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Antimicrobial Activities of Some Coleus Spp

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Coleus spp. is a large and widespread genus with over 150 species. Coleus spp. or locally known as Ati-ati plant is found in several parts of South East Asia including Malaysia. As a member of Mint families, Coleus spp. was believed to have antimicrobial properties. In this study, 3 species of Coleus spp plants [Coleus amboinicus, Coleus blumei (purple leaves hybrid) and Coleus blumei (red leaves hybrid)] were screened for their antimicrobial activities. All samples were freeze-dried, grinded and extracted using 60% methanol. Disc diffusion method was used for assaying the antibacterial properties against five foodborne microbial (Bacillus subtilis, Staphylococcus aureus, Escherichia coli, Pseudomonas aeruginosa and Candida albicans). The results showed that all methanolic extracts (concentration 200µg/disc) inhibited the growth of Staphylococcus aureus . Coleus amboinicus show higher antibacterial activity than the other plants against Bacillus subtilis, Escherichia coli and Pseudomonas aeruginosa. While extracts of all the plants did not show any antibacterial activity against Candida albicans. These results established a good support to the use of Coleus species plant in herbal medicine and to act as a base for the development of natural antimicrobial in food industry.