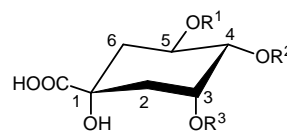
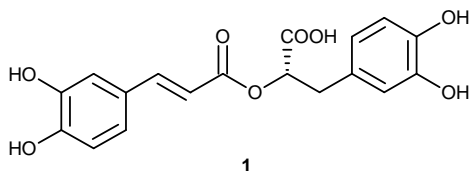


Phenylpropanoids from *Paspalum atratum*

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Abstract: *Paspalum* (Poaceae) is a genus of grasses comprising ca. 400 species distributed mainly in tropical to warm-temperate areas worldwide, of which nearly 220 species occur naturally in Brazil. *Paspalum* is recognized for its ecological and agronomic importance, derived from its forage and ornamental attributes and constitutes a taxonomically complex group of plants [1]. *P. atratum* cv. Pojuca was released by Embrapa in 2000 for commercial use in Brazil and in several other countries as well. This study describes the first phytochemical investigation of *P. atratum*. The aerial parts of *P. atratum* were dried, ground, and extracted successively at room temperature with *n*-hexane and EtOH. The crude EtOH extract was washed with CHCl₃ and the insoluble part was subjected to CC (C18, H₂O/MeOH gradient, 19:1 to 100% MeOH) to give 10 fractions. Fractions 2 and 4 were subjected to HPLC (C18, MeOH-H₂O 4:21, with 0.5% AcOH) to give eight compounds: (*R*)-rosmarinic acid (**1**), 3-*O*-caffeoylquinic acid (**2**, neochlorogenic acid), *cis* and *trans*-3-*O*-coumaroylquinic acids (**3** and **4**), 5-*O*-caffeoylquinic acid (**5**, chlorogenic acid), 4-*O*-caffeoylquinic acid (**6**, cryptochlorogenic acid), caffeic acid (**7**), and phenylalanine (**8**). The structures of the compounds were elucidated based on spectroscopic analyses (MS, ¹H and ¹³C NMR) and on comparisons of their data with those reported in the literature [2-5]. This study reports the isolation and characterization of eight phenylpropanoids from *P. atratum*, six of which (**1-4**, **6**, and **8**) were



	R ¹	R ²	R ³
2	H	H	<i>trans</i> -caffeoyl
3	H	H	<i>cis</i> -coumaroyl
4	H	H	<i>trans</i> -coumaroyl
5	<i>trans</i> -caffeoyl	H	H
6	H	<i>trans</i> -caffeoyl	H

isolated for the first time from the genus.

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