

CONTRADICT RELATION BETWEEN HONY BEE ACTIVES AND PRODUCTION OF CUCUMBER FRUIT PARTHENOGENESIS GREEN HOUSES.

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Article Received on
25 June 2016,

Revised on 16 July 2016,
Accepted on 07 Aug. 2016

DOI: 10.20959/wjpr20169-6891

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ABSTRACT

Pollination expermint were carried out between line parthenocarpic of Cucumber (831012, 832013, 834012, 835012, 836015) with future 837013 top cross methods by *Apis mellifera* indoor of closed Green house and in door of opend plastic houses in Abo-Ghrabe location. The result showed collapsis of Honybee in door plastic houses. which reduced of rate brood area to (138)inch but in open of plastic houses which was reached to 275 inch. The rate of honey area in closed of greenhouses reached 26 inch. but in open of plastic houses reached to 123 inch, The rate of pollen area in closed and open of greenplastic

houses. 22-55 inch respectively. The rate of number seed fruit for closed and open greenhouses 13.98-6.55 respectively. Use of greenhouses increased *Apis mellifera* to Pollination in door of green houses increased of seed production but collapsed of bee hives.

KEY WORDS: *Apis mellifera*, parthenocarpic, Honybee.

INTRODUCTION

The Cucumber *Cucumissativs* of adaptive crop plants to produce seeds in a way Cross pollination depends on several factors for the transfer of pollen between plants, including wind and insects, the most important insect honeybee *Apis mellifera* because of its social system, and brought up in the hives easy to transport, as well as the presence of diffuse hair on the body of the bee and a basket pollen, which helps in the transfer of pollen from one flower to another when you had to pull the nectar of pollen (Issa and Kholi, 1999). Said Guerra et al.(2006), he has to be the presence of honey bees in cucurbit fields for the largest production and Galore and has a good quality. In a study by Solange et al. (2008) in the four glass-planted houses Cucumber Vaccinate two-brokered bees and two natural, found that

houses the Inoculated by bees was a high level of Cucumber and a good quality of its output, while the houses that were left naturally had a few number of fruits and a few weights. Shaher et al. (2013) Explained increase the use of honeybee pollination to produce cucumber seeds in greenhouses sign by high compared to manual pollination. The Profits provided by bees inside greenhouses or glass of high production of seeds and fruits of good quality offset by a significant deterioration of the hives as a result of the queen stops laying eggs and lack of honey and pollen as a result of rising temperatures, It has Sidiquic et al (2009) that the high temperatures inside the greenhouses reduce the preparation of the worker bees in that Bees Field honey dramatically. Tomomi et al (2011) noted decreasing the weights of the hives during the period of the experiment in the greenhouse grown *Balstrobera* due to the lack of studies about the activity of the hives inside the greenhouses have study aimed at measuring the activity bee colonies before being introduced indoor and outdoor greenhouses and then by measuring the brood and honey and pollen area and calculate the number of seeds / fruit in the indoor and outdoor greenhouses.

MATERIALS AND METHODS

1 - FIELD EXPERIMENT

The Six genetic lines pure planted recipe parthenogenesis growth of the fruits of cucumber in five Greenhouses and strains are 1 -831 012, 2- 832,013., 3 - 833,012., 4- 834,012, 5 - 835,012., 6, 836,012 and Father Futur 210738 (Mafraji, 2013), The lines genetic planted with the Father and the cultivation directly on 10/01/2013. The strains distributed in a manner fully randomized panels, as strains planted on the side of the Father and was made available to stimulate the Father breed characterized by its purity recipe for fruit production parthenogenesis to produce male flowers splashed textured silver nitrate Agno3.

Table (1) spray dates with different concentrations of silver nitrate as plant age hybrid option parthenogenesis fruits

Date	Age of cucumber hybrid	Agno3 conc.ppm
27-1-2013	Dicotyledonous stage	35
29-1-2013	Dicotyledonous stage	35
5-2-2013	paper stage fact the first	100
6-2-2013	paper stage fact the first	150
7-2-2013	paper stage fact the first	100
18-2-2013	paper stage the fourth and fifth	250
19-2-2013	paper stage fact the fourth and fifth	250
28-2-2013	different ages	500
29-2-2013	different ages	500

1-3-2013	different ages	500
15-3-2013	different ages	750
16-3-2013	different ages	750
20-3-2013	different ages	750
25-3-2013	different ages	750

POLLINATED BY HONEY BEES

Closed the doors three Greenhouses from both sides cover sorinand worked holes in the house arc with three holes for ventilation display each slot and one of the tightened lid over sorinfull arc nozzles and sprayed the plants with insecticides and Acarcides before the introduction of bees to keep the plant from injury and prevent the entry of any insect, either two houses fourth, fifth and put a bee hive in them and left the doors open, was measured brood, honey and pollen beehive area before entered. Introduced on 28.03.2013 until 05.09.2013. And conducted the processes necessary to sustain the bee hive to examine and feed. It was measured brood, honey and pollen every 12 days using a standard board Frame count, taken 40 fruit at random from each strain / repeater and houses closed and open after maturity Physiological qualified for the completion of seeds and so swollen fruit and colored in yellow and calculate the number of seeds consisting of each repeater and split number of seeds on the number of fruits to determine the average number of seeds consisting of each repeater and split number of seeds on number of fruits to determine the average number of seeds per fruit is formed in each duplicate.

DESIGN AND STATISTICAL ANALYSIS

Designed tests to complete the design of randomization CRD(Complete Randomized Design), and then analyzed using analysis of variance table and the results were compared using a less significant difference Significant Difference Test (L.S.D) and below the level of probability of 0.05 (Alsahoeki and Ohab, 1990).

RESULTS AND DISCUSSION

Table (1): the closed and open space in the brood rate home plastic effect before and after the introduction of bees

The plastic house type	brood area Before admission	brood area after admission			L.S.D value
	3\27	5\2	4\20	4\8	
close	317	138	207	267	40.66
open	328	275	287	352	36.91
value L.S.D	25.59	41.69	29.72	36.41	

It showed results table (1) the not significant differences in the brood space before entered into the greenhouses where the range was 317-328 inch, either after entered into the enclosed greenhouses brood area is beginning to decrease from 138-267 inch high temperatures inside the enclosure and the death of the greenhouses A large number of bees herding Queen starts putting a few eggs commensurate with the density bees area, amounting to 138 inch at the end of the experiment.

The open house was a brood area at the end of the experiment 275 inch. The reason that the greenhouse and that it was open, the temperature is more than selling the place, causing a lack of brood area. Note that a high significant differences in the brood area before insertions later in the closed house was a range of 138-317 inch, causing the cell finishes after the end of the experiment and the inability to rebuild either at the open house was a range of 275-328 inch was able to continue the Beehive after the end of the experiment.

Table (2): the closed and open space in the honey greenhouse rate before the impact of the introduction of bees after being admitted

Type of greenhouse	Date				L.S.D Value
	5\2	4\20	4\8	3\27	
closed	26	51	81	107	22.49
open	123	123	113	100	27.37
L.S.D Value	33.64	39.27	21.66	16.35	

The results of the table (2) the not significant differences in honey for hives space before admission ranging range 100-107 Lang As for after entered into the enclosed greenhouses there were highly significant differences in the honey area has decreased significantly until he arrived at the end of the experiment to 26 inch and the reason for that bees need honey consumption and the sugar solution provided as food for the bees in order to cool the hive inside a closed greenhouse.

The open house plastic there was a slight increase of the temperature difference as it has in the closed house and the ability of bees House shepherd outside the home and return him .In comparison with honey space in the closed and open house, we find there is a high significant differences Upon the introduction of bees to the end of the experiment, as we find that the honey area arrived at end of the experiment to 26 inch either the open 123 inch.

Table (3): the closed and open space at the rate of pollen greenHouse effect before and after the introduction of bees

Type of greenhouse	Date				L.S.DValue
	5\2	4\20	4\8	3\27	
closed	22	37	57	71	40.66
open	55	63	73	63	37.91
L.S.DValue	15.42	17.29	12.74	11.42	

The results of the table (3) non significant differences in pollen area before the introduction of hives to greenhouses ranges between 73-71 inch. But after the introduction of the hives into a closed greenhouses, the pollen levels began to decline even reached 22 inch and this goes back to the Bees Field honey Responsible for collecting pollen has been most of it to die as a result of rising temperatures inside the enclosed greenhouses. The plastic open houses managed bees that collect pollen in order to freedom to collect pollen from the outside of the greenhouse, amounting to 155 inch, also it showed the results of the table and there is a high significant differences between the pollen area in the closed and open house to decide as it amounting at the end of the experiment 55-22inch, respectively, to the large number of bees die Field honey for high temperatures inside the greenhouse.

Table (4): the effect of the greenhouse type in seed production rate The plastic house type number of seeds / fruit

Type of greenhouse	Number of seeds \ fruit
closed	31.98
open	6.55
L.S.D value	4.927

The results Showed in table (4) the presence of high significant differences between the number of seeds in the closed greenhouse, amounting to 13.98 seed / fruit either in the open greenhouse amounted to 6.55 seed / fruit as it was observed that the bees in the closed house shall be freighted with pollen cucumber only as a result of multiple visits to flowers male and does not blossoms option inside the closed greenhouse while at the open greenhouse, the bee lays out the greenhouse and during exit or entry to visit the flowers, whether male or female carries pollen Legs and parts of the mouth of the plants is not cucumber but his visits to flowers, male or female as he left himfertilized weak there are also observed in certain times of the day, especially in the afternoon some of the worker bees are visits to flowers inside the house just making the production of seeds per fruit rate inside the closed greenhouse over an open house for the number of worker bees working outside the cell, as well as an increase in

visits of flower female within 48 hours of age of Venus active in the production of seeds female (Shaher et al., 2013).

ACKNOWLEDGEMENT

The authors acknowledge Majeed H. Nawar(PhD), Plant Protection Department, College of Agriculture/University of Baghdad for his technical assistance.

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