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Antimicrobial activity and biochemical composition screening of *Hericium coralloides*

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Mushroom has beneficial health effect because of its active biological component. Pharmacological feature of it hasn't been completely determined and many mushroom species antimicrobial potential and biochemical compositions weren't analyzed. *Hericium coralloides* is edible mushroom species collected from Yomra, Trabzon and it was analyzed against 17 bacteria and a fungus. 4.15, 8.30 and 16.61 mg samples were prepared with ethanol extraction process and broad range antimicrobial potential was investigated by disk diffusion method. These microbial strains include Bacillus, Enterobacter, Enterococcus, Escherichia, Klebsiella, Listeria, Pseudomonas, Salmonella, Staphylococcus and Candida genera. Bioactive composition of this sample was also determined by Gas Chromatography-Mass Spectroscopy and National Institute of Standards and Technology (NIST) library was used for mass spectra analysis. The results were presented that *H. coralloides* has antibacterial potential against all of them except *C. albicans*, *S. epidermidis* and *L. innocula*. Several active metabolites were identified, but some composition of this sample is not match with library. Unknown molecule should be analyzed by NMR spectra for 3d structure determination and identification.

Keywords*:* *Hericium coralloides*, mushroom, antimicrobial activity, bioactive composition, disk diffusion method, GC-MS

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