



The protective role of quince leaf extract against the adverse impacts of ultraviolet-A radiation on some tissues of *Clarias gariepinus* (Burchell, 1822)

A.H. Sayed a, Hanem S. Abdel-Tawab a, Sara S. Abdel Hakeem a, Imam A. Mekkawy

Abstract:

In the present study the protective role of quince leaf extract against the adverse impacts of ultraviolet radiation-A (UVA) on some tissues of *Clarias gariepinus* (Burchell, 1822) was considered. Fishes were classified into four groups: control, UVR-treated group (for 3 days/for 3 h/day), UVR-treated group (for 3 days/for 3 h/day) with adding 10 ml of quince extract, and UVR-treated group (for 3 days/for 3 h/day) with adding 20 ml of quince leaf extract. Blood smears and sections of the liver, and skin were processed routinely for H & E paraffin embedding technique. Some UVA-induced malformations were recorded in the red blood cells including crenated cells (Cr), Acanthocytes (Ac), tear drop-like cells (Tr) and sickle cells (Sk). Also, UVA-induced disorganization of the normal architecture of hepatic tissues with lipidosis was evident. Hypertrophy and vacuolated club cells were recorded in skin exposed to UVA. In conclusion, quince leaf extract has a valuable antioxidant protective role to prevent and/or repair the histopathological changes induced by UVA.

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