

Evaluation of anti-microbial activity in picrorhiza kurroa plant extract using thin-layer chromatography and FTIR

Firdous, J. , Bharathi, Muhamad, N., Zaini, F.

Abstract

Medicinal plants are the alternative remedy for antibiotics in treating human diseases for centuries because they contain numerous active constituents of therapeutic importance. The medicinal value of plant extracts is due to their target sites other than those used by antibiotics will be active against drug-resistant microbial pathogens. In the present study, the antimicrobial activity of Picrorhiza kurroa extract was analysed and evaluated using thin layer chromatography and fourier transform infra-red spectroscopy. The phytochemical screening of the plant extract in previous studies done by us showed the presence of alkaloids, tannins, steroids, flavonoids, saponins, tannins and phenolics. The presence of various bioactive compounds justifies the use of the plant for various ailments by traditional practitioners. As a result, Picrorhiza kurroa extract possesses antimicrobial activity as the zone of inhibition was observed for both gram positive as well as gram negative bacterial strains. The organic compounds responsible for such activity was also evaluated using TLC and FTIR. © 2016, International Journal of Pharmacy and Technology. All rights reserved.