SIGNIFICANCE AND FUTURE PERSPECTIVES

Drug resistance in microbes is today emerging as one of the most serious constraints in the application of chemotherapy. Coupled with this is the issue of multi drug resistance and the problem of associated side effects of conventional medicines. With these issues in the background the need of the hour is exploration of alternative therapies which can complement these treatments or help to replace them to some extent. Natural products of plants and animal origin offer good scope for exploration in the respect.

Apitherapy which involves application of honey bee products is emerging as a promising line of treatment in this direction. In the present study therefore various honey bee products were screened for their in vitro activity against a range of organisms and propolis was evaluated in vivo for antimicrobial and antioxidative potential in staphylococci induced systemic infection in mice.

The results obtained are encouraging and validate the use of propolis in particulars as an additive with standard antibiotics for fighting microbial infections. There is need to isolate and identify the specific active ingredients in bee products responsible for ameliorative/protective/ synergistic activity and to establish the mechanism of action. This would be dynamic area of research with good therapeutic potential.