Mulinane-type diterpenoids from Azorella compacta display antiplasmodial activity

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Two mulinane-type diterpenoids were isolated from Azorella compacta; namely

20-hydroxymulin-11,13-dienyl acetate and 13,14-dihydroxymulin-11-en-20-oic acid. The structures were elucidated by analysis of their spectroscopic data. These compounds, as well as three previously isolated diterpenes, were evaluated as potential in vivo growth inhibitors of Plasmodium berghei NK 65 on infected mice at an intraperitoneal dose of 10 mg/kg/day. Sixty percent and forty-two percent growth inhibition were obtained with 17-acetoxymulin-11,13-dien-20-oic acid and 13, 14-dihydroxymulin-11-en-20-oic acid, respectively. © 2004 Elsevier Ltd. All rights reserved.