Antibacterial Effects of *Plectranthus amboinicus* (Lour.) Spreng (Lamiaceae) in Methicillin Resistant *Staphylococcus aureus* (MRSA)

Ana P.A.D. GURGEL 1*, Jackeline G. da SILVA 1, Ana R.S. GRANGEIRO 1, Haroudo S. XAVIER 1, Rinalda A.G. OLIVEIRA 3, Maria S.V. PEREIRA 4 & Ivone A. de SOUZA 2

1 Department Pharmacological Science and 4 Department of Antibiotics, Av. Professor Moraes Rego, 1235, Cidade Universitária, Recife, 50740521 Pernambuco, Brazil.
2 Department of Physiology, Pathology and 3 Department of Molecular Biology, Federal University of Paraíba, 58051900, Paraíba, Brazil.

**SUMMARY.** The present study describes some in vitro experiments with hydroalcoholic extract of leaves from *Plectranthus amboinicus* (Lour.) Spreng (Lamiaceae) in several Methicillin resistant *Staphylococcus aureus* (MRSA) strains in the attempt to determine whether the popular use corroborates with pharmacological properties. The antimicrobial activity was determined by the agar diffusion assay method. The evaluation of the minimum inhibitory concentration was determined using the agar dilution method. The time-kill curve was used to determine bactericidal and bacteriostatic effects. In accordance with the results, the hydroalcoholic extracts of leaves of *P. amboinicus* have shown a promising activity in MRSA strains. The minimum inhibitory concentration ranged from 18.7 to 9.3 mg/mL and the time-kill curves suggests a bactericidal and bacteriostatic effects, ranging with the concentration of the extract. These results corroborate with the use of *P. amboinicus* in folk medicine for the treatment of infections caused by *S. aureus*.

**KEY WORDS:** Antibacterial activities, Methicillin-resistant *Staphylococcus aureus* (MRSA), *Plectranthus amboinicus* (Lour.) Spreng.

* Author to whom correspondence should be addressed. E-mail: apavla@yahoo.com.br