Control Of Honeybee Pests And Diseases Without The Use Of Chemicals And Using Of Natural Products

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The honeybee (Apis mellifera L.) is considered one of the most important beneficial insect for the human.The honeybee gather nectar and pollen, they pollinate hundreds of different kinds of commercial crop plants estimation of benefit and increasing of quality and quality of pollinated crops is about 20 times value of all products together, Honeybee can be infested with disease. It is important for the beekeeper to be able to recognize condition that might be disease related and respond according, the bees have two distinct life forms brood and adult and most disease are special as well as varroa destructor and chalkbrood and the pest in the study were hornets (vespa ori ental is).1. Control of varroa mite (Varroa destructor) :1.1.a. Effect of some plants extract spraying on varroa mite in season 2004.:The obtained results the mela azadraghata extract by spraying on bees and combs was highly effective the reduction percentage was 84% on adult bees, 49% on sealed brood at follow the eucalyptus extract the reduction percentage was 81 % on adult bees, 69% on sealed brood at follow the capsicum extract the reduction percentage was 78% on adult bees, 61% on sealed brood at follow grape fruit extract the reduction percentage 77% an adult bees 62% on sealed brood and the mentha leaves extract the reduction percentage was 58% on adult bees 55% on sealed brood.SrVIIYKART -160-1.1.b. Effect of some plants dusting on varroa mite:In season 2004 , the obtained results the eucalyptus dusting on bees and combs was highly effective the reduction percentage on adult bees and sealed brood (85%- 67%) respectively at follow the mela azadraghata dust the reduction percentage on adult bees and sealed brrod was (78%- 57%) respectively at follow the capsicum dust the reduction effect on adult bees and brood was (74%- 68%) respectively at follow the mentha leaves dusting the reduction percentage was (71% -62%) respectively and the grape fruit the reduction percentage on adult bees and sealed brood was (66% - 55%) respectively.1.1.c. Effect some Natural Plants :As a cake the reduction percentage on adult bees and sealed brood at follow (76% - 44%), (62%- 50%) , (60% - 54%), (73% -66%) , (51% - 47%) for (eucalyptus , grape fruit, mela azadraghata, capsicum, mentha leaves).1.2. Effect of varroazal one of volatile Natural products:As a dusting on bees and combs for five weeks the reduction percentage on adult bees and sealed brood was (76%-47%) respectively in season 2004.1.3.Effect the best methods for varroazal application in season 2001:The highly effective was carton on top of combs the reduction percentage on adult bees and sealed broods as follow (92% - 49%), (88% - 46%), (90% - 53%), (87% - 58%) , (75% -43%) for carton on combs at follow cotton on combs at followSZ)149itAtr-161-plastic sheet on combs at follow cotton under combs at follow plastic sheet under combs respectively.While the season 2002 the highly effective was used cotton on combs brood at follow plastic sheet on brood combs at follow carton on brood combs at follow cotton under brood combs at follow carton brood combs at follow plastic sheet under brood combs the reduction percentage on adult bees and sealed brood were (88%, 46%), (86%, 44%), (82%, 55%), (79%, 46%), (76%, 47%) and (72%, 46%) respectively.1.4. Effect of varroazal by spraying on bees and combs in season 2002:And counted the fallen rate after application for 24H, 48H, 72H, 7 day respectively the reduction percentage on adult bees and brood (87% and 59%) respectively.1.5. Effect of varroazal as dusting on season 2004:The results obtained after applied during six weeks

every treatments for four colonies and four colonies control the reduction percentage on adult bees on sealed brood was (89%, 54%) respectively.I.5.The results obtained after used sugar powder dusting on bees and combs on season 2002 :And comparative with formic acid 85% and control. The reduction percentage on adult bees and sealed brood was (89%, 84%), (58%, 32%) respectively for used of formic acid 85% and sugar powder dusting respectively.SV%I.%1ART-162-1.6. The results obtained of smoke Natural products on season 2002:By used eucalyptus and mela zadraghata and formic acid 85%. The reduction percentage by formic acid at follow eucalyptus smoke at follow mela azadraghata was (92%, 85%) , (78%, 60%), (73%, 59%) respectively.1.7. The result obtained after adding the mentha leaves dusting to sugar powder to dustingh:The bees the reduction percentage on adult bees and sealed brood was highly effective by used formic acid 85% at follow the mentha leaves (91%, 873%), (67%, 54%) respectively.1.8. The results obtained on season 2002 :After under a new methods by trapping the varroa mite on pollen traps and comparative with used formic acid 85% on August 2002 for one month the reduction percentage on adult bees and scaled brood for formic acid 85% and pollen traps was (91%, 85%) , (63%, 50%) respectively.1.9. Effect of formic acid 85% on season 2003 :For 28 day and comparative with the control. The reduction percentage on adult bees and sealed brood was (92%, 88%) respectively.1.9.b. Used the pollen supplements on of many methods undriceted :To control of varroa destructors for four weeks by used three pollen supplements and formic acid 85% and control during season 2004, the highly effectives after used formic acidS1)%11AKY -163-85% at follow yeasts pollen supplements at follow date supplements at follow volatile oils supplements (eucalyptus oil). The reduction percentage on adult bees and sealed brood was (93%, 87%), (76%, 57%), (72%. 50%), (66%, 43%) respectively.I.9.b. Comparative honeybee production on health honeybee colonies and infested honeybee colonies during season 2004:from apariy consists of 200 colonies the colonies treatments with the Natural Products and formic acid 85%, sugar powder , pollen traps , and varroazal by all application on bees and 200 colonies untreated (control) infested colonies.The types of production in health colonies was the bee honey production per colony was 4 kilogram in gene , the pollen grains production 7.5 kg, the virgin queen production all the seasons was 1180 virgin queen, the loyal gelly production 145 grams, 120 queen and 65 Nuclus — but the infested colonies the bee honey production was 2 K.g pollen grains 2.5 K.g , royal jelly 17 gram , 30 queen.In season 2005 the mean production per colony in bee honey 5 k.g in June, pollen grains production 11.5 k.g, virgin queen production 1850 virgin queen all the same season, 440 gram royal gelly, 300 queen, 130 Nuclus, but the infested colonies the bee honey production 1.5 k.g honey, pollen grains production 2.5 k.g , 40 queen the results was highly significantly.II. Control of chalk brood (Ascosphaera apis)11.1. The results obtained by used varroazal application by fed : for 28 day on season 2003 the reduction percentage ofSrOWIIART” -164-chalk brood on primary infestation and completely infestation was (77%,-63%).11.2. The results obtained by formic acid 85% application on season 2003 :For four weeks . The reduction percentage of chalk brood on primary infestation and completely infestation for formic 85% was (87%, 80%).11.3. The results obtained by used sugar powder on season 2002 :By dusting the colonies was infested by chalk brood and comparative with formic acid 85%. The reduction percentage ofchalk brood on primary infestation and completely infestation for formic acid 85% , sugar powder dusting was (92%, 79%) , (72%, 55%) respectively.11.4. The results obtained on season 2002 by used directed sunrise:Found that the highly temperature over 41°C could reduction the appearance the disease chalk brood. The reductionpercentage of chalk brood on primary infestation and completely infestation was (65%, 57%) respectively.111. Control of the wasps (Vespa orientalis) :111.1. The results obtained on season 2005 the best time for the day:To captured the queen on time 9-11 morning and 3-4 afternoon.STANiAZY -165-111.2. The results obtained on season 2005 by used differenttraps:The highly effective by used hand trap at follow Abo-El-Enian traps at followed screen traps at follow square trap at follow sticker traps. The mean of workers captured was (75, 68,36, 25.3, 14) respectively.111.3. The results obtained after treatments with five baits :Was (sugar solution, fermented sugar, tona fishes, pollen supplements, varroazal) for time (August- Sept.- Oct. — Nov. —Dec) respectively on season 2004. The m,eans clear in highly infestation by the wasps on October at follow September at follow November at follow December, at follow August the means

was (236.6, 208.4, 208, 206.2, 105.2, 64.8) respectively.111.4. The results obtained on season 2004:Comparative between three types from traps to control the wasps the results was highly significantly. The highly infestation on May at allow April , March, Feb., the means was (1.59, 0.79, 0.54, 0.22) respectively for trapping the queen during January to May but in the (second, third) period the highly means October at follow September, August was (48.2, 42.7, 32.6) respectively at follow November — December — July — June the means was (26.4 — 9.5 — 7.2 — 2.36) respectively. The best traps was highly significantly was Abo-El-Enian traps at follow square traps at allow screen traps the means was (15.4 — 14- 13.3). respectively.