Robyn Rose

United States Department of Agriculture   
Animal and Plant Health Inspection Service

Plant Protection and Quarantine Program  
4700 River Road Riverdale, MD 20737

April 24, 2018

Dear Robyn,

The Maryland Chapter of the Sierra Club respectfully requests that the Biological Control Program investigate an effective host specific, pathogenic biological control of Fig Buttercup (Lesser Celandine)*(Ranunculus ficaria* also known as *Ficaria verna Huds)*  It is our position that this research has could provide the means to substantially reduce damage, particularly to threatened species, by this invasive species.

A 2015 weed risk assessment conducted by the Maryland Department of Agriculture (MDA) describes fig buttercup as a High Risk species and suggests that the collection of additional information could move the risk score further into the high risk region. A significant invasive in the United States, *R. ficaria* readily spreads in moist sites forming extensive and dense mats outcompeting plants in natural systems (MDA, 2015. Retrieved from [http://mda.maryland.gov/plants-pests/Documents/Ficaria\_verna\_ WRA%20061715.pdf](http://mda.maryland.gov/plants-pests/Documents/Ficaria_verna_%20WRA%20061715.pdf)).

The scope of this research would include first, the investigation of population controls of native European sites that exhibit typical densities. Such research would take into account that multiple factors or mechanisms may in fact keep bulb regeneration in check. Once probable mechanisms were identified, a protocol would be developed to evaluate artificial treatments, such as inoculation with one or more pathogens. This preliminary work would simplify the selection of a U.S. test species and could make more efficient, the evaluation of risks to non-target North American species. Alternatively, the same approach could be applied to related, North American species.

Understanding the mission of the Biological Control Program is to “work with cooperators to import, screen, develop, release, implement, monitor, and transfer biological control technologies to prevent the establishment, slow the spread, and manage pests of significant economic, environmental or regulatory importance…” we respectfully request that such an effort begin for the biological control of Fig Buttercup (Lesser Celandine). Specifically, we would hope to see the study of entomological and pathological controls of native populations to learn how spread is constrained.

We sincerely appreciate your consideration of our request. We have made the same request to your colleagues at Crop Production and Protection, ARS with the hope that funding might be more readily secured through a joint request. A knowledgeable point of contact for this matter is Marc Imlay who can be reached 301-442-5657 or email at [ialm@erols.com](mailto:ialm@erols.com).

Best regards,

**Maryland Chapter, The Sierra Club**

**7338 Baltimore Ave #102,**

**College Park, MD 20740**

**Marc Imlay**

**Sierra Club Natural Places Chapter Chair working group**

**Rosalind James  
United States Department of Agriculture**

**Agricultural Research Service, Crop Production and Protection**

**5601 Sunnyside Avenue Mailstop 5139 GWCC-BLTSVL**

**Beltsville MD 20705**

**April 24, 2018**

**Dear Rosalind,**

**The Maryland Chapter of the Sierra Club respectfully requests that the Biological Control Program investigate an effective host specific, pathogenic biological control of Fig Buttercup (Lesser Celandine) *(Ranunculus ficaria* also known as *Ficaria verna Huds)*  It is our position that this research has could provide the means to substantially reduce damage, particularly to threatened species, by this invasive species.**

**A 2015 weed risk assessment conducted by the Maryland Department of Agriculture (MDA) describes fig buttercup as a High Risk species and suggests that the collection of additional information could move the risk score further into the high risk region. A significant invasive in the United States, *R. ficaria* readily spreads in moist sites forming extensive and dense mats outcompeting plants in natural systems (MDA, 2015. Retrieved from** [**http://mda.maryland.gov/plants-pests/Documents/Ficaria\_verna\_ WRA%20061715.pdf**](http://mda.maryland.gov/plants-pests/Documents/Ficaria_verna_%20WRA%20061715.pdf)**).**

**The scope of the proposed research would include first, the investigation of population controls of native European sites that exhibit typical densities. Such research would take into account that multiple factors or mechanisms may in fact keep bulb regeneration in check. Once probable mechanisms were identified, a protocol would be developed to evaluate artificial treatments, such as inoculation with one or more pathogens. This preliminary work would simplify the selection of a U.S. test species and could make more efficient the evaluation of risks to non-target North American species. Alternatively, the same approach could be applied to related, North American species.**

**Understanding that Crop Production and Protection (CPP) National Programs endeavor to deliver science-based information, genetic resources, and technologies for protection from plant diseases and pests, we respectfully request that such an effort begin for the biological control of Fig Buttercup (Lesser Celandine). Specifically, we would hope to see the study of entomological and pathological controls of native populations to learn how spread is constrained.**

**We sincerely appreciate your consideration of our request. We have made the same request to your colleagues at the Biological Controls Program, PPQ, APHIS hoping funding might be more readily secured through a joint request. A knowledgeable point of contact for this matter is Marc Imlay who can be reached by phone at 301-442-5657 or email at** [**ialm@erols.com**](mailto:ialm@erols.com)**.**

**Best Regards,**

**Maryland Chapter, The Sierra Club**

**7338 Baltimore Ave #102,**

**College Park, MD 20740**

**Marc Imlay**

**Sierra Club Natural Places Chapter Chair working group**