Antibacterial screening of some selected medicinal herbs

A.B. HARKAL, S.K. AFSAR, P.N. CHAVAN AND R.P. MALI

ABSTRACT

Four herbs were screened for potential antibacterial activity. In evaluating antibacterial activity both aqueous and organic solvents were used. The herbs screened were *Acacia arabica*, *Piper betle*, *Datura metel*, and *Tamarindus indicus*. Antibacterial activity was tested against seven strains *B. subtilis*, *A. viridae*, *S. aureus*, *P. putida*, *C. dipheria*, *E. coli*, and *B. megaterium*. Out of the seven organisms tested *, B. megaterium* was found to be susceptible to all the herbs extracts to varying extent. The chloroform extract of *Tamarindus indicus* leaf showed the highest zone of inhibition (19mm) against *B. megaterium* whereas water extract was effective against *S. aureus* (11mm). Out of the four herbs screened, *Acacia arabica* was found to be most effective showing inhibitory activity against *P. putida*, *B. megaterium* and *E. coli* whereas *Datura metel* and *Piper betle* showed activity against *B. megaterium*, respectively. Hence, selected herbs showed antibacterial activity against certain pathogenic microorganisms the leaf extract prepared in various solvents showed varying inhibitory activity and thus have therapeutic value.

Key words: Antibacterial activity, Screening, Medicinal herbs