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

Section: 06

# *ISOLATION OF AN INDOLIC ALKALOID AND IRIDOID FROM BRANCHES OF KERIANTHERA PRECLARA*

**Luana da Conceição Moreira**[1,2*], David Ribeiro da Silva[1], Fábio Geraldo de Souza[1], Gabriel Santana Crispim[1,2], Cecilia Veronica Nunez[1,2]

luannamoreira38@gmail.com

*1- Laboratório de Bioprospecção e Biotecnologia – LABB, Coordenação de Tecnologia e Inovação – COTEI, Instituto de Pesquisas da Amazônia – INPA, Av. André Araújo, 2936, Manaus, AM, 69067-375, Brazil. 2- Programa de Pós-Graduação em Biotecnologia – PPGBiotec, Universidade Federal do Amazonas – UFAM, Av. General Rodrigo Octavio Jordão Ramos, 1200, Manaus, AM, 69067-005, Brazil.*

Species of the Rubiaceae family are known for producing pharmacologically relevant alkaloids such as quinine and emetine, as well as other substances such as anthraquinones, saponins, iridoids, and flavonoids. *Kerianthera preclara* J.H.Kirkbr. is a native species from the Amazon region, with records of collections reported only for the state of Amazonas and no previous chemical studies. The objective of this work was to carry out a phytochemical investigation of the *K. preclara* branches methanolic extract, which was analyzed by comparative thin layer chromatography (TLC) and $^{1}$H nuclear magnetic resonance (NMR). This extract, when revealed with Dragendorff's reagent, showed orange spots, indicating the presence of nitrogenous substances. Therefore, it was subjected to liquid-liquid partition and further chromatographic fractionations allowing the isolation the indole alkaloid cinchonamine from the dichloromethane phase and the iridoid kingiside from the ethyl acetate phase. Structural identification was performed by one- and two-dimensional $^{1}$H, $^{13}$C NMR, combined with data from the scientific literature. The $^{1}$H NMR spectrum of cinchonamine showed signals in δ11.16 (1H, *s*, NH), δ 7.48 (1H, *d*, *J* = 7.8 Hz, H-9), δ 7.40 (1H, *d*, *J* = 8.0 Hz, H-12) δ 7.09 (1H, *ddd*, *J* = 8.0; 6.9; 0.9 Hz, H-11), δ 6.98 (1H, *ddd*, *J* = 7.8; 6.9; 0.8, H-10), δ 6.10 (1H, *ddd*, *J*= 17.3; 10.3, 7.5 Hz, H-19), δ 5.13 (1H, *d*, *J* = 10.3 Hz, H-18a), δ 5.22 (1H, *d*, *J* = 17,3 Hz, H-18b), δ 4.51 (1H, *t*, *J* = 9 Hz, H-3), δ 3.50 (1H, *m*, H-5a), δ 3.65 (1H, *m*, H-5b), ), δ 3.13 (1H, *m*, H-21a), δ 3.25 (1H, *m*, H-21b), δ 2.86 (1H, *dd*, *J* = 8.8; 5.7 Hz, H-6a), δ 2.99 (1H, *dt*, *J* = 14.3, 4.7 Hz, H-6b), δ 2.54 (*m*, H-20), δ 2.73 (*m*, H-17), δ 2.14 (*m*, H-14), δ 1.99 (*m*, H-15), δ 1.67 (*m*, H-16a), 2.06 (*m*, H-16b). In the $^{1}$H NMR spectrum of kingiside, a signal was observed in δ 7.50 (1H, *s,* H-3), δ 1.36 (3H, *d, J*= 6.6 Hz, H-10), δ 3.63 (3H, *s*, OMe), δ 5.55 (1H, *d, J*= 5.5, H-l), δ 4.72 (1H, *dq*, *J*= 4.5; 6.4 Hz), an anomeric hydrogen in δ 4.50 (1H, d, *J*= 7.8 Hz, H-1') and several signals compatible with the glucosyl unit in the region δ 2.80-3.20. The results of this research deepen the chemical knowledge about *K. preclara* and reinforce its potential for future chemical and biological investigations. The authors would like to thank CAPES, CNPq, FAPEAM, FINEP and LTQPN-INPA.

***Keywords:*** *Phytochemistry, cinchonamine, kingiside, $^{1}$H-NMR*