Studies on varro aparaste and its relation with chalkbrood disease

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Honeybee (Apis mellifera L.) is subjected to infestatip by many pests colonies .The Varroa mite (Varroa jacobsori Oud .) is considered the main ectoparasite on honeybee in Egypt and all over the world . Chalkbrood disease (Ascosphaera apis) causes severe losses in honey colonies .Therefore ,control of Varroa mite and chalkbrood disease is an important step for protecting honeybee colonies and increasing its products (honey, royal jelly , pollen .etc.). The obtained results could be summarized as follow :1-Survey and observation carried out an honeybee colonies.. which were infested with Varroa jacohsoni mite indicated that ,the percentages of infestation in 1998 in the apiaries of Kafr El-Sheikh Gov. was the highest followed by El-Qualubia and El- Gharbia Gov.While in 1999 the Varroa mites infestation percentage in apiaries of El- Gharbia Gov. was the highest infested followed by Qualubia and Kafr El-Sheikh Gov.2-Treatments of honeybee colonies with different materials against Varroa mites resulted in 93.35 to 96.29 % mortality for colonies treated with :.(Apilife VAR mixed with Oxalic acid) and (Apilife VAR mixed Paraffin),respectively, indicating that Apistan was the most effective on Varroa mites (93.35 to 96.29 %) .While in case of colonies treated with Apilife VAR mixed with oxalic the resulted mortality percentage was from (92.49 to 93.36%). Treatment of Varroa mites with Apilife VAR + Paraffin gave (90.50 to 91.66 %) mortality values.3-The highest number of fallen mites on sticky board was recorded after 7 days from the treatments. Apilife VAR+ Oxalic acid , Aplife VAR+ paraffin and Formic acid 70%75were the best materials in controlling Varroa mites during 1998 .While in 1999, Formic acid 70%, Apilfe —VAR--paraffin and Oxalic acid 3% were the best controlling agent which induced 1640 ,1580 and 1309 Varroa mites .4-All the tested materials increased significantly the broad rearing activity of honey bee comparing with the untreated colonies ,but their effects varied from one season to another .Although ApistanR gave the highest percentage of Varrocr reduction ,it showed the lowest values of brood rearing activity during the two seasons (14.02 and 56.58%).While using of volatile oils as Apilife VAR +oxalic acid and Apilife VAR+paraffin increased in brood rearing activity .5-All the tested materials increased the honey production when compared with untreated colonies and the amounts of honey were more after clover nectarflow than after cotton nectarflow seaeon .Apilife —VAR+Oxalic acid and Apilife —VAR +paraffin gave the highest percentage of increase in honey production either after clover season (59.59 and 41.63% respectively) or after cotton seasons (65.00 and 53.03%) in 1998 . While in 1999 they gave an increase of about 48.56 % and 46.51 % after clover seasons and 45.83 , 36.02 % after cotton seasons , respectively .6-disease and Varroa mites were presence in honeybee colonies at various percentages in the different apiaries .The highest percentages of infection with chalkbrood (Ascosphaera apis) was found in Gharbia Governorate .7-The results indicated that applying Sodium benzuate , Thymol and Apilife —VAR at various concentrations completely inhibited the fungal growth of A. apis which causes chalkbrood disease. On the other hand , citric acid (4 and 6 %) UltragriseofulvinR (6 and 8 %) and 10 %Neern.