

Abstract

Olea Ferruginea is a medicinally very important plant because it exhibit potent anti-oxidant activities along with various other activities. Keeping in view the potential applications of this plant, leaves of Olea ferruginea plant were shade dried and oil was extracted by means of steam distillation. The metabolic profiling of this extract was performed using GC-MS analysis. In order to determine the compounds present in the leaves of Olea ferruginea plant, another experiment was conducted in which various fractions of ethanol and water were made using crushed powder of plant leaves. After passing these fractions from various techniques like sonication, rotary evaporation and freeze drying, precipitates were obtained in different yield and their % yield extraction was determined. Next, the anti-oxidant activity of these fractions was performed by ABTS and DPPH assay using UV-Visible spectrophotometer. The TEAC value and %age radical activity of both these assays was determined. The results of metabolic profiling indicated that leaves of Olea ferruginea plant consists of several biologically important compounds belonging to various classes like alkenes, alcohols, carboxylic acids, aromatics, polyphenols, amines and ketones. Most of these compounds exhibited significant anti-oxidant activity.