Prenylated isoflavones from *Deguelia costata*

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Isoflavonoids are secondary metabolites that belong almost exclusively to the Papilionoideae subfamily of Fabaceae. Phytochemical studies of the species from the *Deguelia* genus (Fabaceae) highlighted that the following classes of compounds were mainly produced by this genus isoflavones, 4-hydroxy-3-phenylcoumarins, rotenones, and stilbenes. In this context, two new prenylated isoflavones (1-2 – Figure 1) were isolated from the dichloromethane extract from the heartwood and leaves, respectively, of the *Deguelia costata* (Benth.) A. M. G. Azevedo. The compounds were purified by successive fractionations of the extracts by chromatographic methods (silica gel column and preparative thin layer chromatography). Their structural formulas were elucidated by analysis of the data of IR, UV, HRESIMS, 1D and 2D NMR spectra. The isolation and characterization of these compounds contributed to the chemotaxonomy of the genus *Deguelia*. It is intended to continue the phytochemical study and evaluate the antimicrobial activity of the compounds and fractions obtained.

Figure 1. Chemical structure of new isoflavones (1-2) isolated from *D. costata*.

![Chemical structure of new isoflavones (1-2) isolated from *D. costata*](https://proceedings.science/p/113869)

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