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Antimicrobial activity of *Epimedium* (Berberidaceae) species growing in Turkey



Derya Cicek Polat

Ankara University, Turkey

Co-authors: **S Sibel Gurpinar**, **Müjde Eryilmaz** and **Maksut Coskun**

Ankara University, Turkey

Epimedium L. (Berberidaceae) is a genus of approximately 52 taxa. A large part of this genus is endemic and found in the southwestern part of China. More than 15 species in this genus have a long history of use in traditional Chinese medicine (TCM). *Epimedium* spp. has been used to treat sexual dysfunction, prostermia, hyperdiuresis, osteoporosis, menopause syndrome, rheumatic arthritis, hypertension, and cardiovascular disease. *Epimedium* species are known as “Keşikülahlı” ve “Tekeotu” in Turkey and two species are growing naturally in Turkey [*E. pubigerum* (DC.) Moren and Decaisne, *E. pinnatum* Fischer in DC subsp. *colchicum* (Boiss.) Busch]. The purpose of this study was to investigate the antimicrobial activity of aqueous, ethanolic and methanolic extracts of *Epimedium* species against some bacteria and yeast. Aqueous, ethanolic and methanolic extracts of *Epimedium* species were screened for their potential *in vitro* antibacterial activities against *Staphylococcus aureus* ATCC 25923, *S. aureus* ATCC 43300 (methicillin-resistant *S. aureus*), *Enterococcus faecalis* ATCC 29212, *Bacillus subtilis* ATCC 6633, *Escherichia coli* ATCC 25922, *Pseudomonas aeruginosa* ATCC 27853, *Klebsiella pneumoniae* RSKK 574 and antifungal activities against *Candida albicans* ATCC 10231. Ampicillin, ciprofloxacin and fluconazole were used as control. Experiments were repeated twice. According to obtained results from disc diffusion method, none of the extracts of *Epimedium* species showed antimicrobial activity against Gram negative test bacteria. Especially, methanol extracts have been shown to be effective on other microorganisms.

Biography

Derya Cicek Polat has completed her PhD, in April 2018. She is working as a Research Assistant at Ankara University, Faculty of Pharmacy in the Department of Pharmaceutical Botany.

derya.cicek.polat@ankara.edu.tr

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