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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 victor) 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

Document Type: Article