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RESEARCH DIRECTIONS

Anti-Varroa Boards 'Mite' Work

Associate Professor Robert Spooner-Hart from the Centre for Plants and the Environment has been investigating the use of a variety of boards in the bottom of beehives to increase hive strength, honey production and for pest management. This research was funded by the Rural Industries Research and Development Corporation.

'The varroa mite is the most serious threat to bees worldwide and can decimate an entire bee colony. Anti-varroa boards of various materials are used to open the base of hives to allow mites to fall out, as well as to increase hive ventilation,' explains Associate Professor Spooner-Hart. 'We have investigated whether these boards will also help to reduce the extent of another pest, small hive beetle. This pest is a big problem for beekeepers in Australia as their larvae can damage the honey and comb in the hive and kill the bee brood. We have also looked at whether using these boards on the hives increases hive strength and honey production.'

The study used beehives in NSW at the University, and in Victoria. It compared traditional wooden bottom boards with anti-varroa mesh bottom boards and French-designed tubed bottom boards. Honey production was weighed and pollen and brood areas were measured using digital photography and image analysing software. Counting procedures were used to determine bee flight activity during regular intervals and visual inspections and analyses were made of small hive beetle populations in each hive at the University.

Even though varroa mites are not currently present in Australia, the boards could also be used in anticipation of them being found in Australia. Reduction of beehive pests and improved honey and bee production are important for adequate bee populations for the pollination of various plants in Australia.

Project Title: Evaluation of anti-Varroa boards for increase in honey production
Funding has been set at: $25,712
Contact Details: r.spooner-hart@uws.edu.au
http://www.uws.edu.au/pafs
July 2009