Preface

Pharmacological activities like antimicrobial activity, antifungal activity, antibacterial activity, antioxidant activity and GC-MS analysis of different parts (fruit, flower and roots) of Berberislyceum was studied in this work. The plant, which is studied here, can be seen as a potential source of useful drugs on the basis of our result that we have concluded. This herbal plant Berberislycium have a good antimicrobial nature, which is revealed and supported by many researchers. In this study Berberislycium was also taken with different solvents to assess the level of various enzymatic and non-enzymatic antioxidant properties, antifungal and antibacterial properties. Main focus of this study was to find the antimicrobial activities, antioxidant activity and some of the new components by GC-MS technique. Some selected combination of solvents has shown very good antibiotic, antifungal and antibacterial properties, which is higher than the reference standard antibiotics taken. The extracts of plant parts such as roots, fruits and flowers show remarkable antimicrobial potentials against both types of bacteria. i.e. Gram negative as well as Gram positive bacteria, and fungal strain.

It was observed that mainly the flower extract has shown maximum antibacterial resistance followed by fruit extract and root extract. The result also agrees with the claim according to the author Berberislycium can be used to treat many diseases like diabetes, stomach infection and heart diseases etc. Enterococcus and Pseudomonas aeruginosawas observed to be most sensitive against all the extracts.

Berberislycium fruit, flower and root extracts have strong potential of antioxidant nature, antimicrobial activity i.e antibacterial and antifungal property due to which they can be helpful for suppressing free radicals that are generated in our body due to various activities. Due to its antimicrobial activity the use of antibiotics can be cut down for curing diseases caused due to some fungi and bacteria.

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