



Assessment of Phytochemicals and Antibacterial Activity of *Evolvulus alsinoides*

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Abstract:

Utilization of plant-based medications for treating different diseases and individual health dates to the prehistoric ages. Plants and plant-based medicines are the premises of many advanced pharmaceuticals. In this research, the antibacterial properties of Slender Dwarf Morning – Glory (*Evolvulus alsinoides*) were assessed. 100 blood samples were collected, and *Staphylococcus aureus* was isolated and was confirmed by the biochemical tests. Synthetic antibiotic Vancomycin was applied to check the antibacterial activity through MSSA. Molecular characterization was done by conserved sequences (16S rRNA gene) using *Staphylococcus aureus* subsp. *aureus* integrated plasmid, pUR3912, strain ST398 primer. Antioxidant activity, Biochemical testing, Phytochemical analysis (“X-ray diffraction (XRD)” and “Scanning electron microscopy (SEM)” were used for better understanding and confirmation of phytochemical compounds extracted from *Evolvulus alsinoides*. Results showed that Methanolic plant extract has a clear antibacterial effect against Methicillin sensitive *Staphylococcus aureus*. Antioxidant activity of the methanolic extract was also proved by DPPH antioxidant assay via TLC.

Biography:

Hafiz Zaid Mahmood is a Microbiologist by profession and works with different food industries in Quality Department in Pakistan. He holds a B.Sc.(Hons) in Microbiology and currently pursuing a Master of Science degree in Molecular Biology at the Department of Molecular Biology, Faculty of Science and Technology, Virtual Uni-



versity of Pakistan. Hafiz Zaid has more than 5 years of working experience and leading in QA/QC Department of different Food and Packaging industries. He has also participated and presented his research in an International workshop on “technological, biochemical, microbiological, sensorial and manufacturing aspects of Ground water and Mineral water” at University of Agriculture Faisalabad, 2106. He is Pursuing his career in food industry and is passionate about working in renowned research institutes.

Publication of speakers:

1. Awouafack, M. D., McGaw, L. J., Gottfried, S., Mbouangouere, R., Tane, P., Spitteller, M., & Eloff, J. N. (2013). Antimicrobial activity and cytotoxicity of the ethanol extract, fractions and eight compounds isolated from *Eriosema robustum* (Fabaceae). *BMC Complement Altern Med*, 13(1), 289.
2. B.Saranya, D.Sarathadevi and S.S.N.Somasundaram (2015). Investigation of Antibacterial Activities of *Evolvulus alsinoides* (L.) Against Clinical Pathogens

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