as a direct support organization of the University may require, the right is reserved to make selections by individual item, group of items, all or none, or a combination thereof; to reject any and all ITN proposals or waive any minor irregularity or technicality in ITN proposals received. Proposers are cautioned to make no assumptions of acceptance, until receiving written notice. Fees, Royalties and Price are not the only considerations in the award.

16. **AWARD.** Award shall be made to the responsive Proposer whose proposal is determined to be the most advantageous to FFSP. Price, although a consideration, will not be the sole determining factor. FFSP or University is under no obligation to award a contract as a result of this ITN.

17. **CANCELLATION.** FFSP, by written notice, may terminate this ITN without penalty or cause, in whole or in part, when such action is deemed by FFSP to be in the best interest of FFSP.

18. **INTERPRETATIONS/DISPUTES.** Any questions concerning conditions or negotiation considerations shall be directed in writing to FFSP. Inquiries must reference the date of ITN closing and the ITN number. No interpretations shall be considered binding unless provided in writing by the FFSP in response to requests in full compliance with this provision.

19. **LEGAL REQUIREMENTS.** This ITN and any contract resulting from this ITN, and any disputes thereunder, shall be construed exclusively in accordance with the laws of the State of Florida without regard to conflict of laws provisions and enforced in the courts of the State of Florida. FFSP and Proposer hereby agree that venue shall lie exclusively in Alachua County, Florida.

20. **ADVERTISING.** In submitting an ITN proposal, the Proposer agrees not to use the results therefrom as a part of any commercial advertising.

21. **ASSIGNMENT.** Any contract issued pursuant to this ITN and the monies, which may become due hereunder, are not assignable except with the prior written approval of FFSP.

22. **LIABILITY and INDEMNITY.** The Proposer shall indemnify and hold FFSP, the University of Florida Board of Trustees, the Florida Board of Governors, and their respective employees, directors, officers, and agents harmless from all costs, expenses, claims, damages, penalties and losses (including without limitation reasonable attorneys' fees and experts' fees) arising out of, relating to, or resulting from any contract awarded as a result of this ITN and from the Proposer's or third persons' use of the FFSP licensed materials.

23. **FACILITIES.** FFSP reserves the right to inspect the Proposer's facilities at any time with prior notice.

24. **TERMINATION.** Upon termination of the agreement that may result from the ITN, FFSP shall give notice with instructions for return of plant materials. Upon receiving a written request from FFSP, Proposer agrees to return to FFSP plant material as instructed. If no instructions are received from FFSP, the Proposer shall give fifteen (15) days notice to destroy all plant material to FFSP. After fifteen (15) days, all plant material shall be destroyed by the Proposer, without exception for other options or hold backs.

25. **RESERVATION OF RIGHTS.** FFSP retains sole rights, titles and ownership of the supplied plant material and associated information provided in performance of the project, including all Intellectual Property (IP) and all current and future patents, plant variety protection (PVP) certificates, copyrights, trademarks, and other intellectual property rights. No one is permitted to file for IP protection, except University, FFSP or their designees. FFSP is enabled by University to file for IP protection and to contract out all forms of IP to commercial entities. Breeding, selection, or modifications to the plant materials and IP supplied are prohibited.

26. **CONFLICT BETWEEN DOCUMENTS.** If any terms and conditions contained within the documents that are a part of this ITN or resulting contract are in conflict with any other terms and conditions contained therein, then the various documents comprising this ITN or resulting License or Research Agreement, as applicable, shall govern in the following order of precedence: amendment, contract and addendum(s), addenda to invitation to negotiation, special conditions, general conditions, invitation to negotiate.

27. EXPENSE. All proposals submitted in response to this ITN must be submitted at the sole expense of the Proposer, whether or not any agreement is signed as a result of this ITN. Proposers will pay all costs associated with the preparation of proposals and necessary visits to FFSP and other required site visits.

28. NO WARRANTIES. FFSP MAKES NO REPRESENTATIONS OR WARRANTIES WHATSOEVER WITH RESPECT TO THE MATERIALS, INCLUDING, WITHOUT LIMITATION, (I) THAT THE USE OF THE MATERIALS DOES NOT OR WILL NOT INFRINGE ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHTS OF ANY THIRD PARTY, (II) THAT A THIRD PARTY'S INTELLECTUAL PROPERTY RIGHTS DO NOT INFRINGE ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHTS OF THE MATERIALS, OR (III) THAT THE USE OF THE MATERIALS IS SAFE AND WITHOUT HAZARD. FFSP IS UNDER NO OBLIGATION TO OBTAIN OR PROVIDE LICENSES THAT MAY BE REQUIRED FOR THE USE OF THE MATERIALS BY PROPOSER. IN ADDITION, PROPOSER SHALL ASSUME ALL RISKS RELATING TO, RESULTING FROM OR ARISING OUT OF THE USE OF THE MATERIALS.

SPECIAL CONDITIONS:

29. USE OF TERMS. The terms proposer, cooperator, firm, vendor, company, and contractor are used synonymously in this ITN unless otherwise indicated.

30. CONTRACT. This ITN, the written proposal submitted, and modifications to terms as negotiated and agreed to by the parties shall be incorporated into the final contract for consideration.

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:
FLORIDA FOUNDATION SEED PRODUCERS, INC.**

Attn: Jim R. Holm

By Email: jholm@ffsp.net

By U.S. Mail or Express Courier:
3760 NW 83rd St, Suite 2,
Gainesville FL 32606

By Fax: (877) 839-9162

Acknowledgment Form



INVITATION TO NEGOTIATE

ITN NUMBER: ITN22-13	
ITN TITLE: 'UFCC17' Crimson Clover 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