

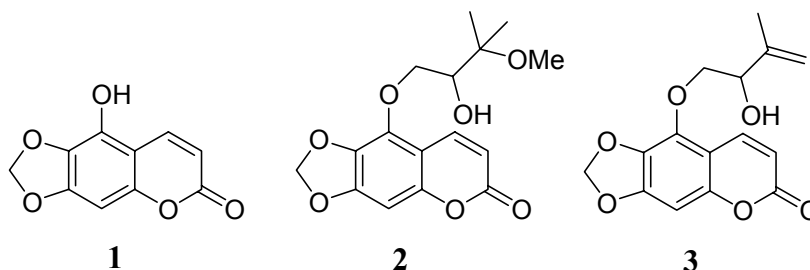
New Coumarins from *Pterocaulon virgatum* (L.) DC

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Plants of the genus *Pterocaulon* are widely distributed in north eastern Argentina, southern Brazil and Paraguay. The aerial parts of these plants are used in Argentine folk medicine. In previous reports we described the isolation and identification of several polyoxygenated coumarins from different *Pterocaulon* species. In that way purpurasol was isolated from *Pterocaulon purpurascens*, as well as the tetraoxygenated coumarins purpurasolol and purpurenol. The trioxygenated coumarins isopurpurasol, sabandinol, sabandinone, 5-(3-methyl-2-butenyloxy)-6,7-methylenedioxy coumarin and 5-methoxy-6,7-methylenedioxy coumarin were isolated from *Pterocaulon virgatum*. Later, sabandinol, 5-(3-methyl-2-butenyloxy)-6,7-methylenedioxy coumarin and 5-methoxy-6,7-methylenedioxy coumarin were also found in *Pterocaulon polystachyum*. The present report deals with the isolation and structural elucidation of three new trioxygenated coumarins from *Pterocaulon virgatum*, namely 5-hydroxy-6,7-methylenedioxy coumarin **1**, 5-(2-hydroxy-3-methoxy-3-methylbutoxy)-6,7-methylenedioxy coumarin **2** and 5-(2-hydroxy-3-methyl-3-butenyloxy)-6,7-methylenedioxy coumarin **3**.



The structures of these three new coumarins were determined based on spectroscopic evidence and by comparison with the known coumarins 5-(3-methyl-2-butenyloxy)-6,7-methylenedioxy coumarin and 5-methoxy-6,7-methylenedioxy coumarin, which were isolated before from the same plant.