10th Brazilian Conference on Natural Products
XXXVI RESEM
4-7 November 2025, Belo Horizonte, MG, Brazil
Section: 03

BIOPROSPECTING PIPER SPECIES FOR ANTIMICROBIAL ACTIVITIES

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A set of crude extracts, fractions and pure compounds from *Piper* species was submitted to antimicrobial assays, aiming at detection of bioactive compounds. Among them, methanolic extracts from roots, leaves, branches and stems of *P. flavoviride* were selected for further chromatographic fractionation, yielding as major compounds 2,2-dimethyl-6-carbomethoxychroman-4-one and methyl taboganate, besides their benzoic acid derivatives, nervogenic acid, 2,2-dimethyl-8-(3-methyl-2-butenyl)-2*H*-chromene-6-carboxylic acid, pinocembrin, tembamide and tembamide acetate. The fraction rich in chromanone presented inhibitory activity against *Staphylococcus aureus* (inhibition zone = 15 mm), *Pseudomonas aeruginosa* (inhibition zone = 9 mm) and *Chromobacterium violaceum* (MIC = 125 µg/mL). The fraction rich in methyl taboganate presented inhibitory activity against *C. violaceum* (MIC = 125 µg/mL). Nervogenic acid (inhibition zone = 11 mm), chromene (inhibition zone = 12 mm) and tembamide acetate (inhibition zone = 13 mm) presented inhibitory activity against *S. aureus*.

Keywords: *Piper sp., Piperaceae, bioprospecting, antimicrobial activity.*