EVALUATION OF FLUMETHRIN RESIDUES IN HONEY AFTER AN EXPERIMENTAL APIARY TREATMENT

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INTRODUCTION

Synthetic acaricides are used for the control of *Varroa destructor*. In Spain, Bayvarol® (Flumethrin) is an authorized veterinary drug for this mite control. Acaricides against *Varroa* constitute a source of honey contamination and, consequently, the use of drugs retains a potential sanitary risk for human health.

The aim of this study was to evaluate flumethrin residues in honey after an experimental apiary treatment.

MATERIAL AND METHODS

- Five honey-bee colonies were treated with Bayvarol® strips (3.6 mg flumethrin/strip).
- Samples of honey were extracted from honeycomb portions before treatment (blank sample) and six and eight weeks after the treatment was started.

RESULTS

Results obtained were used for evaluating the sanitary risk of this residue in honey.

Results of validation study are satisfactory according to all guidelines laid down by European Decision. None of the honey samples analyzed showed flumethrin residues at detectable levels (DL = 8 ng/g honey and QL = 10 ng/g honey).

Our results confirm that the correct use of Bayvarol® strips does not leave flumethrin residues in honey under the tested conditions and the intake of honey from treated combs does not pose a sanitary risk for humans.

CONCLUSIONS

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