



Funding Update
Genome To Phenome Initiative



Dec 10, 2019

Paths to Federal Funding

- Get specific programs funded
 - e.g. NIFA line item
 - Not likely
- Get language into budget report, directing agencies to fund specific programs
 - Non-binding but typically adhered to by agencies
- Get authorization for a new program, such as in the Farm Bill
 - Authorizations establish a program and spending limit
 - Appropriations actually fund it
 - Typically non-mandatory so funding must be made through annual federal budget process (appropriation)
 - Not typically fully funded at authorization level
 - e.g. AFRI within NIFA: Authorized at \$700 million but only appropriated at \$415 million in FY19
 - Must go back every year for funding

Farm Bill Appropriations Request

- Iowa State University, University of Wisconsin, ICGA sent in report language to House and Senate
- House Ag Budget Report contained our language

Leveraging Plant Genome Information.—The Committee recognizes the potential impact that variable weather, environments, and production systems can have on the yield and quantity of maize and the need for greater prediction of plant performance under variable growing conditions. The Committee encourages USDA to support research that leverages plant genomic information with phenotypic and environmental data through an interdisciplinary framework, resulting in an understanding of plant processes that affect productivity and the ability to predict plant performance.

Farm Bill Appropriations Request

- Senate version of budget report included similar language supporting phenomics research

Genomes to Phenomes.—The Committee is supportive of the multi-university crop research initiative known as Genomes to Phenomes and encourages NIFA to support the development of tools and datasets that can be used across multiple crop species to improve the output and efficiency of agriculture.

Farm Bill Appropriations Request

- Senate budget report also renewed funding for G2F (\$1.25 million) through the GEM program for 2020

Genomes to Fields.—The Committee recommendation includes no less than the fiscal year 2019 level to support the Germplasm Enhancement of Maize [GEM] project to complement the existing USDA maize germplasm programs and support the emerging large-scale public sector effort to investigate the interaction of maize genome variation and environments, known as the Genomes to Fields project.

Farm Bill Authorization for Agricultural Genome To Phenome Initiative

H. R. 2—316

SEC. 7207. NATIONAL AGRICULTURAL WEATHER INFORMATION SYSTEM.

Section 1641(c) of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 5855(c)) is amended by striking “2018” and inserting “2023”.

SEC. 7208. AGRICULTURAL GENOME TO PHENOME INITIATIVE.

Section 1671 of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 5924) is amended—

(1) in the section heading, by inserting “TO PHENOME” after “GENOME”;

(2) by striking subsection (a) and inserting the following:

“(a) GOALS.—The goals of this section are—

“(1) to expand knowledge concerning genomes and phenomes of crops and animals of importance to the agriculture sector of the United States;

- \$40 million per year authorization in 2018 Farm Bill
- First authorization for this 1990 initiative, redefined in current Farm Bill
 - Previously known as Agricultural Genome Initiative

Farm Bill Appropriations Request

- D.C Trip June 12
 - Sophia Magill, Pat Schnable, Leslee Gilbert - ISU
 - Carina Marquez-Oberhoffner, Natalia de Leon – UW Madison
 - Sarah Doese, Peter Laudeman - NCGA
 - David Ertl – ICGA
- Met with
 - Joni Ernst (Farm Bill Conference Committee member)
 - Mark Pocan staff (House Ag Approps)
 - Sen Baldwin staff (Senate Ag Approps)
 - House Ag Appropriations Committee
 - Senate Ag Appropriations Committee



Genome To Phenome Briefing

- Held a briefing on Genome To Phenome Initiative
 - Speakers included Natalia, Pat and Penny Riggs (Animal scientist at Texas A&M)



D.C. Trip Take-aways

- Rep. Pocan and Sen. Baldwin continue to be strong allies on respective Approps Comm.
- House Ag Approps Committee said we were one of the fortunate ones to get funding for new Farm Bill program
 - Only four new Farm Bill programs were funded in House budget
- Animal industry will be a good ally for lobbying
 - They have published a Genome To Phenome Blueprint
- Message from both House and Senate was to keep doing what we are doing
 - The more they hear from members, the better
 - Would be good to also hear from the authorizers of Farm Bill language

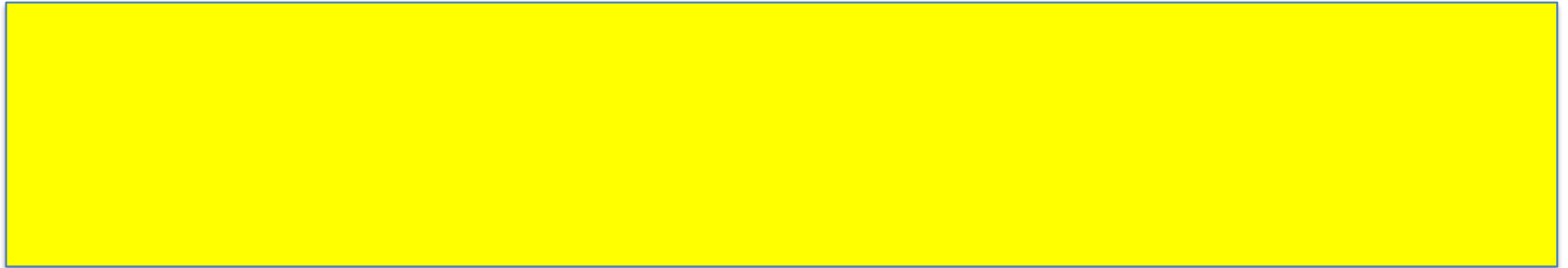
Farm Bill Appropriations Request

- House Ag Budget draft also included funding for Genome To Phenome Initiative
- 'Only' \$1 million of the \$40 million authorization
- But importantly this made it into their budget
- Only 4 of all new Farm Bill authorizations received funding – this is one of the four
- Gives us something to build on

6 SEC. 774. There is hereby appropriated \$1,000,000
7 to carry out section 1671 of the Food, Agriculture, Con-
8 servation, and Trade Act of 1990 (7 U.S.C. 5924) as
9 amended by section 7208 of P.L. 115–334.

Farm Bill Appropriations Request

- However, the senate budget did not include any funding for Genome To Phenome 😞
- Nada, zipo



Farm Bill Appropriations Request

- There is another chance as House and Senate budgets must be reconciled
- Plans being made to send letter to conference committee members requesting funding in final budget for G2P
- There is always next year, but it would be very helpful to have at least \$1 million in this coming year's budget to build on so we don't have to start with nothing

PHENOME 2020 Conference

- Plans are set for PHENOME 2020
 - Feb 24-27, 2020 in Tucson
 - New location to reduce cost, make more accessible to students
- Will again host Genomes To Fields workshop prior to conference
 - Monday Feb 24



Questions?

