

Antihemolytic, Antithrombotic effects of five flavonoids compounds isolated from Jordanian *Varthemia iphionoids*.

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The aim of this study is to evaluate in-vitro, the biological activities of some flavonoids isolated from *Varthemia iphionoids* (Asteraceae family) aqueous methanol extract. The plant is a perennial herb, common in mountainous places in many parts of Jordan. The plant is described in Jordanian folk medicine for the treatment of kidney and gastro-intestinal disorders. *V. iphionoids* aqueous methanolic extract afforded sixteen known compounds (three monoterpenoids, twelve flavonoids and one sterol). The antioxidant activities of five identified flavonoids: kumatakillin (VA1), Penduletin (VA2), Jeceidine (VA3), 6-methoxisokaemfride (VA4) and quercetin 3,3'-Di-O-methyl ether (VA5) were determined. The results indicated that in anti-hemolytic assay, the five compounds gave a TH50 higher than standard and the best result was shown with VA2 (TH50 = 60.14 ± 0.72). Moreover, the evaluation of anticoagulant and thrombolytic potential showed that all the compounds had significantly prolonged the clotting time and exhibited an important thrombolytic activity especially the compounds VA1, VA2 and VA3 compared to the control (***) p <0.001).

Keywords: *Varthemia iphionoids*, Flavonoids, NMR, Antihemolytic, Anticoagulant.