



Population Control of *Dociostaurus maroccanus* by *Pistacia lentiscus* and *P. vera*

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Abstract: The invasion of insect pests is causing significant losses on crops and agricultural land, for this reason locust control remains one of the major concerns in the strategy of protecting crops in arid and semi-arid regions. The present study was conducted for evaluation of bio-insecticidal of the essential oils of *Pistacia lentiscus* and *Pistacia vera* of the Anacardiaceae family in the region of Tlemcen by molecular modeling methods. The work consists of studying the inhibition of the α -amylase enzyme of the species *Dociostaurus maroccanus* which is a digestive enzyme by molecular docking. The molecular dynamics simulation study showed good result for the myrcène a functional inhibitor for the activity of α -amylase enzyme. The result obtained confirms the bio-insecticide effect of the genus *Pistacia* family of Anacardiaceae.

Keywords: Essential oil, *Pistacia lentiscus*, *Pistacia vera*, *Dociostaurus maroccanus*
