A New Method to control Nosema Disease by Feeding

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INTRODUCTION

Nosema infection is considered a very important disease of adult honeybees because it can significantly reduce yields of honey and pollen, compromising honeybees lifetime. The most common method of nosema disease controlling is the application of the antibiotic fumagillin and it is no longer practised for the associated risk of honey contamination. In this study we compare the effect in spore reduction of Api Herb, a vegetable made honeybee feed, and of fumagillin.

RESULTS AND DISCUSSION

Pre-treatment infections were very hard in all colonies (see Fig.1). The average number of spores per bee decreased during the 3 weeks of treatment in all groups. Significant results (P = 0.3) in spores reduction were observed for all of the tested groups but the strongest decrease was detected for group A.

The detailed values are listed below:

GROUP “A” (treated with Api Herb): 71.7% spores reduction
GROUP “B” (treated with fumagillin): 53.6% spores reduction
GROUP “C” (control): 30.8% spores reduction.

No harmful effects were registered for combs, adult honeybees and for the beekeepers.

CONCLUSION

Three weekly administrations of Api Herb yielded a noticeable decrease in the number of spores infecting the honey bee intestines, without negative effects for adults and comb health. This product, if correctly used, could play an important role in prevention and reduction of nosema disease without risks of honey and wax pollution with antibiotics.

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