

October 22, 2012

The Honorable Tom Vilsack
Secretary, U.S. Department of Agriculture

The Honorable Steven Chu
Secretary, U.S. Department of Energy

The Honorable Leon Panetta
Secretary, U.S. Department of Defense

The Honorable Lisa Jackson
Administrator, U.S. Environmental
Protection Agency

The Honorable Ray LaHood
Secretary, U.S. Department of
Transportation

Dear Secretary Vilsack, Secretary Chu, Secretary Panetta, Administrator Jackson, and Secretary LaHood,

As scientists in the fields of ecology, wildlife biology, forestry, and natural resources, we are writing to bring your attention to the importance of working proactively to prevent potential ecological and economic damages associated with the potential spread of invasive bioenergy feedstocks. While we appreciate the steps that federal agencies have made to identify and promote renewable energy sources and to invest in second and third generation sources of bioenergy, we strongly encourage you to consider the invasive potential of all novel feedstock species, cultivars, and hybrids before providing incentives leading to their cultivation.

Studies have shown that some of the plants considered most promising in terms of bioenergy capacity may actually be highly invasive and potentially harmful to native species and ecosystems.^{1,2,3,4} In fact, many of the characteristics that make a plant appealing as an ideal source of biomass such as ease of establishment, rapid growth, resistance to pests and diseases, and low input requirements, are the same characteristics that make a plant more likely to become invasive.^{5,6} According to the non-federal members of Invasive Species Advisory Committee that provide independent advice to the National Invasive Species Council, “Absent strategic mitigation efforts, there is substantial risk that some biofuels crops will escape cultivation and cause socio-economic and/or ecological harm.”⁷

Many of today’s most problematic invasive plants – from kudzu to purple loosestrife – were intentionally imported and released into the environment for horticultural, agricultural, conservation, and forestry purposes. These invasive species already cost billions of dollars a year in the United States⁸ and are one of the primary threats to North America’s native species and ecosystems. It is imperative that we learn from our past mistakes by preventing intentional introduction of energy crops that may create the next invasive species catastrophe – particularly when introductions are funded by taxpayer dollars.

Under Executive Order 13112, a federal agency cannot “authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the

United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.”

To ensure ongoing compliance with the Executive Order and to prevent unintended consequences from the promotion of non-native and modified plants, algae, and microorganisms, we therefore request that federal agencies clearly assess the invasion risk of bioenergy feedstocks (including hybrids, varieties, genetically modified organisms, and cultivars) before these feedstocks can be eligible for federal incentives leading to their cultivation (through mandates, purchases, research grants, loans, and other means). Those species that may become invasive in the United States should be ineligible for incentives, unless the risk is low and, at a minimum, prudent measures are available and mandated to reduce the invasion risk and potential for harm. Tools for assessing the invasiveness of plant species and cultivars are widely available, including USDA APHIS’s newly revamped weed risk assessment.⁹ The National Invasive Species Council is best suited to coordinate this assessment process.

A thoughtful, consistent, proactive approach to sustainable bioenergy production that avoids potentially invasive feedstocks, while encouraging the development and implementation of new energy crops to meet U.S. renewable energy goals, would demonstrate wise stewardship of federal funds and serve to benefit the agencies in the long run. By assessing and reducing risks up front, we can minimize the potential for bioenergy crops that are promoted with taxpayer dollars to become invasive and cause harm to natural ecosystems. It is much cheaper and easier to take the steps to prevent an invasive escape than it is to deal with it after it has occurred.

Signed,

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