BREEDING HONEY BEES (*Apis mellifera*) FOR DISEASE RESISTANCE, PEST TOLERANCE, AND HONEY PRODUCTION IN WASHINGTON STATE

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Previous research has shown that honey bees can be successfully bred for traits such as hygienic behavior, tolerance to *Varroa destructor*, and increased honey production. While these traits have been studied individually, there are no reports of attempts to select for all three traits simultaneously. The objectives of this project are to breed honey bees for these traits under Washington State climatic conditions. We are including beekeepers statewide as an integral part of the evaluation process. Increasing traits for disease and pest tolerance in honey bees will reduce the reliance on pesticides and antibiotics, reduce pesticide resistance issues, and allay fears of pesticides entering hive products. We report the results of the first year of queen breeding, including the traits measured in the spring of 2002 and feedback from state beekeepers.