

عنوان مقاله:

Effects of *Oliveria decumbens* and *Pelargonium roseum* essential oils on *Anopheles stephensi* larvae in Laboratory condition

محل انتشار:

دومین کنگره بین المللی بیماریهای منتقله بوسیله ناقلین و تغییرات آب و هوایی و چهارمین کنگره ملی حشره شناسی پزشکی ایران (سال: 1398)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

Background: Mosquitoes, are responsible for spreading devastating parasites and pathogens causing serious diseases, including malaria, yellow fever, dengue, filariasis and, more recently Zika virus. Essential oils (EOs) from plants are used as alternative sources of pest management tools. *Oliveria decumbens*, an endemic plant of Iranian flora, belongs to umbelliferae family. *Pelargonium roseum* is a species indigenous to southern Africa belonging to the Geraniaceae family. Objective: The aim of this study is trying to find environmental friendly materials to help producing ecofriendly larvicide. Material and method: Pure leaf EOs of *O. decumbens* and *P. roseum* purchased from Barij essence company. *Anopheles stephensi* larvae were reared at laboratory colony at School of Public Health, Tehran University of Medical Sciences. The larvicidal bioassay tests were carried out according to WHO guidelines for laboratory and field testing of mosquito larvicides. Mortality recorded 24 h after treatment. All analyses were conducted using the statistical package MS excel 2013. Result: *O. decumbens* and *P. roseum* and mix of them had LC50s of 25.14, 32.2 and 16.55 ppm respectively and LC90s for them were 31.65, 40.85 and 24.08 ppm respectively. Conclusion: Mix of two EOs had more larvicidal effect on target species. It is recommended to perform phases II (small-scale field trials) and III (large-scale field trials) of the WHO method.

کلمات کلیدی:

Anopheles stephensi larvae, *Oliveria decumbens*, *Pelargonium roseum*, Essential oil

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