

ABSTRACT

The present study aimed to study the phytochemical properties of a hepatoprotective herbal formulation by employing some *in-vitro* contemporary methods. The antioxidant components were initially extracted from the plant in methanol and water. The radical scavenging activity or antioxidant activity of these extracts were assessed by following contemporary methods, including 2,2'-azinobis(3-ethylbenzothiazoline-6-sulphonic acid) (ABTS) radical cation assay, 2,2'-diphenyl-1-picrylhydrazil (DPPH) assay, the ferric reducing antioxidant power (FRAP), total phenolic contents (TPC), super oxide anion scavenging activity, total Flavanoids contents (TFC), metal chelating activity and total antioxidant activity by phosphomolybdate assay. The Phytochemical constituents of herbal formulation were identified by 'Phytochemical screening tests'. Such Phytochemical screening revealed that the herbal formulation is naturally enriched with Flavanoids, Terpenoids, Tannins, Saponins, phenolics and Alkaloids. The comparison of methanolic and water extract revealed that methanolic extract possess more antioxidant potential than the water extract. The methanolic extract showed more antimicrobial activity than the water extract.

Key words: Herbal formulation, ABTS, DPPH, FRAP, EC50, Phytochemical screening