CHEMICAL DIVERSITY AND BIOLOGICAL ACTIVITIES OF HALOGENATED METABOLITES FROM RED ALGAE GENUS LAURENCEA FROM CARRINGTON REEF.

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This study was carried out on 5 Laurencia species. They are Laurencia snackeyi, Laurencia nangii, Laurencia sp., Laurencia papilose, and Laurencia cribb. Five halogenated secondary metabolites were isolated from L. snackeyi. The halogenated secondary metabolites are (2Z*, 6S*, 9R*)-chamigr-2, 5(14)-dien-8-one (80), Palisadin B (76), 5-acetoxypalisadin B (7), Aplysistatin (6), and 5β-hydroxypalisadin B (81). The halogenated secondary metabolites were then tested against marine environmental bacteria, human pathogenic bacteria and yeast. (2Z*, 6S*, 9R*)-chamigr-2, 5(14)-dien-8-one (80) and Palisadin B (76) did not show any positive activity against all of them. 5-acetoxypalisadin B (7) and Aplysistatin (6) showed positive activity against 5 marine environmental bacteria which were Clostridium cellubiovarum, Clostridium sordelli, Clostridium novyi, Vibrio arginolyticus and Vibrio parahaemolyticus. 5β-hydroxypalisadin B (81) showed positive activity against 2 marine environmental bacteria which were Clostridium sordelli and Vibrio parahaemolyticus, 2 human pathogenic bacteria Vibrio cholera and E. coli, and 2 different strains of Candida albicans yeast.