

Nanotechnology has become mainstream in recent year. The word “nano” means very small structure (1–100 nm), Nanoemulsion it is a drug delivery system consisting of emulsified oil and water, it is a stable system (creaming, flocculation, and aggregation do not occur), it can deliver both hydrophilic and lipophilic drugs and administrated by various routes (such as orally, topically, and parenterally). Antioxidants are biological active agents that can prevent or slow the damage of cells caused by unstable free radicals molecules that the body produces as a reaction to environmental and other pressures. In this work we tried to change and modify the oil system of some plants and test it biologically as antioxidant agents.The antioxidant activity of the the modified oil was evaluated using the free radical-scavenging assay. DPPH (1,1-diphenyl-2-picrylhydrazyl) was used to measure the scavenging activity of the oil. Serial dilutions of oil and trolox (as a standard reference compound) were prepared at a concentration of 1mg/10 mL, from which serial dilutions were carried out (1, 2, 3, 5, 7, 10, 20, 50, 80 and 100 $\mu\text{g}/\text{mL}$). The antioxidant activity for our formulation of oil with IC50 9 $\mu\text{g}/\text{ml}$ was close to the positive control trolox with IC50 2 $\mu\text{g}/\text{ml}$.