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# PRELIMINARY CHARACTERIZATION OF FLAVONOIDS FROM *OURATEA CASTANEIFOLIA* AND *OURATEA SEMISERRATA*

**Vinícius Costa Cruz**[1*], Nayara Yanne Cardoso Pereira[1], Priscilla Rodrigues Valadares Campana[1], Fernão Castro Braga[1]

vinii.ccruz@gmail.com

*1-Laboratório de Fitoquímica, Departamento de Ciências Farmacêutica, Faculdade de Farmácia, UFMG, Av. Antônio Carlos, 6627, Belo Horizonte, MG, Brazil*

The genus *Ouratea* is characterized by the presence of biflavonoids, which are considered its chemotaxonomic markers. The species *Ouratea castaneifolia* and *Ouratea semiserrata* are native from Brazil and their phytochemical composition have not yet been fully explored. The aim of this study is to perform a putative identification of flavonoids and biflavonoids in the ethanolic extracts from fruits of the specie *O. castaneifolia* and leaves of *O. semiserrata*. Sequential flash fractionation of the extracts was performed on silica gel using n-hexane, dichloromethane, ethyl acetate, and methanol. Subsequently, the ethyl acetate fraction of *O. semiserrata* and methanolic fraction of *O. castaneifolia* were subjected to open column of Sephadex LH-20. Chromatographic analyses were performed by UPLC-DAD-ESI-MS/MS. A C18 column was used, mobile phase: water (A) and acetonitrile (B) acidified with 0.1% formic acid, gradient of 5-95% B, detection in UV (200-500 nm). The ESI-MS analyses were performed in exploratory negative ionization mode (*m/z* 100 to 1500 Da). For ESI-MS/MS, a collision energy ramp from 20 to 70 eV and 5 to 30 eV with a fixed cone voltage of 62 eV and 30 eV were used for biflavonoids and flavonoids, respectively. The methanolic subfraction A of *O. castaneifolia* shown flavonoids identified as quercetin, kaempferol, apigenin and luteolin diglycosides, respectively (*m/z* 609 Da, rutin; *m/z* 593 D; *m/z* 577 and *m/z* 607 Da) and triglycosides of quercetin and kaempferol (*m/z* 755 Da and *m/z* 739 Da). The subfraction B shown biflavonoids as apigenin dimers (*m/z* 537 and monomethoxylated at *m/z* 551 Da). From *O. semiserrata*, a subfraction with two phenolic acids derived from benzoic acid were identified (*m/z* 391 Da, lanceoloside A; *m/z* 419 Da, diestherglycoside) along with fully hidroxilated and monomethoxylated biflavonoids (*m/z* 537 and 551 Da, respectively), as well as apigenin (*m/z* 269 Da). Therefore, these results contribute to expanding the knowledge on the chemical constitution of the *Ouratea* genus, reinforcing the importance of phytochemical prospecting of native plant species, and the importance of biflavonoids as chemical markers of this genus. Future investigations aimed at structural elucidation by NMR and evaluation of biological activity will be conducted. Acknowledgments: FAPEMIG, CNPq and PRPq.

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