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Insecticidal metabolites from the green alga *Caulerpa racemosa*

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Abstract

The purpose of this study is the isolation and identification of metabolites from the green alga *Caulerpa racemosa* and assaying them against the medically important mosquito *Culex pipiens*. The chloroform/methanol extract of the green alga *C. racemosa* afforded a number of metabolites, as caulerpin (1), caulerpynyne (3), phytol (4), 10-keto-3,7,11-trimethyldodecanoic acid (5), a number of unsaturated compounds in addition to caulerpinic acid (2), the alkaline hydrolysis product of caulerpin. In summary, the larvicidal activity of caulerpin and caulerpinic acid were tested against *C. pipiens* mosquito (filarial vector) leading to the identification of novel effective mosquitocidal compounds. © 2010 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim.

Author Keywords

Caulerpa racemosa; Caulerpin; Caulerpinic acid; Caulerpynyne; *Culex pipiens*; Mosquito

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