

SCBA 2024 Research Grant Recipients

DAVID MILLER

Project: Small Hive Beetle, Beehive Entrance Trap

Summary: Develop economical small hive beetle trap that mounts to the entrance of a beehive, the trap will be a labyrinth that will separate bees and beetles, guiding beetles through a one-way path to an oil reservoir and death.

The issue this project is going to address is what attracts Small Hive Beetles to Honeybee hives. This project will seek to eliminate or significantly reduce SHB in hives in honeybee hives, with pesticide free IPM methods.

Test hives will be selected in apiaries known to have had problems with small hive beetle infestations in various geographic and environmental locations. The goal is that test data will define which honeybee hive conditions and locations are most attractive to small hive beetles. An additional goal is to determine what time of year beetles are most active in various types of environments.

JENNIFER YORK

Project: Build a Better Women's Beekeeping Suit

Summary: To research and develop an updated beekeeping suit for women, with improved fit, styling, and smart, functional components, to be outsourced for domestic production in the USA, thereby empowering women to excel in beekeeping.

RACHEL SAUDER

Project: Duel Queens without Dueling Queens

Summary: The stronger the hive, the more productive it will be. A hive of 60,000 Bees can produce 1.54 times as much honey per thousand bees than one of 15,000 bees.¹

This project seeks to gain a greater understanding of the benefits of a hive's synergy by testing methods of increasing population to a greater amount than one queen can lay.

Four methods of hive management will be tested: horizontal dual queen colonies², vertical dual queen colonies³, physically modified dual queen colonies⁴, and brood donations from other colonies. Two hives of each method will be created and studied for this research project, as well as two hives using traditional beekeeping techniques as a control group. The success of each method will be determined by the health of the hive, honey production, and ease of management. At the end of the project, a comparative analysis of each of these methods will be produced.

¹ Farrar, 1960.

² Wyns Dan, 2020.

³ Farrar, 1958.

⁴ Zheng HQ et al , 2009.