





INFLUENCE OF SOME SUPPLEMENTARY FEDDING ON EXPRESSION OF HONEYBEE PRODUCTIVITY

**Mohamed Fahmy Abou Ghadir, Mohamed
Omar, Samir H. Manna and Adham
Mostafa**





Introduction





Materials and Methods



- Experimental conditions
- Proteinic diets administration
- Measurements
 - Food consumption
 - Brood rearing activity
 - Quality determination of honeybee workers emerged under isolated conditions
 - Fresh and dry weight
 - Protein content



**Table (1) : Description of mixed proteinic diets
administrated to honeybee workers.**



Variant	Date palm pollen	Maize pollen	Soybean meal	Dried skem milk	Brewer's yeast	Faba bean meal	Sugar
Diet 1	-	-	3	1	1	-	5
Diet 2	-	-	-	0.5	1	3	4.5
Diet 3	1	-	3	0.5	1	-	5.5
Diet 4	-	1	3	0.5	1	-	5.5
Control	Feeding on bee-bread collected from honeybee colonies						

Results



Table 2: Food consumption of honeybee nuclei, fed on mixtures proteinic materials, under isolated conditions, during the period from 28-5 to 27-7



Date of feeding Tested diets	Sealed brood area (sq. inches/colony)													Total gm
	28-5	2-6	7-6	12-6	17-6	22-7	27-7	2-7	7-7	12-7	17-7	22-7	27-7	
Diet 1	150.6 a	86.3 bc	95.4 b	87.1 bc	87.3 bc	84.7 bc	48.9 fg	15.6 nopq	21.7 jklmn opq	25.4 hijkl mnop	18.8 lmno pq	19.9 mnop q	6.7 q	746.0 A
Diet 2	39.8 gh	41.9 gh	85.5 bc	80.5 bcd	26.9 higq mnop	21.0 jklmn opq	19.9 klmn opq	20.9 jklmn opq	13.0 opq	18.4 lmno pq	10.0 pq	6.9 q	5.3 q	390.6 B
Diet 3	142.9 a	67.3 de	94.3 b	93.7 b	87.6 bc	74.4 cd	75.1 cd	34.2 ghijkl	37.6 ghij	40.9 gh	36.0 ghijk	31.9 hijkl mn	22.2 ijklm nopq	838.6 A
Diet 4	141.9 a	82.9 bc	95.0 b	95.3 b	90.7 Bc	83.8 bc	59.3 ef	40.8 gh	32.9 ghijkl m	38.6 ghi	34.7 ghijkl	27.8 hijkl mno	19.0 lmno pq	843.3 A

Table 3: Effect of certain proteinic diets on sealed brood area of honeybee nuclei, under isolated condition, during the period from 9-6 to 8-8.



Dates of inspection Tested diets	Sealed brood area (sq. inch)						Total brood area (sq inch)
	9/6	21/6	3/7	15/7	27/7	8/8	
Diet 1	127.0 b	27.6 b	30.3 b	5.5 b	8.6 b	2.3 b	201.5
Diet 2	92.0 b	1.6 b	2.0 b	5.5 b	5.3 b	1.3 b	107.8
Diet 3	169.0 b	41.3 b	43.3 b	13.3 b	25.0 b	12.3 b	304.3
Diet 4	168.6 ab	26.3 b	38.6 b	6.3 b	14.3 b	6.3 b	260.6
Bee bread (control)	253.3 a	260.6 a	208.6 a	176.3 a	203.6 a	190.0 a	1292.6

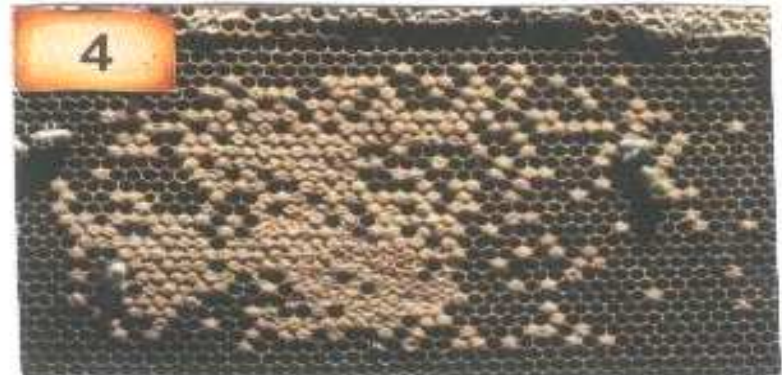


Table 4: Average of fresh weight, dry matter and protein content of honeybee adult reared under isolated conditions after feeding on mixtures of proteinic materials.



Tested diets	Fresh weight (mg)	Dry matter (mg)	Protein content Mg/100 Dry matter
Diet 1	98.16 AB	15.60 a	57.96 (abc)
Diet 2	98.06 AB	16.26 a	53.40 (c)
Diet 3	97.60 AB	15.80 a	58.76 (ab)
Diet 4	95.36 B	15.70 a	58.35 (ab)
Bee bread (control)	107.70 A	16.86 a	55.86 (bc)

Conclusion



Diet No.	Total Bread area (sq. inch)
Diet 3	304.33
Diet 4	260.66
Diet 1	201.50
Diet 2	107.83

شكرا الحسن المتعلم

