

149. COLORIMETRIC ANALYSIS OF HONEYS OF *Lotus tenuis* AND THEIR RELATIONSHIP TO POLLEN CONTENT

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We conducted the study of color and pollen content of monofloral honey *Lotus tenuis* Waldst et Kit, a honeybee colony in the Salado region, Buenos Aires, Argentina, in order to observe the changes in apparent color according to the changes in the pollen and determine patterns of color among which *Lotus tenuis* can be found. Ten honey samples obtained during the harvest (January to March) with a frequency of ten days were used. The pollinological analysis was performed according to the usual techniques (Louveaux, 1978) and the color was analyzed with Pfund's Color Grader. We considered secondary pollen contribution the ones that appeared with a frequency between 15 and 45%. All honeys presented a percentage of pollen *Lotus tenuis* higher than 50%. Apiaceae (*Carduus sp*), Brassicaceae, Lamiaceae (*Mentha sp*) and Myrtaceae (*Eucalyptus sp*) supplied secondary pollen. The variation observed in the colors of honey does not correspond to the input side of pollen. Pfund's scale values were 10% White, 20% of Water White and 70% Extra White.

150. CONTROL OF THE MITE *VARROA DESTRUCTOR* (VARROIDAE) IN HONEYBEE COLONIES OF *APIS MELLIFERA* (HYMENOPTERA: APIDAE) BY THYMOL

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The aim of this work was to evaluate the acaricide efficacy of thymol in plates to control the mite *Varroa destructor* in honeybee colonies during the autumn months, 2007. The assays were carried out in an experimental apiary located in La Plata, province of Buenos Aires. Ten Langstroth hives were divided into two equal groups. The first group received a total of four plates with 8.03 g of thymol at 15-day periods. The second one was the control group. Dead mites were collected weekly from special floors designed to prevent mite removal by adult honeybees. Then, both groups received one Cumavar® strip to kill remaining mites. Thymol showed an average acaricide efficacy of 63.68% ± 18.75, showing significant differences with the control group ($p \leq 0.05$). During the experience, great numbers of bee brood were observed. No negative effect on honeybee brood was recorded. In spite of moderate efficacy, results showed that thymol is a useful agent to kill a significant number of mites. However, treatments would present better results without the presence of honeybee brood, especially after the winter months.

151. SPONTANEOUS DENTAL ROOT RESORPTION IN AN ANIMAL MODEL

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Objective: The aim of this study was to investigate and evaluate spontaneous dental root resorption in an animal model.

Methodology: Buccal media roots at mandibular 1st molar from Sprague Dawley rats aged 2, 3, 4, and 12 weeks were fixed in phormol buffer 10%, slowly decalcified and processed in a routine manner for light microscopy. Histological and morphometrical studies were performed using an image analysis system (Image ProPlus Software).

Results: root resorption was absent at 2 weeks, resorption active areas (12%) being observed at 3 ws. Then, they increased (14%) at 4 ws, (31%) at 5 ws and (28 %) at 12 ws.

Conclusion: From these results, resorption started after 2 ws and was observed in many areas at 3 ws. Resorption steps were found at all time periods. This is a good animal model to study dental resorption biology as well as to evaluate dental therapies.

Granted by CIUNT. Key words: root resorption, animal model, cementum regeneration.

152. INFLUENCE OF PROTEIN UNDERNOURISHMENT IN BONE FORMATION OF THE CREST OF ALVEOLAR BONE. HISTOMOROMETRIC STUDY

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Undernourishment caused by the lack of certain dietary components alters bone modeling and remodeling. Since alveolar bone differs from long bones, the aim of this study was to determine the response of the alveolar crest in a model of protein undernourishment. Male Wistar rats were assigned to one of the following groups: Group I: Fed with a conventional diet. Group II: Fed with a protein deficient diet *ad libitum*. Animals were sacrificed 30 days after the beginning of the study. Lower jaws were processed for light microscopy. In mesiodistal samples of the first lower molars stained with hematoxylin-eosin, the following parameters were evaluated in the alveolar crest: bone resorption surfaces, bone forming surfaces, surfaces at rest. Number of osteoclasts and bone volume (Tv/Tbv), where Tv: Trabecular volume and Tbv: Total bone volume. Statistical analysis was performed using Student's test.

Results: Bone resorption was higher in the experimental group while osteoclast and bone volume did not show significant differences between groups.

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