

Table 3 Mosquito pupicidal activity of *P. glandulosus* essential oil against *Ae. aegypti*, *An. gambiae* and *Cx quinquefasciatus* pupae 24 h post exposure

Mosquito species used	Conc.(ppm)	MM±SD (%)	LC ₅₀ (LCL-UCL) (ppm)	LC ₉₀ (LCL-UCL) (ppm)	χ ²
<i>Aedes aegypti</i>	25	54.67±4.61 ^a	27.22	93.42	2.87
	50	62.67±4.61 ^b	(15.24–37.32)	(67.96–168.35)	
	100	90.67±5.11 ^c			
	200	100.00±0.00 ^d			
	300	100.00±0.00 ^d			
	F value	86.40***			
<i>Anopheles gambiae</i>	25	61.33±6.11 ^a	22.60	140.53	3.92
	50	65.33±4.61 ^a	(7.64–36.21)	(91.76–344.88)	
	100	76.00±5.00 ^b			
	200	96.00±4.00 ^c			
	300	100.00±0.00 ^c			
	F value	33.40***			
<i>Culex quinquefasciatus</i>	25	0.00±0.00 ^a	104.75	225.05	3.93
	50	10.67±4.61 ^b	(86.20–126.00)	(179.33–320.06)	
	100	54.67±4.61 ^c			
	200	76.00±3.00 ^d			
	300	100.00±0.00 ^e			
	F value	254.17***			

Note: MM±SD (%): Mean of mortality ± standard deviation (%); MM±SD within a column followed by the same letter do not differ significantly at P= 0.05 (Duncan's test); ***: p<0.001; LC₅₀ and LC₉₀: Lethal Concentrations able to kill 50% and 90% of pupae respectively; ppm: parts per million; LCL: Lower Confidence Limit; UCL: Upper Confidence Limit; χ²: Chi-squared; Number of replicates: 4