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***Fagonia cretica* L.: Antioxidant potential, protective effects on H₂O₂-induced DNA damage and identification of polyphenols by RP-HPLC analysis**

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Fagonia cretica L. is a popular folk medicine and it is used with honey in rural areas of Pakistan for its thirst quenching and blood purifying properties. The present study was designed to determine antioxidant potential and polyphenolic compounds of *F. cretica*. Total phenolic and flavonoid contents of *F. cretica* were estimated and protective effects of plant extracts on H₂O₂-induced DNA damage was determined. Ethyl acetate extract of *F. cretica* (FCE) contained highest amount of phenolics and flavonoids and its antioxidant and protective activities in all tested antioxidant systems were higher than the other extracts. All extracts of *F. cretica* showed significant protection in H₂O₂-induced DNA damage assay. The RP-HPLC analyses provided first ever report regarding the presence of important natural antioxidant compounds such as gallic acid, chlorogenic acid, rutin, quercitrin and kaempferol in FCE. These results indicate that *F. cretica* extracts possess potent antioxidant activities tested in this study and could be used as a potential therapeutic agent in the treatment of diseases involving oxidative stresses.

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