



The Importance of Alfalfa Research Funding

USDA



 Agricultural
Research
Service



\$9.1 billion

ARS - \$47.3 million (88.6 SY)



\$5.6 billion

ARS - \$37.7 million (77.7 SY)



\$2.3 billion

ARS - \$11.9 million (25.9 SY)



\$51.7 billion

ARS - \$47.6 million (103.8 SY)



\$40.9 billion

ARS - \$35.9 million (76.5 SY)

\$9.1 billion

ARS - \$47.3 million (88.6 SY)



\$2.3 billion

ARS - \$11.9 million (25.9 SY)



\$5.6 billion

ARS - \$37.7 million (77.7 SY)



\$8.9 billion

ARS - \$4.7 million (10.9 SY)



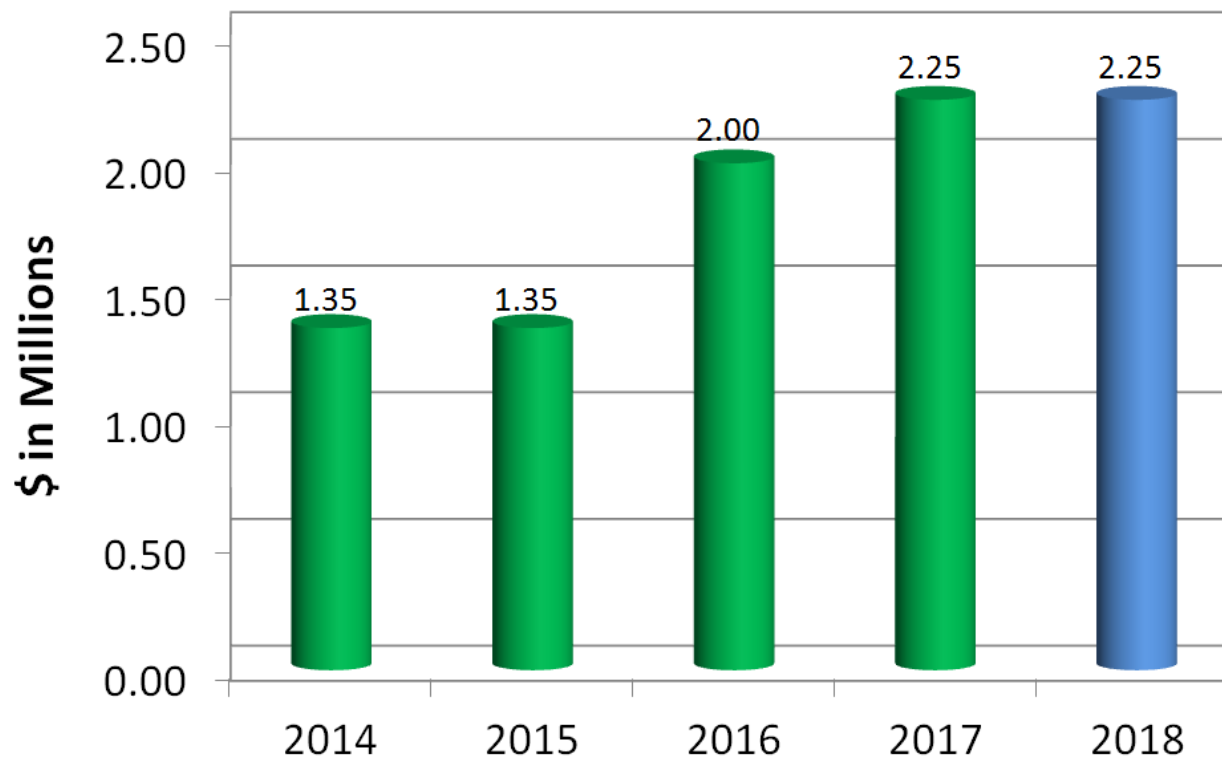
\$51.7 billion

ARS - \$47.6 million (103.8 SY)

\$40.9 billion

ARS - \$35.9 million (76.5 SY)

AFRP



**Nearly \$7 million devoted to
alfalfa research since 2014**



**Searchable
Database!**

[Organization](#) [Research](#) [Education](#) [Policy](#) [Media](#) [Helpful Links](#) [NAFA](#)

Research Programs

The National Alfalfa & Forage Alliance was instrumental in securing funding for two research programs supporting the alfalfa industry:

- Alfalfa Pollinator Research Initiative (APRI)
- Alfalfa Seed & Alfalfa Forage Systems Research Program (AFRP)

The APRI, administered through USDA's Agricultural Research Service (ARS), is devoted to ensuring the availability of healthy non-Apis pollinator populations essential for alfalfa seed production. APRI research focuses on pollinator management, production, safety, epidemiology and disease management, and genetics and demographics.

The AFRP, administered through USDA's National Institute for Food and Agriculture (NIFA), supports integrated, collaborative research and technology transfer to improve the efficiency and sustainability of conventional and organic forage production systems. The program is devoted to improving alfalfa forage and seed yield, improving persistence, improving alfalfa forage and seed harvesting and storage systems, improving estimates of alfalfa forage quality, and breeding.

Find information by entering one or more of the drop-down search options:

Keyword
Researcher
University/Entity
Year
Categories
Research Program

[Final Reports](#)

[Project Objectives](#)

[Program Priorities](#)

[RFA](#)



Organization Research Education Policy Media Helpful Links NAAIC

2017 Alfalfa Seed and Alfalfa Forage Systems Research Program (AFRP)

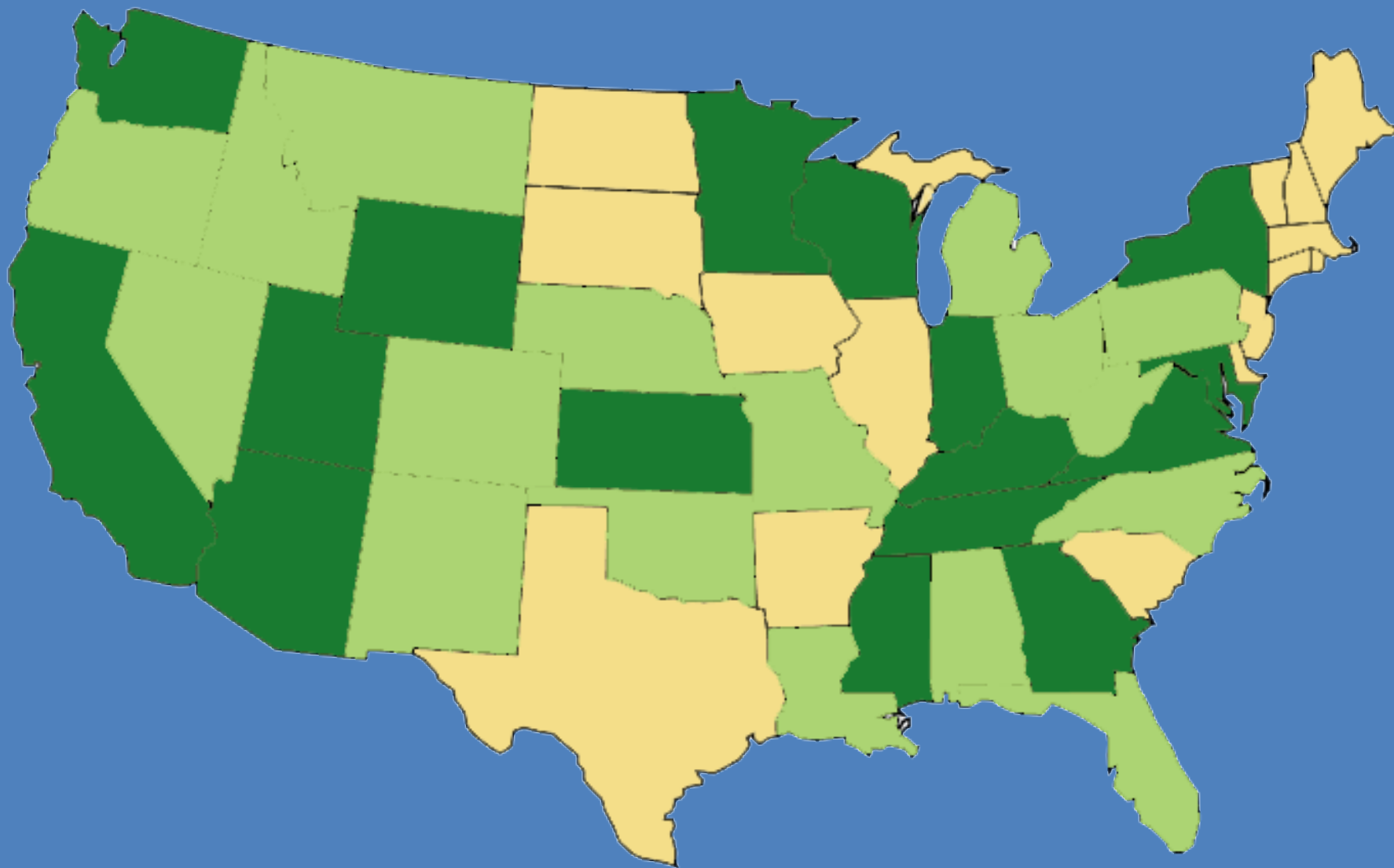
- **Developing Regionally-Adapted, Resilient Alfalfa Germplasm Pools**
- Edward Brummer, University of California-Davis (\$290,000)
- **A Decision Support Tool for Predicting Alfalfa Yield and Quality to Enhance Resource Use Efficiency**
- Isaya Kisekka, University of California-Davis (\$253,825)
- **Development of Grazing Recommendations and On-Farm Decision Tools for Managing Alfalfa-Grass Mixtures in the Southeastern U.S.**
- Jennifer Tucker, University of Georgia (\$250,000)
- **Bacterial Stem Blight of Alfalfa: Connection with Frost Damage, Development of Resistant Germplasm, and Mapping Resistance Genes**
- Deborah Samac, USDA-ARS (MN) (\$250,000)
- **Developing an Attractant for *Lygus hesperus* Derived from Host Plant Volatile Compounds**
- Zainulabeuddin Syed, University of Notre Dame (\$250,000)
- **Proximal and Remote Sensing of Alfalfa Canopies for Early Detection of Insect Stress and Rapid Integrated Pest Management Decision Making**
- William Lamp, University of Maryland (\$290,000)
- **Determining Genetic Factors That Influence Forage Quality in Alfalfa**
- Steve Norberg, Washington State University (\$250,000)
- **Identifying Factors to Optimize Establishment of Alfalfa Interseeded in Corn**
- Mark Renz, University of Wisconsin (\$250,000)

2016 Alfalfa Seed and Alfalfa Forage Systems Research Program (AFRP)

- **Overhauling Alfalfa Weevil Management in Irrigated Southwest Desert Alfalfa**
- Ayman Mostafa, University of Arizona (\$246,000)
- **LIDAR and Photogrammetry to Map Alfalfa Yield and Quality Using Unmanned Aircraft Systems**
- Joseph Dvorak, University of Kentucky (\$250,000)
- **Impact of Potassium Fertilization, Harvest Frequency, and Grazing Management in Alfalfa Persistence Across the Southeastern U.S.**
- Rocky Lemus, Mississippi State University (\$249,134)
- **Managing Selfing Rates in Alfalfa Seed Production Fields**
- Johanne Brunet, USDA-ARS (WI) (\$250,000)
- **Increasing Preventative and Curative Options for Clover Root Curculio Management in Western Alfalfa**
- Ricardo Ramirez, Utah State University (\$250,000)
- **Integrated Pest and Pollinator Management on Alfalfa Production as a Seed Crop**
- Doug Walsh, Washington State University (\$240,000)
- **The Silent Decline in Soil Potassium Levels and Its Effect on Alfalfa Productivity in the Central and Western U.S.**
- Anwar Islam, University of Wyoming (\$250,000)
- **Subsurface Drip Irrigation, Deficit Irrigation Strategies, and Improved Varieties to Improve Alfalfa Water Use Efficiency Under Drought Conditions**
- Dan Putnam, University of California - Davis (\$118,500)

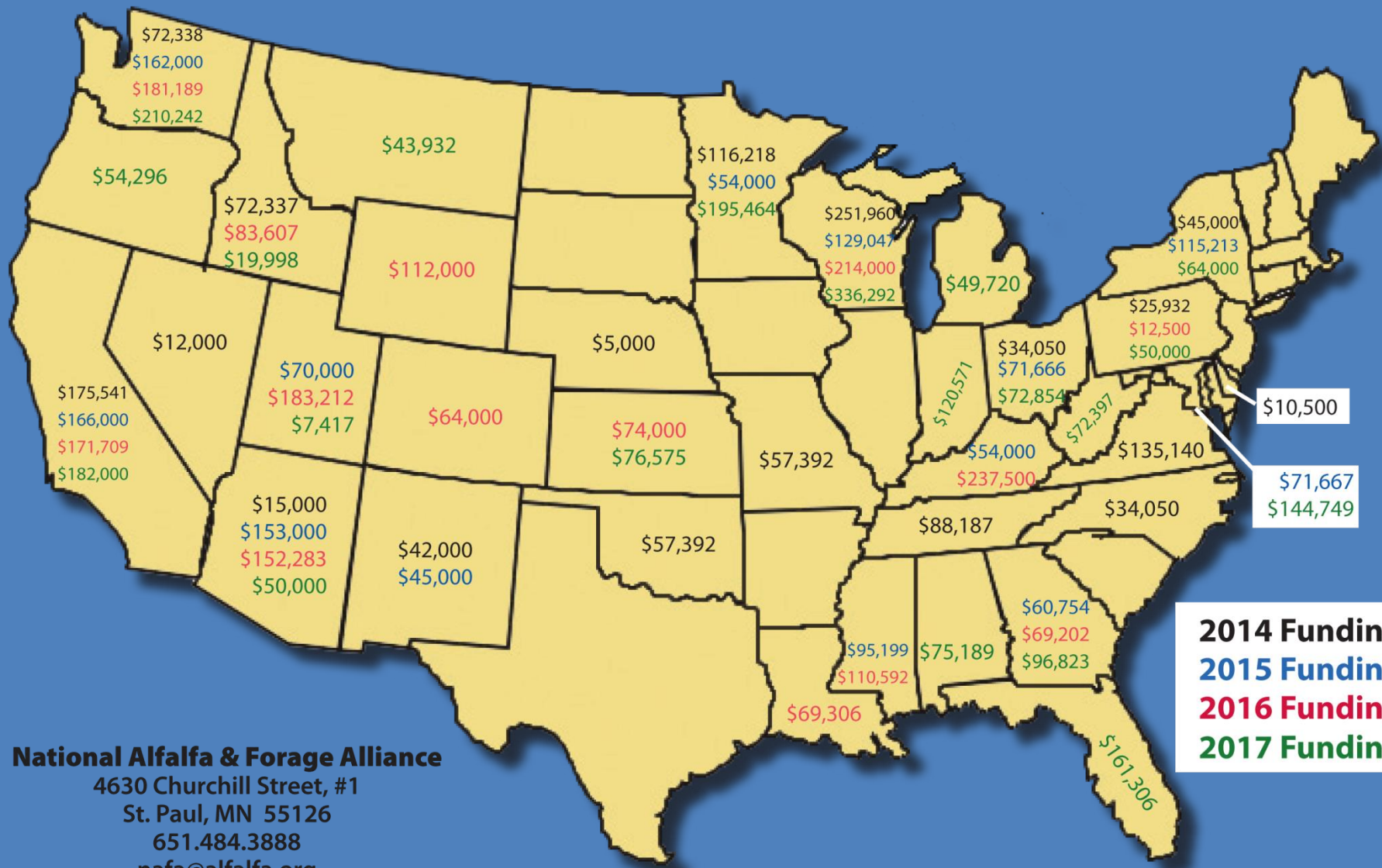
Alfalfa Seed & Alfalfa Forage Systems Research Program (AFRP)

Research Funding going to 34 states



Alfalfa Seed & Alfalfa Forage Systems Research Program (AFRP)

Research funding going to 34 states.



National Alfalfa & Forage Alliance

4630 Churchill Street, #1

St. Paul, MN 55126

651.484.3888

nafa@alfalfa.org

2014 Funding
2015 Funding
2016 Funding
2017 Funding

Senate FY18 ARS Report Language

Alfalfa Research. – The Committee notes that research into alfalfa seed and alfalfa forage systems holds the potential to increase yield, increase milk production, and improve genetics, and the **Committee recommendation includes an increase of \$1,000,000** to support research focused on alfalfa improvement. Research should focus on using tools to accelerate and enhance existing breeding programs focused on improving yield and quality parameters; developing innovative harvesting and utilization systems; developing new markets for co-products; and quantifying environmental benefits from alfalfa based systems.



Persistence...
SUCCESS!

NAFA Priorities

NAFA requests agencies use sound science in policy development and adhere to established comment procedures.

• Alfalfa Safety Net

- Request alfalfa be classified as a program crop
- Forage Crop Insurance (enhance existing APH and seeding year programs; work with developers as they craft new revenue and/or quality policies)

• Public Research

- ARS
 - Request parity in research funding with major crops
 - Request an additional \$10 million investment in ARS alfalfa research
 - Identify National Program Leader(s)
 - Request continued support for U.S. Dairy Forage Research Center
 - Establish two western positions to work in collaboration with the USDFRC
 - Request continued support for St. Paul ARS Forage Unit (i.e., fill vacant positions)
 - Request continued support for Logan ARS Units (Bee Lab & Forage Unit)
 - Maintain support for Research Geneticist position
 - Request continued funding for Alfalfa Pollinator Research Initiative (APRI)
- NIFA
 - Request the continued inclusion of AFRP authorizing language in next Farm Bill
 - Request continued funding for Alfalfa Seed and Alfalfa Forage Systems Research Program (AFRP)
 - Work with NIFA on land grant commitment to forages (i.e., fill vacant forage positions)
 - Continue to work with NIFA on grant opportunities (e.g., BRAG, new investigator)

• Emergency Forage Strategy

• NASS Data

- Secure value reporting for green chop/haylage
- Improve accuracy of alfalfa yield reporting (i.e., survey questions)

• Maintain and Enhance Key Export Markets

- When appropriate, work with ASTA, agencies, and other national associations to establish LLP tolerances
- Refine coexistence strategies, when appropriate, to meet requirements of key export markets

• Crop Protection Tools

- Continue to work with EPA to support and maintain seed industry crop protection tools (seed industry has non-food use status)
- Continue to work with EPA to support and maintain forage crop protection tools

• Miscellaneous

- Monitor the Endangered Species Act (ESA)
- Monitor RFS2 certification process



NAFA Priorities

NAFA requests agencies use sound science in policy development and adhere to established comment procedures.

- **Alfalfa Safety Net**

- Request alfalfa be classified as a program crop
- Forage Crop Insurance (enhance existing APH and seeding year programs; work with developers as they craft new revenue and/or quality policies)

Persistence...
SUCCESS!

McConnell Includes Alfalfa Crop Insurance Language in Farm Bill's Manager's Report

Senator Mitch McConnell (R-KY) showed his support for alfalfa by inserting language in the Manager's Report of the 2014 Farm Bill. The language inserted appeared as follows:

"The Managers recognize alfalfa to be an important domestic forage crop valued for nitrogen fixation, soil conservation, crop rotation, and as a natural habitat. The Managers view alfalfa as having great potential for the national cash hay market and as an affordable means of supporting the forage and intensive grazing needs of the horse, cattle, and dairy sectors. However, from 2002 through 2011, alfalfa acreage has declined 15.7 percent, and in 2012 alone acreage declined an additional 10 percent. The Managers stress the importance of an alfalfa crop insurance policy to ensure that producers have the risk management protection that they need to produce this important crop. The Managers urge the Secretary to include information regarding regional differences in cultivation in the alfalfa crop insurance study."

- **Alfalfa Seed Insurance Program**
- **Forage Seeding Program**
- **Actual Revenue History (ARH)**

Persistence...
SUCCESS!





NAFA



U.S. Alfalfa Farmer Research Initiative

U.S. ALFALFA FARMER RESEARCH INITIATIVE BRANDS

[Full Announcement](#)

[Checkoff FAQs](#)

[2017 Research Projects](#)



Support the Alfalfa Checkoff!

Buy your seed from these facilitating marketers:

Alforex Seeds
America's Alfalfa
Browning Seed
Channel
CROPLAN
DEKALB
DuPont Pioneer
Dyna-Gro
Fontanelle Hybrids
Forage First
FS Brand Alfalfa
Gold Country Seed
Hubner Seed
Jung Seed Genetics
Kruger Seeds
Latham Hi-Tech Seeds
Legacy Seeds
Lewis Hybrids
NEXGROW
Prairie Creek Seed
ProHarvest Seeds
Rea Hybrids
S&W Seed Company
Simplot Grower Solutions
Specialty
Stewart
Stone Seed
W-L Research



NAFA administers the U.S. Alfalfa Farmer Research Initiative (aka Alfalfa Checkoff Program), a farmer-funded investment in alfalfa-related research to help drive innovation and profitability in the alfalfa industry.

The U.S. Alfalfa Farmer Research Initiative, implemented voluntarily by seed brand, is assessed at the rate of \$1/bag of alfalfa seed. One-hundred percent of the checkoff funds will be used to support public research into alfalfa and alfalfa forage systems.

Each brand identifies their willingness to participate in the checkoff program. The role of participating brands is simply to facilitate the collection of the checkoff from farmers purchasing their alfalfa seed.



Please support these participating seed marketer Alfalfa Checkoff Program brands!

[Alforex Seeds](#)
[America's Alfalfa](#)
[Browning Seed](#)
[Channel](#)
[CROPLAN](#)
[DEKALB](#)
[DuPont Pioneer](#)
[Dyna-Gro](#)
[Fontanelle Hybrids](#)
[Forage First](#)
[FS Brand Alfalfa](#)
[Gold Country Seed](#)
[Hubner Seed](#)
[Jung Seed Genetics](#)

[Kruger Seeds](#)
[Latham Hi-Tech Seeds](#)
[Legacy Seeds](#)
[Lewis Hybrids](#)
[NEXGROW](#)
[Prairie Creek Seed](#)
[ProHarvest Seeds](#)
[Rea Hybrids](#)
[S&W Seed Co.](#)
[Simplot Grower Solutions](#)
[Specialty](#)
[Stewart](#)
[Stone Seed](#)
[W-L Research](#)



Alfalfa Checkoff Program

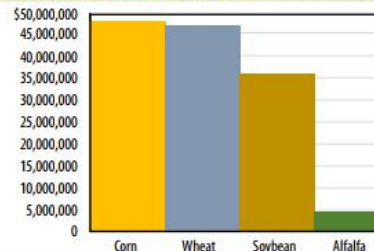
Dedicated to Public Research

Alfalfa is key to sustainable agricultural systems and is an economic engine in rural communities – its value for soil conservation, nitrogen fixation, energy savings, crop rotation, and wildlife habitat is unsurpassed. In terms of value, it is the nation's third most valuable field crop following only corn and soybean.

However, alfalfa must offer a competitive value for farmers in order to provide these benefits and maintain or expand acreage base. Yields of other major cropping choices have significantly surpassed alfalfa due, in part, to the vast amount of public research dedicated to these other crops.

While advances are being made in federal funds dedicated to public research (i.e., Alfalfa Seed & Alfalfa Forage Systems Research Program - AFRP, Alfalfa Pollinator Research Initiative - APRI), USDA's public research portfolio needs to be better balanced to provide needed research to the nation's third most valuable field crop (see chart). In addition to enhanced USDA commitment, it is imperative U.S. alfalfa farmers also make a financial commitment to public research supporting the industry.

ARS Research Funding by Crop (Source: ARS, 2014)



How will the checkoff program work?

The checkoff will be voluntary by alfalfa seed brand. Each brand will identify their willingness to participate in the checkoff program. **The role of participating brands is simply to facilitate the collection of the checkoff from farmers purchasing their alfalfa seed** (similar to elevators facilitating the collection of other commodity checkoff programs). The money collected comes from the farmer, not the seed marketer.

Checkoff Rate: \$1/bag on all U.S. sales of alfalfa seed including VNS and forage mixtures containing greater than 80% alfalfa.

Invoicing: It will be added to the alfalfa seed purchase invoice in a method identified by each participating brand (i.e., separate invoice line item; adding \$1 to price of each bag).

Publicity/Recognition: Seed marketers are encouraged to include the checkoff logo in digital/print media, bag tags, and/or bag imprints. To support the U.S. Alfalfa Research Initiative, farmers are encouraged to purchase seed from participating brands.

Participating Brands: If your favorite brand is not on the list, contact NAFA for information on how a seed marketer can become a participating brand.

Alforex Seeds
America's Alfalfa
Browning Seed
Channel
CROPLAN
DEKALB

DuPont Pioneer
Dyna-Gro
Fontanelle Hybrids
Forage First
FS Brand Alfalfa
Gold Country Seed

Hubner Seed
Jung Seed Genetics
Kruger Seeds
Latham Hi-Tech Seeds
Legacy Seeds
Lewis Hybrids

NEXGROW
Prairie Creek Seed
ProHarvest Seeds
Rea Hybrids
S&W Seed Company
Simplot Grower Solutions

Specialty
Stewart
Stone Seed
W-L Research

How will checkoff funds be spent?

The funds will be spent on public research into alfalfa and alfalfa forage systems (100% of funds will support public research; NAFA will not assess administrative costs). The checkoff will support research into the improvement of yields, water conservation, development of new storage and harvest systems, creation of new uses, and other research areas holding the potential to advance the alfalfa and alfalfa forage industry through integrated, collaborative research and technology transfer.

How will funds be distributed & outreach be conducted?

Research Priorities: NAFA, with input from farmer and industry members, will develop a list of research priorities.

Requests for Proposals: An RFP will be circulated to all known public U.S. alfalfa researchers.

Review Panel & Awards: NAFA will identify a subcommittee made up of university researchers, industry representatives, and farmers to evaluate proposals on scientific merit, conceptual adequacy, innovation, institutional qualifications, and relevance to industry priorities.

Outreach: Researchers will be required to submit a final project report that will be archived in a searchable database on the NAFA website. Additionally, researchers may be requested to present their findings at forage meetings and provide summaries that can be published in industry magazines.



First Checkoff Recipients — Congrats!



Charlie Brummer
UC-Davis \$49,988



Dan Putnam
UC-Davis \$41,165



Doug Walsh
WSU \$35,000



Steve Norberg
WSU \$40,000



Leslie Beck
NMSU \$10,000



Deb Samac
ARS \$36,000



Craig Sheaffer
UMN \$28,576



Matthew Digman
UWRF \$20,869



J. Brett Rushing
MSU \$39,000

2017 Alfalfa Checkoff Project Objectives

Full Announcement

Checkoff FAQs

Participating Marketers



Support the Alfalfa Checkoff!

Buy your seed from these facilitating marketers:

Alforex Seeds
America's Alfalfa
Browning Seed
Channel
CROPLAN
DEKALB
DuPont Pioneer
Dyna-Gro
Fontanelle Hybrids
Forage First
FS Brand Alfalfa
Gold Country Seed
Hubner Seed
Jung Seed Genetics
Kruger Seeds
Latham Hi-Tech Seeds
Legacy Seeds
Lewis Hybrids
NEXGROW
Prairie Creek Seed
ProHarvest Seeds
Rea Hybrids
S&W Seed Company
Simplot Grower Solutions
Specialty
Stewart
Stone Seed
W-L Research



NAFA's U.S. Alfalfa Farmer Research Initiative (USAFRI), better known as the Alfalfa Checkoff, initial request for proposals garnered an impressive response, generating 34 research proposals requesting more than \$1.4 million, demonstrating the high demand for alfalfa-related research funding. Proposals covered a wide range of topics intended to drive innovation and profitability in the alfalfa industry, as well as a broad geographic area. Nine researchers were the beneficiaries of the first-ever USAFRI, a farmer-funded investment in alfalfa-related research. Research projects in California, Minnesota, Mississippi, New Mexico, New York, Washington, and Wisconsin are being funded.

Award amounts subject to change, dependent on actual checkoff received.

1. Maximizing Alfalfa's Yield Potential
— E. Charles Brummer, University of California-Davis (\$49,988)
2. Developing High Yielding and High Quality Varieties and Cropping Systems for High Salinity Conditions
— Daniel Putnam, University of California-Davis (\$41,165)
3. Enhancing Alfalfa Yields and Stand Life by Improving Management of Seed Rot and Seedling Damping Off
— Deborah Samac, USDA-ARS (\$36,000)
4. Evaluating Progress in Alfalfa Forage Quality Improvement
— Craig Sheaffer, University of Minnesota (\$28,576)
5. Impact of Poultry Litter Application on Yield and Quality of Alfalfa Grown in Mississippi
— J. Brett Rushing, Mississippi State University (\$39,000)
6. Evaluation of the Efficacy of Various Herbicides for Control of Broadleaf (*Plantago major*) and Buckhorn (*Plantago lanceolata*) Plantain in Alfalfa
— Leslie Beck, New Mexico State University (\$10,000)
7. Developing Practical Phosphorus and Potassium Tissue Test Recommendations and Utilizing Struvite in Modern Alfalfa Systems
— Steve Norberg, Washington State University (\$40,000)
8. Integrated Pest Management and Pollinator Protection on Alfalfa Produced for Seed 2018-2019
— Douglas Walsh, Washington State University (\$35,000)
9. The Impact of Tedding on the Economic Production of Alfalfa Silage
— Matthew Digman, University of Wisconsin-River Falls (\$20,869)

By collaborating together



We can achieve more!