Constituents of Acacia cedilloi and Acacia gaumeri. Revised Structure and Complete NMR Assignments of Resinone

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The rare lupene derivative named resinone has only been isolated before from Fluorensia resinosa. We now report the isolation of this compound from the bark of the new recently described Acacia cedilloi (Fabaceae), and the revision of its structure to 16β-hydroxylup-20(29)-en-3-one, based on NMR and MS spectral data. The detailed 1H and 13C NMR assignments of resinone and its acetate achieved by 1D and 2D NMR experiments (including DEPT, COSY, HMQC and HMBC) are reported. In addition, the study of A. cedilloi and A. gaumeri afforded the known related lupenes lupeol and lupenone, the acyclic squalene, the sterols β-sitosterol, stigmasta-7,22-dien-3β-ol (spinasterol) and stigmasta-5,22,25-trien-3β-ol (22-dehydroclerosterol) as well as α-tocopherol and β-carotene.