ResearchGate

See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/319099940

Antimicrobial activity screening of Usnea barbata

Conference Paper · July 2017

CITATIONS
0

READS
199

3 authors:

Ali Yetgin
Cukurova University
66 PUBLICATIONS **294** CITATIONS
SEE PROFILE

Kerem Canlı
Dokuz Eylul University
110 PUBLICATIONS **692** CITATIONS
SEE PROFILE

Ergin Murat Altuner
Kastamonu Üniversitesi
152 PUBLICATIONS **1,165** CITATIONS
SEE PROFILE

All content following this page was uploaded by Kerem Canlı on 13 August 2017.

The user has requested enhancement of the downloaded file.

P-76

Antimicrobial activity screening of *Usnea barbata*

Ali YETGİN[1], Kerem CANLI[2], Ergin Murat ALTUNER[3]

[1]Department of Biotechnology, Institute of Engineering and Science, Izmir Institute of Technology, Izmir, Turkey

[2]Department of Biology, Faculty of Science, Dokuz Eylül University, Izmir, Turkey

[3]Department of Biology, Faculty of Science and Arts, Kastamonu University, TR 37150, Kastamonu, Turkey

ali1992yetgin@gmail.com

The novel antimicrobial and aseptic agent should be improved because of antibiotic resistance of several bacteria. Lichen species can be used as traditional healer at many developing countries due to the lack of pharmaceutical drug. Research on lichens and lichen extracts is becoming popular because of their specific biochemical composition. *Usnea barbata* is belonging to Usneaceae family and it is an epiphytic lichen species which grows on branches and trunks of trees. Ethanol extract of this lichen was determined for antimicrobial activity against 17 bacteria and 1 fungi. Twelve of these microorganisms are standard species and they are important for exact determination of human infection disease. These microbial strains include *Bacillus, Enterobacter, Enterococcus, Escherichia, Klebsiella, Listeria, Pseudomonas, Salmonella, Staphylococcus* and *Candida* geniuses. Samples with amounts of 0.22, 0.44 and 1.1 mg were analyzed by using disk diffusion method. It was concluded that *U. barbata* has antibacterial potential against fourteen of the tested strains. Two of them showed high sensitivity (higher than 15 mm); six of them were moderately sensitive (14-10 mm) and six of them were low sensitive (9-7 mm).

Keywords: *Usnea barbata*, lichen, antimicrobial activity, disk diffusion method, ethanol extract

View publication stats