

Antimicrobial screening of ethnobotanically important stem bark of medicinal plants

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ABSTRACT

Background The stem barks are the rich sources of tannins and other phenolic compounds.

Tannins inhibited the growth of various fungi, yeast, bacteria and virus. Hence, ten

stem barks of ethnomedicinally important plants were screened for antibacterial and

antifungal activities against human pathogenic strains. **Methods** Air-dried and powdered

stem bark of each plant was extracted with 50% aqueous ethanol, lyophilized and the

dried crude extracts were used for the screening against 11 bacteria and 8 fungi.

Antibacterial and antifungal activities were performed according to microdilution

methods by NCCLS. **Results** The plants *Prosopis chilensis*, *Pithecellobium dulce*, *Mangifera*

indica showed significant antibacterial and antifungal activities against *Streptococcus*

pneumonia, *Enterobacter aerogenes*, *Klebsiella pneumonia* and *Candida albicans* with MIC of

0.08mg/ml. *Pithecellobium dulce* bark also showed significant antibacterial activity

against *Bacillus cereus*. **Conclusion** The bark of *Pithecellobium dulce* has more or less

similar activity against the known antibiotic and may be considered as potent

antimicrobial agent for various infectious diseases.

KEYWORDS

Antibacterial . antifungal . bark . ethnobotany . MIC

REFERENCES