ANTIBACTERIAL ACTIVITY OF ALCOHOLIC EXTRACT OF THE FRUIT PEEL JAMBOLAN 
(Syzygium cumini (L.) Skeels.)


The antimicrobial activity of medicinal plants has been searched in several species worldwide. The aim of this study was to evaluate the existence of in vitro antibacterial effect of alcoholic extract of the fruit peel jambolan (Syzygium cumini (L.) Skeels.). To this end, were used four bacterial strains standard American Type Culture Collection (ATCC), three Gram-negative bacteria: Salmonella enteritidis (ATCC 13076), Escherichia coli (ATCC 11229) and Enterobacter aerogenes (ATCC 13047) and a Gram-positive Staphylococcus aureus (ATCC 25923). The antibacterial action was evaluated through the inoculation of Mueller Hinton agar plates. The number of bacterial cells was adjusted to 0.5 standard McFarland scale (1.5x10⁸ cells.mL⁻¹). The antimicrobial susceptibility testing (Antibiogram) was performed according to the method of diffusion disc or Kirby-Bauer. Under sterile conditions, were used paper discs 8, being a disk sterile ethanol, 4 commercial antimicrobial discs and 3 discs embedded with 50 µL of the ethanol extracts in concentrations 350 mg.mL⁻¹; 750 mg.mL⁻¹ and 1000 mg.mL⁻¹. The plates were inverted and incubated at 36.5 ºC for 24 hours, and their reading of inhibition halos diameter was done. The discs containing the antibiotic trimethoprim (25µg), oxacillin (1µg), vancomycin (30µg) and ampicillin (10µg) were used against Gram positive bacteria, whereas the Gram negative bacteria tested antibiotic trimethoprim (25µg), amoxicillin (10µg), ciprofloxacin (5µg) and gentamicin (10µg). The experiment was conducted with 3 replicates per treatment and each treatment consisted of a series in triplicate (3 plates). As verified, the ethanol extracts tested showed no antibacterial activity against ATCCs used in this study.