

Phytochemical Study: Antioxidant Activity of *Euphorbia resinifera* L.

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Several studies have been done in the past for the prevention and cure of cancer. Algeria, a country known for its biodiversity, has a particularly rich and varied flora. For this purpose, it constitutes in our opinion, a considerable source of search for bioactives natural substances. This work aims at valorization of a medicinal herb, of *Euphorbia resinifera*, for its anti-cancer activity. It belongs to the family of Euphorbiaceae, and is particularly found in northern Sahara region. The traditional pharmacopoeia reveals that this species is equipped with several therapeutic virtues like anti-cancer.

With an aim of developing this plant, a phytochemical study and

antioxidant evaluation was carried out. The phytochemical study indicates the presence of the flavonoides, alkaloids and saponins. Other parts in the selective extraction protocols enabled us to recover acceptable quantities of these families, which are analyzed by thin layer chromatography. The antioxidant evaluation of the gross methanolic extract of more separated families was carried out by two different methods, namely bioautographique HPTLC and spectrophotometric quantification. Both techniques confirmed the antioxidant power by color stains yellow and purple TLC plates, sprayed with DPPH and sulfuric acid, respectively. These confirm the antioxidant effect of the extracts studied by calculation of the CI50, and measurement of the kinetic parameters, such as the reaction time of trapping of free radicals DPPH of our extracts with various concentrations.

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