

Table 1. Larvicidal activity of two different formulations against *Aedes aegypti*

Treatment	Larval mortality after					
	1 hour	2 hours	3 hours	8 hours	20 hours	48 hours
Formulation-4	0	76.0±16.7	84.0±8.9	100.0±0	100.0±0	100.0±0
Formulation-5	0	64.0±16.7	80.0±14.1	100.0±0	100.0±0	100.0±0
Temephos (0.01 ppm)	30.7±12.6	89.3±8.4	100.0±0	100.0±0	100.0±0	100.0±0

Table 2. Larvicidal activity of two different formulations against *Culex quinquefasciatus*

Treatment	Larval mortality after					
	1 hour	2 hours	3 hours	8 hours	20 hours	48 hours
Formulation-4	0	77.7±18.5	80.0±17.3	98.4±6.5	95.5±8.8	100.0±0
Formulation-5	0	86.6±14.4	91.1±14.5	100.0±0	100.0±0	100.0±0
Temephos (0.01 ppm)	40.6±15.8	98.2±10.7	100.0±0	100.0±0	100.0±0	100.0±0

Results


- Formulation-5 was more effective against *Cx. quinquefasciatus* larvae
- Formulation-4 was more effective against *Ae. aegypti*; it showed 100% larvicidal activity in 8 hours
- Formulation-5 recorded 100% larvicidal activity against both mosquito species in 8 hours
- At 48 hours, the two formulations killed 100% larvae of both mosquito species.
- Ovicidal activity experiments showed that both formulations inhibited 100% egg hatching in *Cx. quinquefasciatus* eggs. In *Ae. aegypti*, formulation-4 and formulation-5 recorded only 8.4 and 12.3% ovicidal activities, respectively.

Conclusion

- Though both formulations showed slight variation in their efficacy, they were equally effective at 48 hours of treatment against the larvae of *Ae. aegypti* and *Cx. quinquefasciatus*.
- The two formulations had 100% ovicidal activity against *Cx. quinquefasciatus* eggs.

Reference

World Health Organization (WHO), 2005. Guidelines for laboratory and field testing of mosquito larvicides. World Health Organization communicable disease control, prevention and eradication WHO pesticide evaluation scheme.


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