

The natural Factors and their suitability for Sugarcane *Saccharum officinarum* L. cultivation in
Diyala Governorate .

Dr. Nadir Flayh Ali Almubarak
Collage of Agriculture - University of Diyala

ABSTRACT

Study of the natural factors namely, Geographic site, climatic factors, irrigation resources and soil characteristics were investigated in Diyala Governorate. The aim of study was to Know the capability and suitability of Sugarcane *Saccharum officinarum* L. cultivation and its economic industrialization in Diyala Governorate. The following results showed : 1. As the governorate is situated between latitudes $33^{\circ} 11$ and $35^{\circ} 28$ north of equator , so that it is considered as part of sugarcane productive region . 2. Middling of mean temperature during the first months of the crop growth (tillering stage). Then, gradually increases during months which are coincident with the great vegetative growth stage. Followed, by gradual decrease of temperature during both early and late maturity stages are considered of significant positive effect on the crop growth and maturity. 3. Coincident of lightly duration length with the increase of temperature during Sugar cane growth stage is considered of magnificent favorable condition for the crop growth and maturity. 4. Total mean yearly rainfall in the governorate is about 169.4 mm. This indicates that Sugarcane cultivation is impossible without using other irrigation resources.

Key Words: Sugarcane, Climate factors, Irrigation resources, Soil, Diyala Governorate .