The latex of *Jatropha gossypipholia* is effective against clinical isolates of *Pseudomonas aeruginosa*

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In Brazil, *Pseudomonas aeruginosa* is amidst the most frequently isolated pathogen in patients with nosocomial pneumonia, which is the second cause of most urinary infections and surgical wound. The treatment of infections caused by this pathogen is hampered due to resistance to most of the currently available antimicrobial drugs. The search for new active drugs against *P. aeruginosa* is an urgent need, and medicinal plants represent an important source of biologically active compounds. *Jatropha gossypipholia* (popularly known as pião roxo) is a medicinal plant that contains different active compounds, described in the National List of Medicinal Plants of Interest to SUS, used in folk medicine to treat infections and in wound healing. Given the need of new effective antimicrobial compounds and the scarcity of data concerning the antimicrobial potential of this plant, this work aimed to investigate the Minimum Inhibitory Concentration (MIC) of *Jatropha gossypipholia* L. latex on clinical isolates *P. aeruginosa*. The collection of latex samples was carried out by mechanically on the plant tissue after the selection of the specimen and correct botanical identification. The isolates (n = 5) were obtained from tracheal secretions, and had their identity confirmed using the VITEK® system. The MIC was determined using the broth microdilution assay and resazurin staining in independent triplicates. Approximately $1.5 \times 10^8$ CFU (0.5 McFarland scale) of each clinical isolate was exposed to serial dilutions of 1000 to 7, 81 μg/mL of the crude latex. The latex MIC ranged between 15.86 and 500 μg/mL and further studies will be conducted with biomonitored fractionation of the latex in an attempt to isolate an antimicrobial drug prototype.

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