

ABSTRACT

The presence of an array of secondary metabolites in the leaf - surface exudates has elicited phytochemical screening. The constituent compounds, supposedly, serve a protective role on the plant lipids against autoxidation occasioned by UV radiation. Some flavonoids, Polsen 1, Polsen 3 and Polsen 5, isolated from the leaf - surface exudate of *Polygonum senegalense* were investigated for antioxidant effect on edible oils, heated to about 200 °C. Polsen 1 enhanced the induction period and thus could be used as an animal feed additive for the purpose of retarding oxidative destruction of the naturally occurring carotenes and vitamin E in animal feeds. One compound (Polsen 5) showed a cytotoxic effect against a mammalian cell - line, Chinese Hamster Ovarian (CHO), using the 3 - (4,5 - dimethylthiazol - 2-yl) - 2,5 - diphenyltetrazoliumbromide