PREFACE

The plants which are used for healing purpose or medicinal purpose are herbal plants. Herbal plants have been used virtually in all the ages as a source of medicine. The medicines recovered are known as herbal medicines. The widespread use of herbal remedies and health care preparations, as those described in ancient text such as the vedas and the bible, has been traced to the occurrence of natural products with medicinal properties. The most commonly used herbal medicinal plants are garlic, onion, tulsi, ginger, turmeric, fennel, cloves, mustard, thyme, bay leaves etc. From these plants many medicine and drugs are obtained.

In this study, the pharmacological activities like antioxidant, antifungal and antimicrobial activity of various medicinal plants (Garlic, Onion, Turmeric, Ginger and Lemon) individually and in various combinations. The antibacterial and anti fungal activity of these plants were characterized by bacterial and fungal strains:

Bacterial Strains are Escherichia coli, Klebsiellaspp, Bacillus cereus, Staphylococcus aureus, Micrococcus spp, Salmonella aureus. Whereas, fungal strains are Aspergillusniger, Aspergillusstereus, Aspergillusjapinicus, Penicillumexpansum.

Individually garlic is most potent herbal plant against the selected bacterial strains among the selected plant and Micrococcus spp bacteria are observed to be most sensitive against these selected herbal plant extracts. In double combinations, GT (garlic & turmeric), GG( garlic and Ginger) and GGT(garlic & turmeric) combinations were observed to be very effective against most of the selected gram-positive and gram negative bacteria. They have also shown more potential as compared to standard antibiotic-chloramphenicol. In triple combination, GGT (garlic, ginger & turmeric) has shown best antibacterial potential than any other combination and this is also more than standard compound. Other potent combinations are GOT and GOL. Garlic individually has shown best anti-fungal potential followed by ginger and turmeric. In combinations, GT (garlic & turmeric) combination is having best anti-fungal potential followed by GG( garlic and Ginger). They were found to have more potential as compared to standard antifungal-Ketoconazole. So by this study we get many combinations of herbal plants which show and possess much better anti-microbial, anti-fungal, anti-oxidant and anti-inflammatory properties.

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