

January 27, 2010

The Honorable Tom Vilsack
Secretary
U.S. Department of Agriculture
1400 Independence Avenue, S.W.
Washington D.C. 20250

Dear Secretary Vilsack:

For decades there has been a steady and devastating atrophy in the capacity of our nation's land grant universities and federal research facilities to produce publicly held and locally adapted plant varieties and animal breeds. Though the decline has taken place without fanfare, the negative implications are quite grave, undermining world food security, agricultural sustainability, and our ability to adapt to climate change and to meet the demands of consumers for high quality, nutritious food.

With the shift in federal funding toward genomics and the widespread practice of private patenting and control of germplasm developed with public funds, the critical realm of classical¹ plant and animal breeding for development of locally adapted and publicly held cultivars has dwindled.

That is why we are excited by the prospect of the forthcoming Request for Applications for the Agriculture and Food Research Initiative (AFRI). This first roll out of the new AFRI under the new Administration and new Director is the perfect opportunity to establish discrete AFRI conventional plant and animal breeding programs, with particular attention to sustainability, nutrition, food security, and climate.

As you know, leaders in Congress have called on USDA, through the past six annual appropriations processes, to make funding for classical plant and animal breeding a priority within the USDA competitive research grant programs. Congress also added explicit language in the 2008 Farm Bill to make conventional plant and animal breeding statutory priorities within the new AFRI program. AFRI programs for conventional plant and animal breeding and cultivar development were not established last year, and conventional breeding proposals that were submitted to broader program areas were largely rejected by USDA staff.

From the information we have gathered from USDA REE appointees and staff to date, it appears that this vitally important topic is included in the new RFA in a general way, but, it appears, specific programs with specific funding are not included in the draft. We are therefore calling upon you to ensure that this golden opportunity is not missed, and that congressional direction is not once again shunted aside. We urge you to:

- 1) Create AFRI programs with segregated funding streams in the FY 10 RFA for conventional plant and animal breeding;

- 2) Incorporate language in the RFA that reflects the clear congressionally-stated prioritiesⁱⁱ as well as language reflecting priority interest in breeding related to food security, nutrition, climate, energy, and food safety;
- 3) Assure that the AFRI review panels include a balance of scientific perspective and expertise, and that reviewers with strong understanding of conventional/classical breeding serve as a majority on the panels; and,
- 4) Allow but do not require the use of marker-assisted selection technology in proposals funded under these new programs.

In addition to AFRI, the Agricultural Research Service also has an incredibly important role to play. We urge you to call for a review and evaluation of current ARS capacity for conventional plant and animal breeding and for the development of a multi-year plan to address shortcomings and gaps. We also urge you to make it the clear policy of the Department to reward ARS researchers who release new publicly held cultivars, to reverse the decades-long trends of decline.

The importance of these recommendations cannot be overstated. As a result of funding and intellectual property-right decisions by USDA and our nation's land grant institutions, the entire profession of classical plant and animal breeding is in jeopardy of extinction. Plant breeding departments at universities are being closed, graduate students are encouraged to partner with industry to secure their funding and their future, and the pool of available germplasm is narrowing. As a result, entire regions of the country and the globe are without seed varieties adapted to their geographic needs and changing climate, farmers no longer have a full spectrum of plant varieties and animal breeds available to them, and consumers bemoan the scarcity of food varieties that meet their tastes and nutritional needs.

Now is the time to reverse the decline and restore balance in agriculture research funding decisions to reflect the importance of public plant and animal breeding, before our capacity in this arena is lost. We thank you for your attention to this urgent matter.

Sincerely,

National Organic Coalition
National Sustainable Agriculture Coalition
Organic Farming Research Foundation
Rural Advancement Foundation International
Union of Concerned Scientists

cc:

Dr. Kathleen Merrigan, Deputy Secretary
Dr. Molly Jahn, Acting Under Secretary
Dr. Roger Beachy, NIFA Director

ⁱ Also commonly referred to as “conventional” or “public” plant and animal breeding. We use the terms interchangeably in this letter.

ⁱⁱ 2008 Farm Bill Citations

The language for the new priorities for conventional plant and animal breeding under § 7406(a) is as follows:

Under “Plant health and production and plant products”:

“conventional breeding, including cultivar and breed development, selection theory, applied quantitative genetics, breeding for improved food quality, breeding for improved local adaptation to biotic stress and abiotic stress, and participatory breeding”

Under “Animal health and production and plant products”:

“conventional breeding, including breed development, selection theory, applied quantitative genetics, breeding for improved food quality, breeding for improved local adaptation to biotic stress and abiotic stress, and participatory breeding”

Report Language (pp. 852-853):

“The Managers are aware of the importance of supporting public sector conventional plant and animal breeding, as evidenced by the specific mention of this priority under the “plant health and production and plant products” and “animal health and production and animal products” priorities in AFRI. The Managers intend that the term “conventional breeding,” also known as “classical breeding,” refer to breeding techniques which rely on creating an organism with desirable traits through controlled mating and selection. Because conventional breeding is critical to the development of seeds and breeds that are well adapted to local conditions and changing environmental constraints, these efforts are important to the food and agriculture sector. The Managers are aware that participatory breeding programs, where producers are involved in the process of developing new plant varieties and animal breeds, yield varieties and breeds that are better adapted to local environments. The Managers encourage an emphasis on funding of conventional plant and animal breeding as part of the new AFRI.”

Additional Report Language (p. 853):

“The Managers intend that most program areas within AFRI would have grant terms of short duration. However, the Managers are aware that there are areas of research where longer-term grants are needed, such as conventional plant and animal breeding, environmental research, and nutrition research. The Managers expect the Secretary to use 10-year grant terms only when it is critical for long-term systems research.”

Appropriations Citations

The Senate Conference Report to the FY 10 Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Bill includes the following language:

“Section 7406 of the Food, Conservation, and Energy Act of 2008 specifies priority areas within the Agriculture and Food Research Initiative [AFRI], including an emphasis on conventional (classical) plant and animal breeding. The Committee strongly concurs with the intent of this section, and requests a report from the agency as to its plans for implementing the intent of this important conventional/classical plant and animal breeding requirement.”