

7KH SRWHQWLDQ DQWLFHQFHU HIIHFVV RI WUDGLWLRQDO PHGL

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Introduction : Traditional herbs and spices are widely consumed in the world and contains numerous bioactive components that are beneficial to consumer health. Documents have endorsed that a diet enriched with fruit, vegetables and spices can reduce the risk of developing major cancers. **Purpose:** This study aimed to evaluate the growth inhibitory activities of four medicinal herbs including saffron, ginger, cinnamon and curcumin on oral squamous cell carcinoma (OSCC) cell line (KB).

Materials and Method: Having obtained the aqueous extracts of the four herbs, they were administered on KB *per se* and in dual, triple, and quadruple combinations. Their cytotoxic effects were measured in different concentrations after 24 and 48 hours using MTT assay.

Results: The minimum and maximum concentrations of extracts were respectively 108 and 217 mg/ml for curcumin with IC₃₀ of 77 mg/ml, 108 and 270 mg/ml for ginger with IC₃₀ of 58 mg/ml, 2 and 10 mg/ml for saffron with IC₃₀ of 1.9 mg/ml, and 5 and 40 mg/ml (100% cytotoxicity) for cinnamon with IC₃₀ of 3.3 mg/ml.

Agriculture & Horticulture

