Antitumour and Antioxidant Activity of Some Red Sea Seaweeds in Ehrlich Ascites Carcinoma *in vivo*

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The antitumour activities of extracts from the Red Sea seaweeds *Jania rubens*, *Sargassum subrepandum*, and *Ulva lactuca* were investigated in an *in vivo* mice model based on intramuscular injection of Ehrlich ascites tumour cells. In parallel, antioxidant activities were measured. Tumour marker levels, liver biochemical parameters, and hepatic oxidant/antioxidant status were measured to prove the anticancer and antioxidant nature of the algal extracts. Significant decreases in carcinoembryonic antigen (CEA) and Ǔ-fetoprotein (AFP) levels, activities of liver enzymes, levels of nitric oxide (NO) and malondialdehyde (MDA), and an increase in total antioxidant capacity (TAC) were recorded in groups treated with the algal extracts. *Jania rubens* was selected for phytochemical screening of its phytoconstituents. In addition, carotenoids, halides, minerals, lipoidal matters, proteins, and carbohydrates were studied. Furthermore, 7-oxo-cholest-5(6)-en-3-ol (**1**) and cholesterol (**2**) were isolated from the dichloromethane fraction.

Key words: Seaweeds, Antitumour, Phytoconstituents