10th Brazilian Conference on Natural Products
XXXVI RESEM
4-7 November 2025, Belo Horizonte, MG, Brazil

Section: 02

IDENTIFICATION, QUANTIFICATION OF FLAVONOIDS, AND ANTIOXIDANT ACTIVITY ASSESSMENT OF *Passiflora setacea* D.C (Passifloraceae) LEAVES

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Passifloraceae family stands out for its role in natural product utilization. The wild species *Passiflora setacea* D.C, known as "maracujá-do-sono" has chemical and pharmacological properties which are important to food and pharmaceutical industries. This species presents greater resistance to pathogens compared to commercial counterparts. Although the chemical composition and biological activity of *P. setacea* have been studied, further investigation is still needed. This study aimed to identify and quantify flavonoids in the hydroalcoholic extract of *P. setacea* leaves using thin-layer chromatography (TLC), high-performance liquid chromatography (HPLC), ultra-performance liquid chromatography with diode-array detector and mass spectrometer (UPLC-DAD-MS), and spectrophotometric methods. The antioxidant potential of the extract was evaluated through DPPH free radical scavenging, the β-carotene/linoleic acid lipid peroxidation method, and the liposome peroxidation assay (TBARS). Apigenin 6-C-β-D-glucopyranoside and luteolin 6-C-β-D-glucopyranoside were identified by TLC, HPLC, and UPLC-DAD-MS, while isovitexin-2″-O-xyloside and apigenin 6,8-di-C-β-D-glucopyranoside were detected by UPLC-DAD-MS. The total flavonoid content, expressed as apigenin, was 4.44 ± 0.13 (% w/w). Apigenin 6-C-β-D-glucopyranoside and luteolin 6-C-β-D-glucopyranoside contents were quantified by HPLC, with values of 0.44 ± 0.009 and 0.83 ± 0.087 (% w/w). Antioxidant activity was detected by the β-carotene/linoleic acid method (EC_{50} 61.93 ± 3.07). However, no activity was found in the DPPH and TBARS assays. This phytochemical investigation contributes to understanding the chemical characteristics and biological activity of this understudied species, which has pharmaceutical and agronomic relevance.

Keywords: *Passiflora setacea*, *HPLC, UPLC-DAD-MS, DPPH, TBARS,* β-carotene