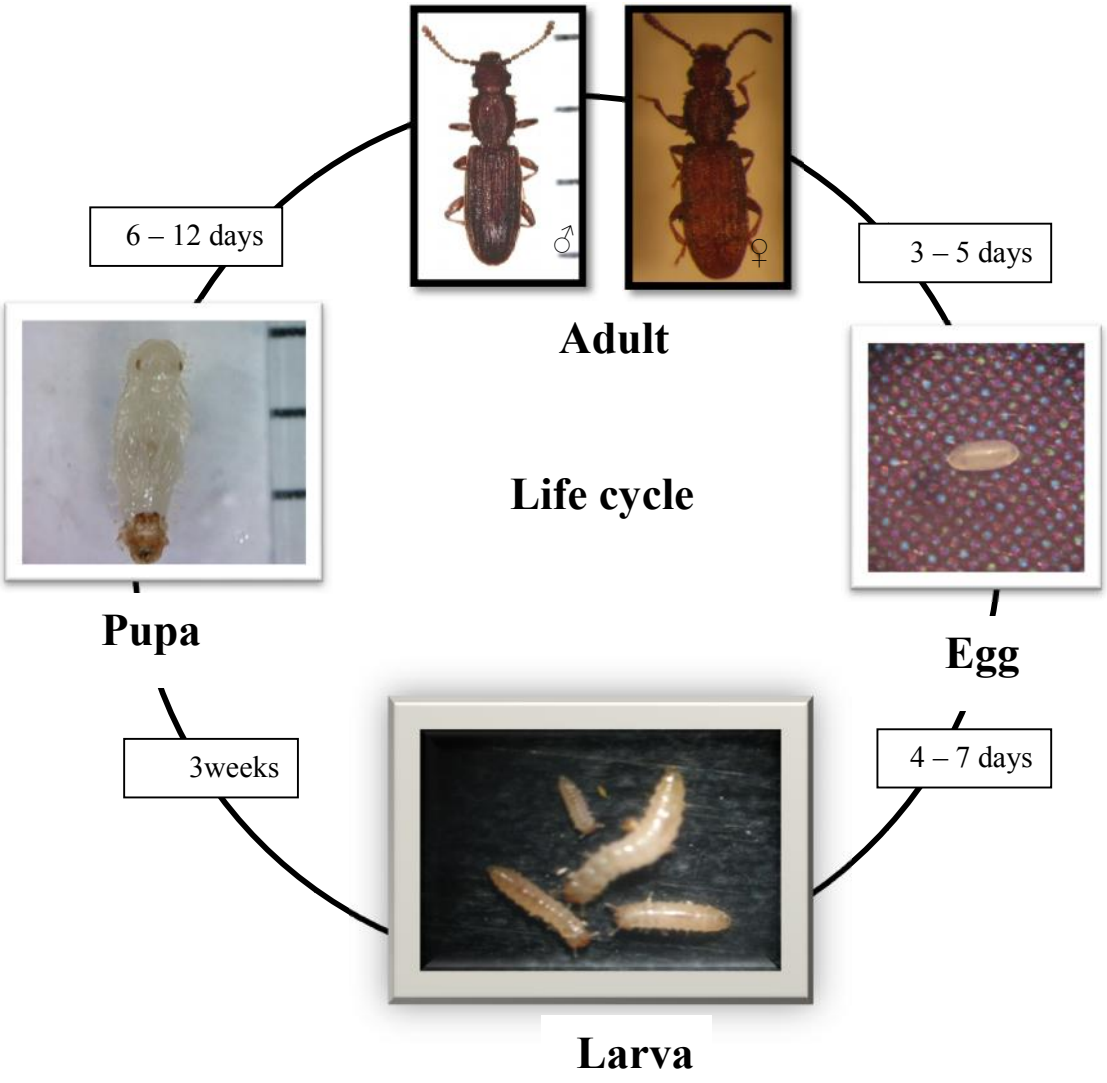

Fig. (1): Life cycle of *O. surinamensis*

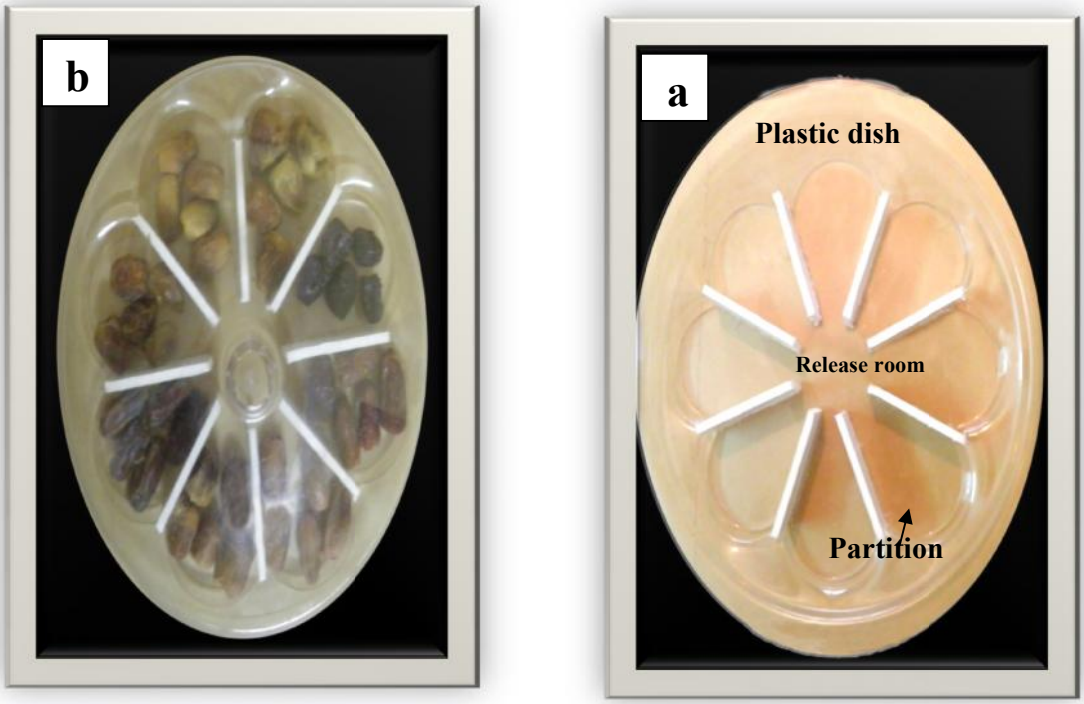

Fig (2): Arena design which used in preference test
(a) = Structure of arena, (b) = Arena during experiment

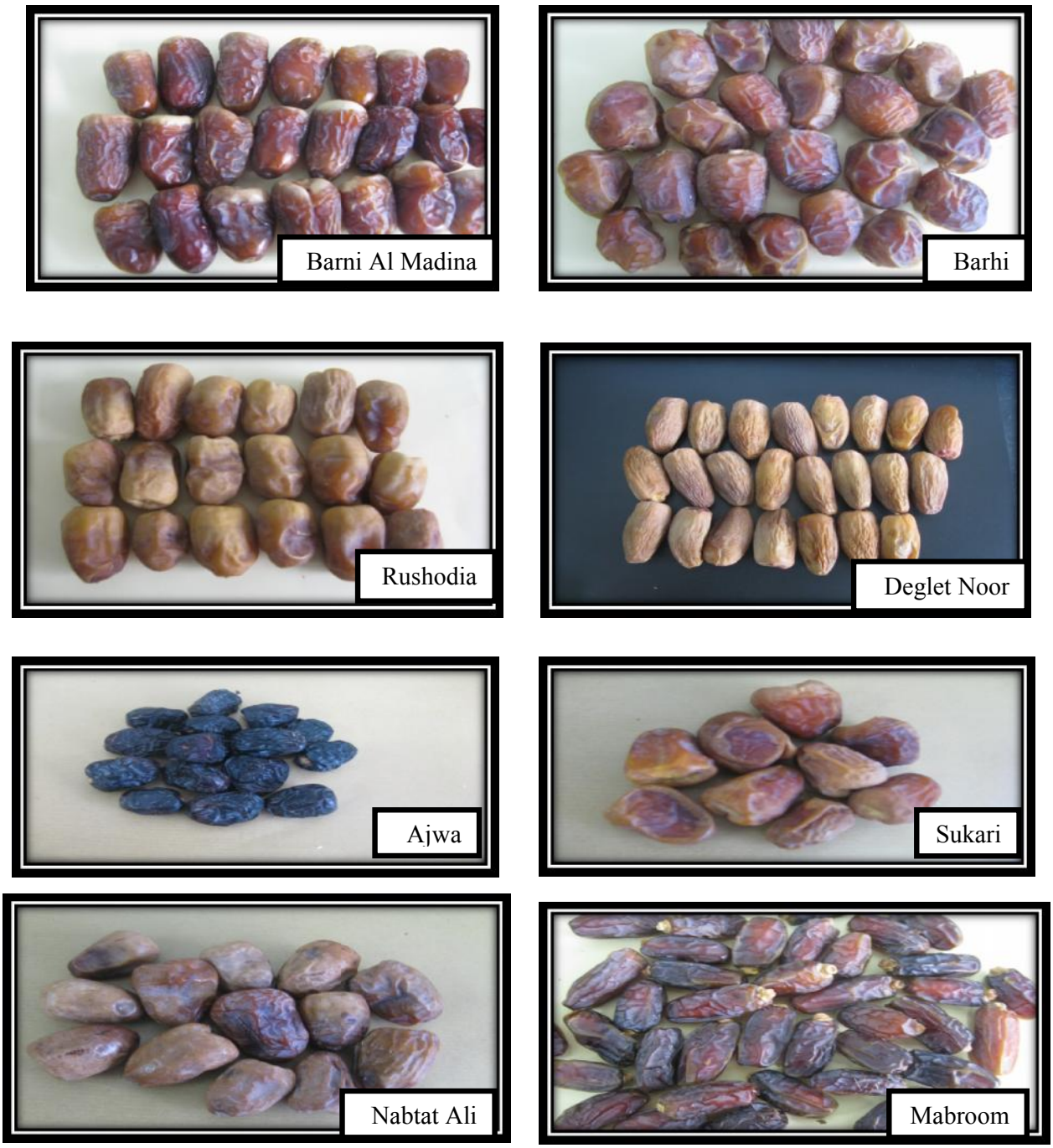

Fig (3): Photo shows the physical properties (texture, colour, shape and size) of the different varieties of date.

Table (1): Analysis of chemical constituents of tested date cultivars.

Means with the same letters have no significant difference

Date cultivars	Total soluble solids (%)	Acidity (%)	Total sugars (%)	Moisture content (%)	Nitrogen (%)	Lipids (%)	Fiber (%)	Ash (%)
Barhi	76.80_a	0.192_a	68.98_a	14.54_b	1.42_f	0.130_f	4.23_f	2.14_b
Barni Al Madina	74.00_b	0.205_a	67.02_a	11.38_e	3.91_d	0.141_f	7.06_d	2.30_b
Deglet Noor	74.00_b	0.156_b	65.40_a	13.10_d	5.12_b	0.321_b	9.33_b	2.31_b
Rushodia	68.40_d	0.217_a	58.78_c	15.67_a	2.74_e	0.143_f	5.79_e	1.72_d
Sukari	71.60_c	0.156_b	57.98_d	14.70_b	4.67_c	0.285_c	8.74_b	1.73_d
Ajwa	74.40_b	0.217_a	61.98_b	14.02_b	5.45_a	0.380_a	11.25_a	3.30_a
Mabroom	69.60_c	0.205_a	57.84_d	13.87_c	4.11_d	0.187_e	8.19_c	2.06_c
Nabtat Ali	71.20_c	0.192_a	59.68_c	14.61_b	4.99_b	0.215_d	8.52_b	2.23_b
$LSD_{0.05}$	2.09	0.027	3.95	0.70	0.299	0.015	0.89	0.24

Table (2): Effect of tested date cultivars on female fecundity of *O.surinamensis*.

Date cultivars	Number of deposited eggs/5females/2weeks (Mean ± S.E)
Barhi	49.33±3.2b
Barni Al Madina	16.67±0.9e
Deglet Noor	6.67±1.2f
Rushodia	25.00±1.1d
Sukari	61.67±1. 7a
Ajwa	2.67±0.9f
Mabroom	14.00±0.01e
Nabtat Ali	32.33±0.9c
L.S.D at 0.05	4.68
L.S.D at 0.01	5.69

Means with the same letters have no significant difference

Table (3): Attraction percentage of *O. surinamensis* adults toward eight dry date cultivars (Choice test).

Date varieties	Percentages of adults attract
Barhi	13.8
Barni Al Madina	11.3
Deglet Noor	3.1
Rushodia	28.8
Sukari	22.5
Ajwa	3.1
Mabroom	4.4
Nabtat Ali	13

Table (4): Measurement of growth index of immature stages of *O. surinamensis* rearing on different dates varieties

Date varieties	Growth Index (Mean ± S.E)
Barhi	3.7±0.08
Barni Al Madina	2.7±0.33
Deglet Noor	0.48±0.02
Rushodia	3.22±0.06
Sukari	4.16±0.03
Ajwa	0.94±0.01
Mabroom	2.29±0.32
Nabtat Ali	2.15±0.1
L.S.D at 0.05	0.504
L.S.D at 0.01	0.898

Table (5): Susceptible index measurement of tested date cultivars towards Saw-teethed beetle.

Date varieties	Total No. of First progeny	period for emergences of 50% First progeny	S.I(%)
Barhi	47±2.08b	28	14.3±0.4a
Barni Al Madina	34±4.5d	35	10±0.4c
Deglet Noor	27.7±3.7d	35	9.4±0.4d
Rushodia	43±2.5b	28	13.4±0.2a
Sukkari	57±1.5a	28	14.5±0.1a
Ajwa	13.67±3.9d	35	7.1±0.03d
Mabroom	24.33± 2.6d	28	11.4±0.4c
Nabtat Ali	39±6.6c	30	12.4±0.3c
L.S.D at 0.05	10.12		1.42
L.S.D at 0.01	13.45		1.95

Means with the same letters have no significant difference

Table (6): Correlation between chemical compositions of tested date cultivars and susceptibility index.

Components (%)	Correlation (r)	significant
Total soluble solids	**-0.252**	**No sig.**
Acidity	**-0.364**	**No sig.**
Total sugars	**-0.238**	**No sig.**
Moisture content	**0.714**	**0.05**
Nitrogen	**-0.619**	**No sig.**
Lipids	**-0.476**	**No sig.**
Fiber	**-0.548**	**No sig.**
Ash	**-0.833**	**0.01**

Table (7): The percentages of the real weight of the different varieties of dates during storage for six months

Months of store / Tested Date cultivars	(% of weight loss)						Mean of monthly loss (%)
	1	2	3	4	5	6	
Barhi	2.7	5.5	18	40.4	55.4	62.7	30.8
Barni Al Madina	2.9	4.6	13.7	34.7	48.3	55.2	26.6
Deglet Noor	5.2	7	7.5	10.5	11.3	11.6	8.9
Rushodia	4.9	7	16.9	38.3	49.19	53.5	23.3
Sukkari	5.9	8.8	18.9	36	41.6	43.7	25.8
Ajwa	3.4	3.7	7.1	10.5	16.7	21.5	10.5
Mabroom	1.7	2.2	4.9	18.1	31.3	40	16.4
Nabtat Ali	5.6	8.2	18.7	33	36.7	38.6	23.5