

Antibiosis for Detection of Endophytic Bacteria Isolated from Medicinal Plants of the Amazon

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The Brazilian Amazon has an immeasurable biodiversity that was little studied and explored by the biotechnology, mainly the endophytic microorganisms of medicinal plants. These properties are of interest that are beneficial to plants, humans and the environment, such as for bioremediation of the polluted environments, in the fermentation for production of food and medicine among others. Aiming to search for new natural sources of antibiotics there was the isolation of endophytic bacteria from Amazon corama medicinal plant (*Kalanchoe pinnata* Persoon), family Crassulaceae. Used by the natives in the region to fight the infection and healing of wounds. The plant was collected in Manaus and the healthy tissues of the leaf, root and stem were subjected to surface sterilization with hypochlorite to 4%. After these pieces were inoculated in Petri dishes with ISP2, Oats and BDA plus 50µg/mL of cetoconazol, cultivated in B.O.D at 26°C for 30 days. After 48 hours there was a transfer of the colonies of bacteria to glass with penicillin culture media tilted, then were purified and preserved. Groups of bacteria were isolated from *Pseudomonas*, *Lactobacillus*, *Staphylococcus*, and *Xanthomonas Bulkoderia*. Thirty strains were selected and evaluated for their potential antibiosis against *Staphylococcus aureus*, *Pseudomonas aeruginosa* and *Ralstonia solani* by cocultivos. Four strains showed satisfactory results against *S. aureus* and two for *P. aeruginosa*. These lines will be identified at the species level by sequencing the region of 16S rDNA in UFAM.

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