

SUMMARY

Three extracts, light pet., diethyl ether and aqueous alcoholic extract were prepared from *Nigella sativa* L., *Peganum harmala* L., *Albinia officinarum* Hance, *Carthamus tinctorius* L. and *Ambrosia maritima* L.. The extracts were examined for their in vitro antibacterial activities against five significant micro-organisms; *E. coli*, *Staph aureus*, *Strept. faecalis*, *Ps. aeruginosa* and *Sal. typhimurium*. the method for preparation of different extract as was follow: the air dried powdered plant material was extracted with ethanol almost till exhaustion, this extract was evaporated to give a total residue; this residue was partitioned between aqueous alcohol (1:1) and light pet.. The light pet. was concentrated to afford total residue, the remaining aqueous ethanolic portion was extracted with diethylether (6 x 200 ml) the diethylether was concentrated to afford total residue, the remaining aqueous ethanolic portion evaporated to give ethanolic extract, filter paper disc prepared, double fold dilution of each extract, filter paper impregnated with this dilutions, complete evaporation of solvent, put filter paper on agar inoculate with tested organism.

It was found that diethyl ether extract of *Nigella sativa* L. and

aqueous alcoholic extract of *Peganum harmala* L. showed good antibacterial activity against all tested micro-organism, whereas light pet. extract of *Alpinia officinarum* Hance was active against staph. aureus only. The extracts of *Ambrosia maritima* L., *Carthamus tinctorius* L. and other extracts of *Nigella sativa* L., *Peganum harmala* L. and *Alpinia officinarum* Hance were not active against any of tested micro-organism.

The diethyl ether extract of *Nigella sativa* L. showed antibacterial synergism with norfloxacin, ampicillin, amikacin, gentamycin and ampicillin. Also aqueous alcoholic extract of *Peganum harmala* L. showed antimicrobial synergism with ampicillin. The diethyl ether extract of *Peganum harmala* L. and light pet. extract of *Alpinia officinarum* Hance showed additive antimicrobial action with norfloxacin, amikacin, cefoperazone, gentamycin, ampicillin and trimethoprim plus sulphamethoxazole

CONCLUSION

The diethyl ether extract of *Nigella sativa* L. and aqueous alcoholic extract of *Peganum harmala* L. showed good antibacterial activity against all tested micro-organism whereas the light pet. extract of *Alpinia officinarum* Hance was active against *Staph. aureus* only. The extract of *Ambrosia maritima* L., *Carthamus tinctorius* L. were not active against any of the tested micro-organisms.

The dethyl ether extract of *Nigella sativa* L. showed antibacterial synergism with norfloxacin, amikacin, gentamicin and ampicillin. Also aqueous alcoholic extract of *Peganum harmala* L. showed antimicrobial synergism with ampicillin. light Pet. extract of *Alpinia officinarum* Hance showed additive antimicrobial action with all tested antibiotic drugs.