Ratings Sheet 1 of 3

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Very Good

Explanation to Applicant

The applicant has a strong academic record. The applicant has previous research experience, and it has resulted in presentations and a submitted report.

The applicant provides an in-depth research plan. The proposed areas of research are important, however, lack of mechanistic approaches would limit the significance of the study.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Excellent

Explanation to Applicant

The applicant has been involved in community outreach and has created scientific activities for farmers and undergraduate students.

The applicant could improve the outreach, dissemination plans, and teaching/workshop for elementary school teachers and/or students.

Summary Comments

Strong application developed by a motivated student who has prior research and work experiences. Increasing the publication record and adding mechanistic approaches would strengthen the application.

2014 NSF GRFP Applicant: Samantha Alger

Ratings Sheet 2 of 3

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Very Good

Explanation to Applicant

THe applicant has a strong academic background although not as strong as some other applicants. There is evidence of an academic scholarship that she received, one report that was prepared, and a presentation at scientific meeting. No publication in a journal was observed. Previous research experiences have prepared the applicant for the proposed study on susceptibility of native bees to viruses in relation to life-history traits and floral resources.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Very Good

Explanation to Applicant

There is evidence of a very high potential for broader impacts. Applicant was Environmental Educator for the Audubon Society. She organized and gave lectures to the public and young adults about chytridiomycosis (deadly fungus) that impacts amphibian populations. She plans to develop the native pollinator program in Vermont, and offer her services to bee keepers and farmers to test for viral infection of bees. She will involve undergraduate students in research. Results of her research will be presented at scientific meetings and published in journals and on a website.

Summary Comments

The applicant has a high potential for making significant contributions to knowledge in the proposed area of investigation. Results of her work will also have major impacts on the way bees are managed.

2014 NSF GRFP Applicant: Samantha Alger

Ratings Sheet 3 of 3

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Excellent

Explanation to Applicant

The applicant shows a diversified undergraduate education including business administration and biology. She has been involved in education and field research experiences since her college graduation. The proposed research on viral prevalence among bee species is well thought out and well planned. The needed resources are available.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Very Good

Explanation to Applicant

The proposed work will provide management recommendations and tools important to farmers who rely on pollinators for crop yield. She is well aware of the need to communicate research results to actual users and has proposed ways to do this.

Summary Comments

This is a solid research proposal by a well qualified student.

2014 NSF GRFP Applicant: Samantha Alger