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Antioxidant and Mosquito Larvicidal Activity of Compounds from Surface Exudates of *Dodonaea angustifolia*

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The surface exudates of *Dodonaea angustifolia* (Sapindaceae) yielded seven methylated flavonoids and two clerodane diterpenoids. Among the compounds tested for larvicidal activity; 3,5,4′-trihydroxy-7-methoxyflavone (rhamnocitrin) and 5,7-dihydroxy-3,6,4′-trimethoxyflavone (santin) showed good dose dependent activity with an LC_{50} values of 1.75 and 5.1 μg/ml respectively, after 24 h. Rhamnocitrin, which was the most active, caused 100% mortality at 6.5 μg /ml after 24 h. Hautriwaic acid showed good larvicidal activity (LC_{50} 10.2 μg/ml, after 24 h). The surface exudates showed radical scavenging activity (RSA) of 54.6 % at 11.4 μg/ml. The flavonol 3,5,7,4′-tetrahydroxyflavone (kaempferol) was the most active with RSA of 96.8% at 50 μM followed by 3,5,4′-trihydroxy-7-methoxyflavone with RSA of 96.2% at the same concentration. The RSA of 3,5-dihydroxy-7,4′-dimethoxyflavone,5,4′-dihydroxy-3,6,7-trimethoxyflavone,5,7-dihydroxy-3,6,4′-trimethoxy flavone, 5,7,4′-dihydroxy-3-methoxyflavone,and5,4′-dihydroxy-3,7-dimethoxyflavone were 25.4 %, 2.55%, 6.67%, 11.2% and 18.4% respectively at 50 μM.