
Mus musculus

Natural Honey
) () Mitomycin-C- (MMC) - -
Mus musculus (

Abstract

The study is designed to investigate the role of natural honey in the inhibition of genotoxic effects of mitomycin-C- [MMC] drug in mice [*Mus musculus*] through using the cytogenetical test by determining the mitotic activity , chromosomal aberration [chromatide and chromosome break] and sperm head abnormalities .

The results revealed the following :-

Absence of toxicity and mutagenicity for all concentration of honey at tested doses , the high inhibitory effect of mitomycin-C- for cell division in addition to induction of chromosomal aberration and sperm head abnormalities and the high inhibitory efficiency of all concentration of honey against the toxicity and mutagenicity of MMC .

[16]

Honey

)

(
.() ()

[22]

. [5]

. [8]

[5]

Flavonoides

[7]

[1]

. %40-20

)

[2]

(4.0 1.0 0.1

- -

. [20.14.13]

/ (600 450 300 150)

/ 2

- -

32-27 12-8 . *Mus musculus*

[9] Allen

[12] Evans

. [21] San Stick

100 [10] Au

100

. [19] Rawat

3
7 / (600 450 300 150) 4

4 3 6
7

. - -

6 6

3 3

L.S.D

النتائج

-1

-

(1)

15.06

(P< 0.05)

450 300 150)

% (20.37 17.93 19.16 19.60) %

/ (600

(P< 0.05)

/ 300

(1)

-

)

(1)

(

-

(1)

)

P<0.05)

(

(P> 0.05) / (450 300) (

. / (600 150)

- - -2

-

(P< 0.05) (2)

) () - -

7 % 15.20 % 5.20 (

(P< 0.05)

150) (1) % (46.16 14.41 61.37 38.28)

. / 300 / (600 450 300

(P< 0.05) (2)

% 3.87 % 8.70

(P< 0.05) 7

450 300 150) % (66.04 63.30 68.94 66.04)

. (1) / 300 / (600

-

(P< 0.05) (2)

0.17 % 9.22 - -

7 %

(P< 0.05)

(600 450 300 150) % (39.31 40.42 48.28 38.98)

. (1) / 300 /

-

(P< 0.05) (2)

- - -

. % 2.97 % 6.08

7

%64.63 (P< 0.05)

. / 300 (1) % 99.67

() -3

-

(3)

- - (P< 0.05)

. (P> 0.05) / 150

150) % (9.02 8.62 9.00 6.97) - -

/ (600 450 300
% 15.10 % 4.86

(600 450 300 150) % (24.15 38.95 39.32 43.82)
. (1) / 300 /
- - (3)
(P< 0.05)

. / 300 % 47.09 44.12
(P< 0.05) - - (3)

P<) (0.05

90.00 96.67) / (600 450 300 150)
. (1) / 150 (92.67 91.00

. (1) [2] (1)

) (1) (1

[23]
[6] [2]

- - (2)
(2)

[18] Littlefield [4]
DNA DNA
Cross-linking
. [4]

(3) (2) - -
(1)

[1] Glutathione

[15]

DNA

Nucleophils

[11] Electrophils

[22]

Aleo barbadensis

[17] Lee , Kim

Polysaccharides

B(a)P

DNA-Adduct

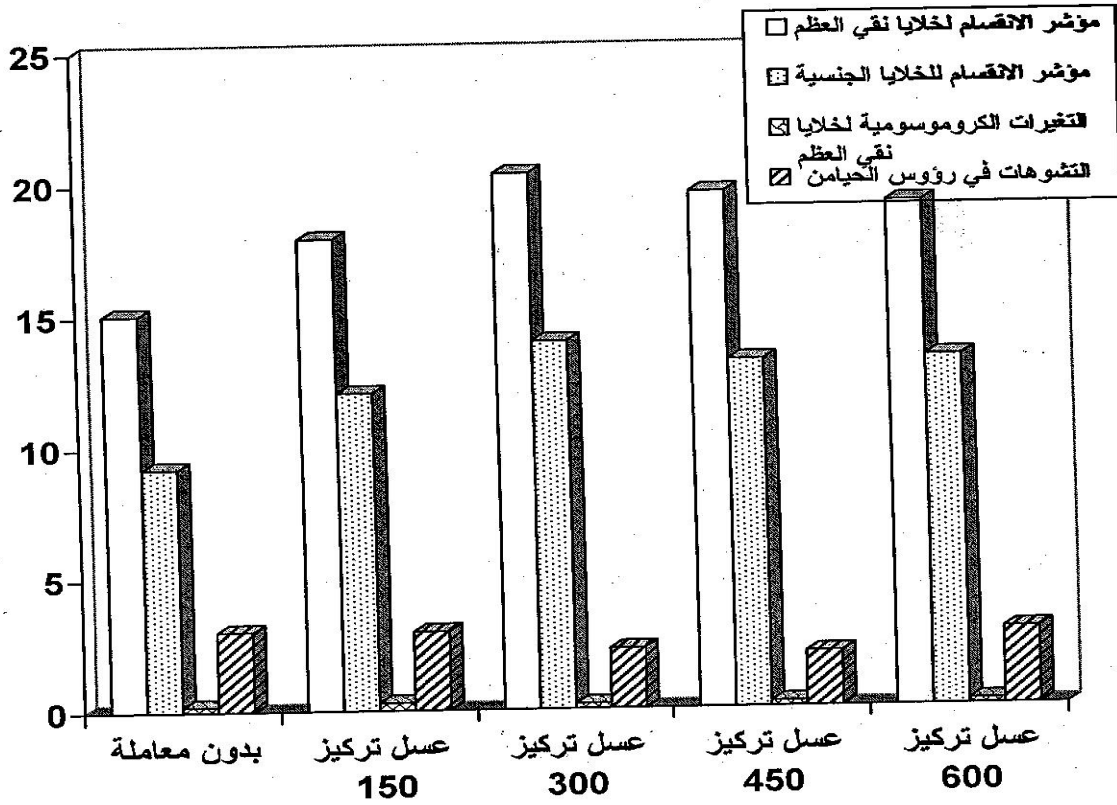
DNA

Desmutagen

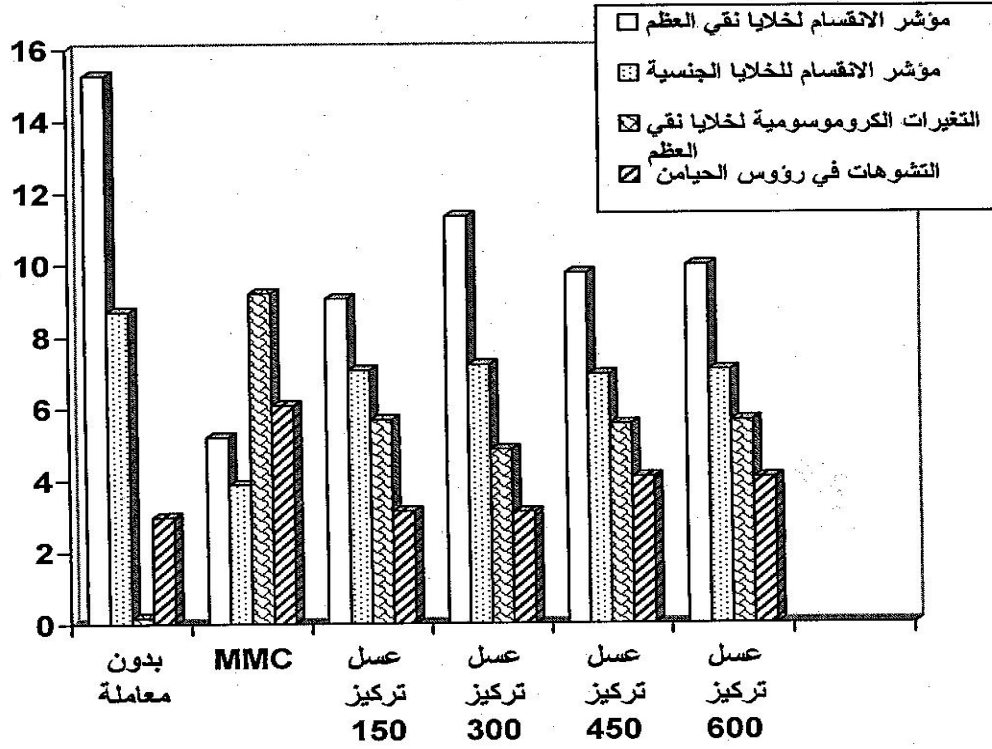
[2]

Bioantimutagen

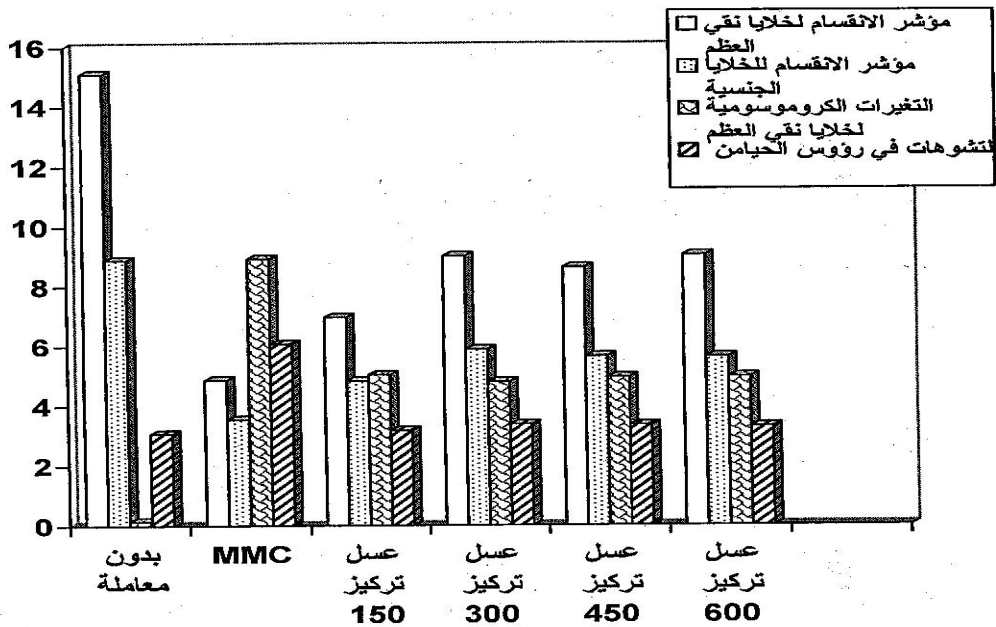
%					
				/	
94.85	38.98	66.04	38.28	150	
99.67	48.28	68.94	61.37	300	
64.63	40.42	63.30	41.41	450	
65.27	39.31	66.04	47.16	600	
96.67	44.12	24.15	20.60	150	
90.00	47.09	43.82	40.42	300	
91.00	45.38	39.32	36.71	450	
92.67	45.26	38.95	40.62	600	



شكل رقم (1) تأثير تجريع العسل على مؤشر الانقسام الخيطي والتغيرات الكروموسومية والتشوهات في رؤوس الحيامن في الفئران البيض



شكل رقم (٢) تأثير تجريع العسل قبل المايتوسين سي- على مؤشر الانقسام الخيطي والتغيرات الكروموسومية والتشوهات في رؤوس الحيامن في الفئران البيض



شكل رقم (٣) تأثير تجريع العسل بعد المايتوسين سي- على مؤشر الانقسام الخيطي والتغيرات الكروموسومية والتشوهات في رؤوس الحيامن في الفئران البيض

	(1983)	-1
	(2002)	-2
	(2001)	-3
.803-795 :(3)	(6) <i>Mus Musculus</i>	
	(1997)	-4
	(1994)	-5
	(2002)	-6
	(1996)	-7
	(1994)	-8

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