

*Olea europea* L.

*Culex pipiens molestus* Forskal

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#### ABSTRACT

The effect of aqueous extract of *Olea europea* L. leaves was studied in four sublethal conce.i.e., 0.025, 0.25, 0.5 and 1% on the larvae ovaries of insect *Culex pipiens molestus* Forskal. These larvae were of third instars concluding four stages of age viz., 24, 48, 72, and 96 h., after there emergence. Findings of the study revealed various abnormalities including reduced size of vestigial ovaries in the advanced stages. However, such reduction in the ovaries was less than those occurred at the early stages i.e., 24 h pre-emergence. Other deformities involved irregular distribution of yolk or vitelline granules within the oocytes, huge inhibition of granule formation or their deposition, an extreme decrease in the number of ovarioles, ovarian follicles and egg production. All concentration. In both stages 24 and 48 post-emergence showed inhibition in the length and width of the ovaries with their follicles having decreased number of ovarian follicles. All conc. In stage 72 h post-hatching caused significant inhibition in the characteristics investigated, however, 0.25 % concentration. caused the effective inhibition in the length of ovary and width of ovarian follicles. Regarding to the last stage i.e. 96 h post-emergence, it was found that all concentration. followed were inhibitory for length and width of ovary and length of ovarian follicles, however, the most effective inhibition was observed at 0.5 and 1 % concentration. concering the width of ovarian follicles, there were no inhibition of all different concentration. used as compared with control specimens.

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**Olea europea L.**

*Olea europea* L.

% 1    0.5    0.25    0.025

*Culex pipiens molestus* Forskal

96   72   48   24

24

48   24

72

% 0.025

96

% 1   0.5

. (1)

(3) (2)

.(4)

.(5)

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(8) (7) (6)

(9)

. (10)

Oleaceae

*Olea europea* L.

: .(1)

Oleine, Oleasterol, glucose, olivine, oleuropein, olestranol, Resine. (1)

Oleuropeoside. (11)

Glutamates, serine, proline, Aspartate, Mannitol. (12)

Betulinic acid, alpha-beta amyryn, Erythrodiol. (13)

(1±27)

40

.(14)

8

16

12

(4-3)

300

( )

24

.(10-5)

2007

(15)



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(2 1)

% 1 0.5 0.25 0.025

(2)

% 0.25

(1 )

(4)

0.25

24

.(3 )

(3)

%0.025

% 0.5 0.25

24

.(5)

(7 6 )

(4)

% 1 0.5

.

...

**Olea europea L.**

**:(1)**

**24**

|    |     |     |     |       |
|----|-----|-----|-----|-------|
|    |     |     |     |       |
| 75 | 100 | 275 | 456 | 0.00  |
| 31 | 50  | 112 | 212 | 0.025 |
| 25 | 50  | 106 | 200 | 0.25  |
| 31 | 56  | 125 | 250 | 0.5   |
| 25 | 62  | 131 | 256 | 1     |

.%5

**:(2)**

**48**

|    |     |     |     |       |
|----|-----|-----|-----|-------|
|    |     |     |     |       |
| 81 | 112 | 331 | 831 | 0.00  |
| 37 | 62  | 168 | 450 | 0.025 |
| 43 | 75  | 156 | 456 | 0.25  |
| 31 | 68  | 156 | 437 | 0.5   |
| 37 | 68  | 156 | 456 | 1     |

.%5

:(3)

72

|     |     |     |      |       |
|-----|-----|-----|------|-------|
|     |     |     |      |       |
| 131 | 443 | 775 | 1556 | 0.00  |
| 25  | 56  | 187 | 400  | 0.025 |
| 31  | 87  | 187 | 468  | 0.25  |
| 25  | 56  | 162 | 450  | 0.5   |
| 50  | 143 | 262 | 625  | 1     |

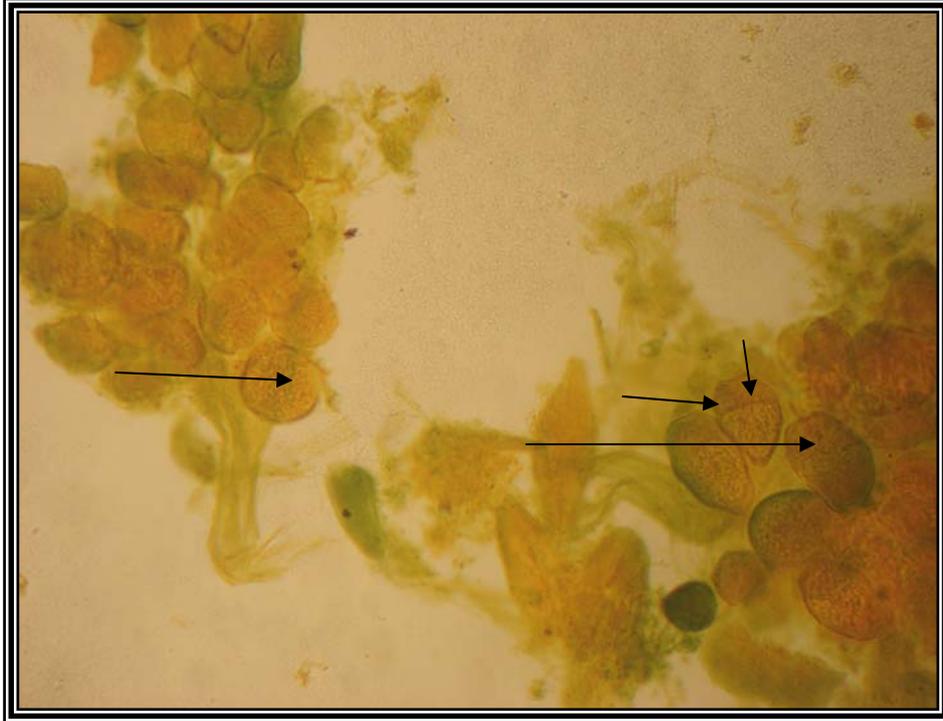
. %5

:(4)

96

|     |     |      |      |       |
|-----|-----|------|------|-------|
|     |     |      |      |       |
| 100 | 500 | 1112 | 1843 | 0.00  |
| 81  | 406 | 518  | 800  | 0.025 |
| 81  | 412 | 568  | 868  | 0.25  |
| 93  | 356 | 537  | 850  | 0.5   |
| 93  | 356 | 575  | 931  | 1     |

. %5

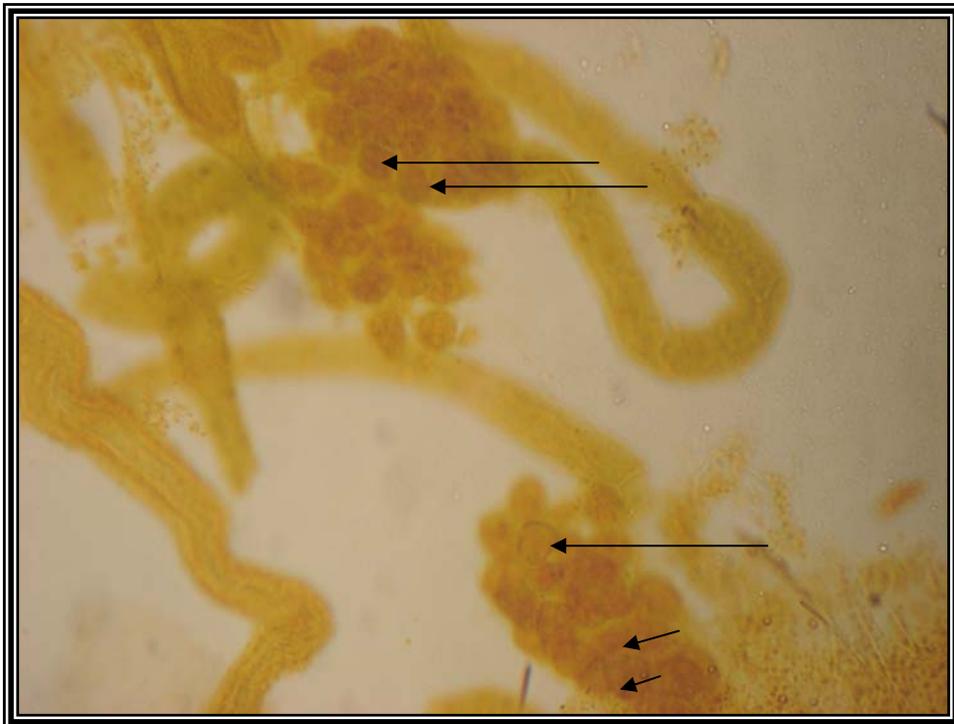


24

:(1)

.( ) ( )

165X .



:(2)

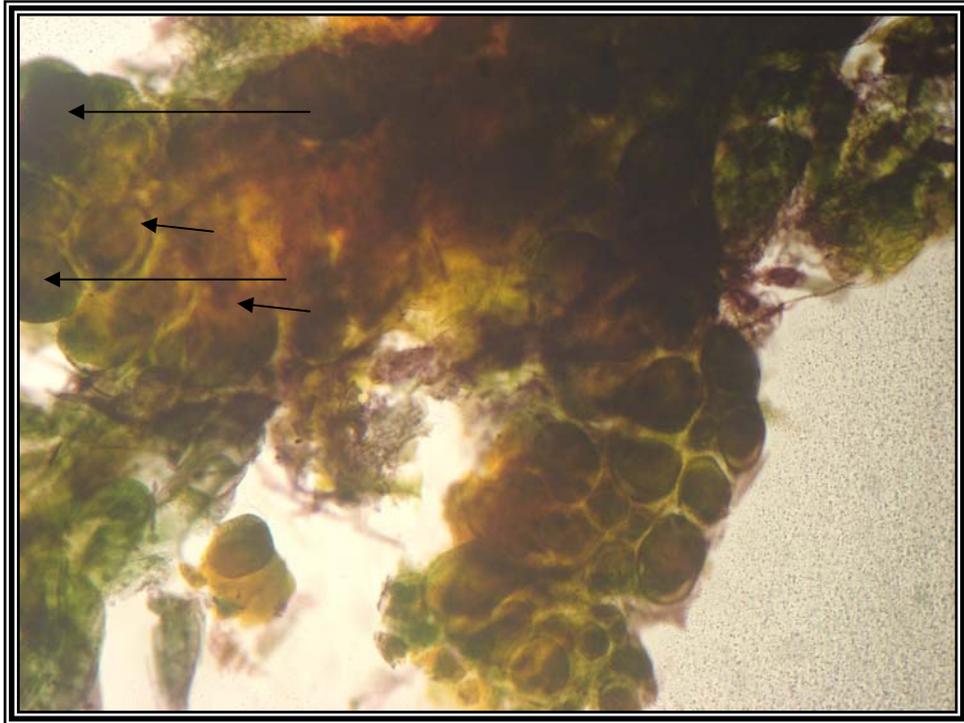
24

% 0.25

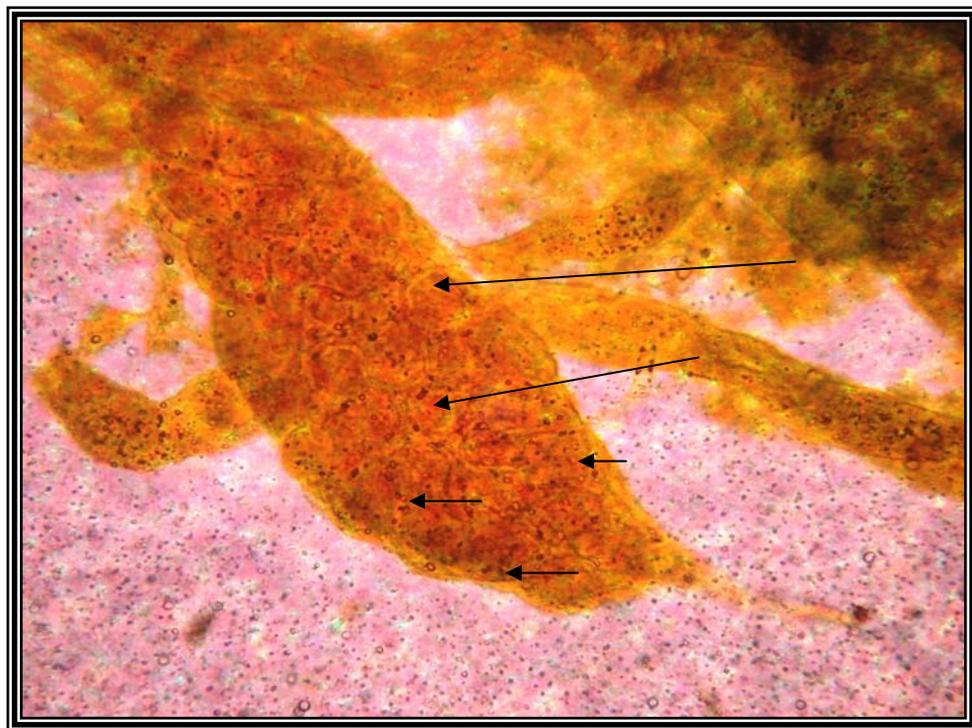
( )

. 165X

.( )



48 : (3)  
 ( )  
 . 115X . ( )



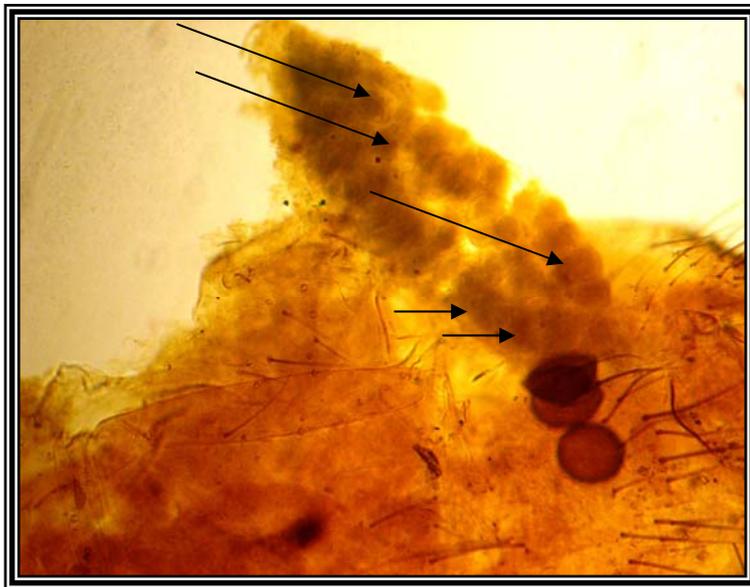
48 : (4)  
 %0.25  
 X240. ( ) ( )



72

:(5)

.90X .



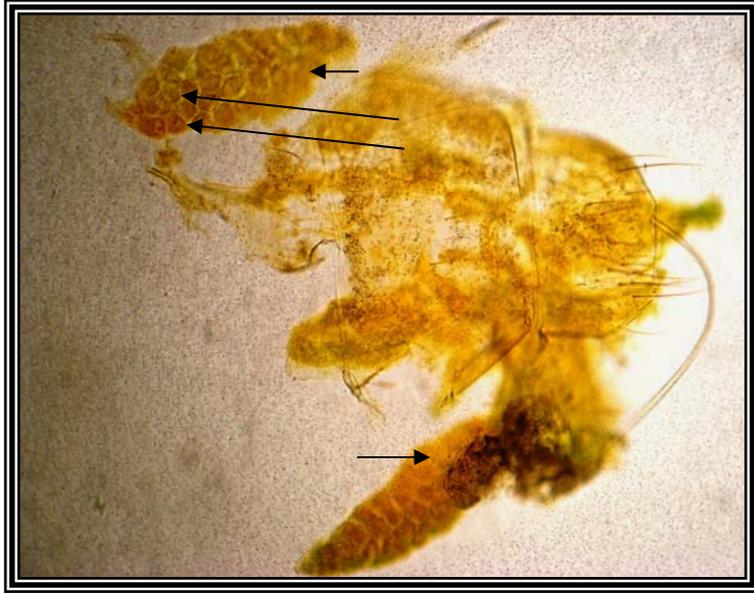
72

:(6)

%0.5

( )

.165X ( )



72

:(7)

%0.025

( )

.115X ( )

(18)

5 10

(19)

(20)

*Anethum sowa* Roxb (Indian dill) seed

(21)

Tropical

/ 1 0.5 application

1 % 2.5 (22)

% 1.5

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.(1999)

(8)

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