What All the Buzz Is About: Contained Production and Increased Yield of Glycine max and Other Crops with the Aid of Apis mellifera and Natural Fertilizers (Phase II)

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Every year, the honeybee population seems to decline more dramatically. With this being said, it also means crucial pollination is being lost all over America. “Crucial” is merely an understatement, as almost every bite of food we eat is contributed thanks to the bee population. The overall purpose of the project is to simulate what bees truly do for us in the real world, and showing how we benefit. Without the bees, as they continuously decline due to various diseases, our crop yield will go down. Farmers across America would lose money due to the lack of bee production. A method I used was containing the bees in a large screening where they pollinated the plants inside. This left the others to no pollination whatsoever. Another consisted of bringing in layers of topsoil in order to grow efficient crops. In addition to this, we brought in potash (a type of potassium fertilizer) to again benefit the plants and also to simulate a general process a farmer would go through every year. In my project, I have come to find that pollination by Apis Mellifera had caused the soybeans to be larger and more abundant than those without. Actually, I found that after my experiment if there was an entire plot, one would receive 60 bushels per acre. Therefore, this continues my drive to a far larger experiment. Along with this, various vegetables planted along with the Glycine Max prospered with the aid of Apis Mellifera compared to those without. These also prospered, again reining in the overall importance of the bee population and their importance to local Iowa crops.

Awards Won: