BIOCHEMICAL STUDIES ON POTATO TUBERS

BY
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A thesis submitted in Partial fulfilment
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MASTER OF SCIENCE

IN

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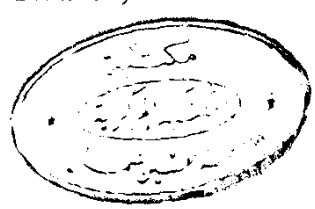

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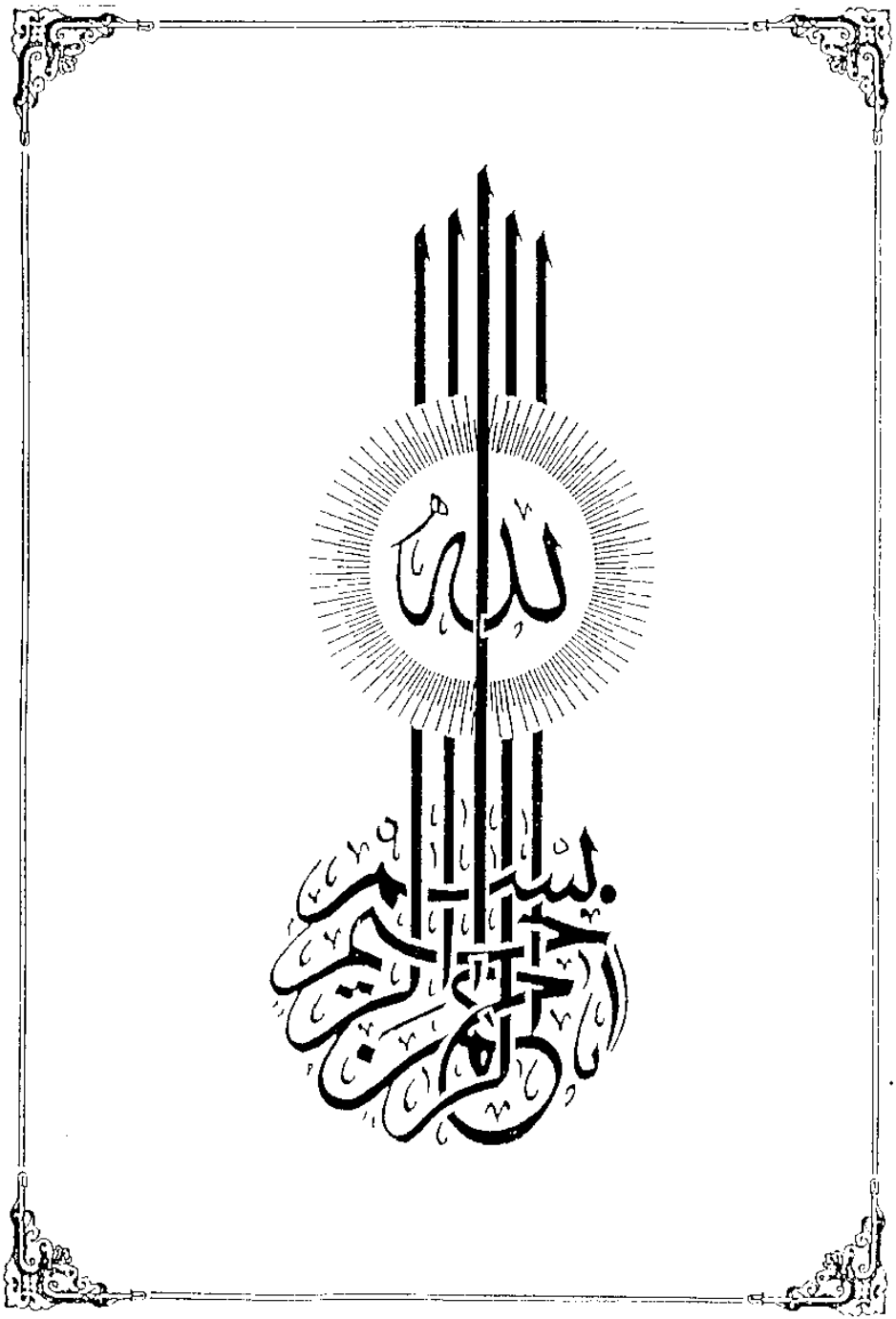

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ABSTRACT

Tubers of potatoes CV. alpha were treated with IAA at two concentrations (10^{-7},10^{-2}M), Ethrel (Ethephon) at two concentrations (1000,2000ppm), and with 24% (v/v) MeOH and distilled water as controls, All treated tubers stored at 4°C and room temperature for 24 weeks. The samples taked for determination every eight weeks for studing the effect of hormonal treatments on each of sprouting, Moisture, Dry Matter, Carbohydrate Fractions, Amylases activities, Phenolic compounds, Glycoalkaloids, and Crude Lipids. The storage temperatures shown a greet effect on the sprouting process and the chemical contents which determined. There were a relationship between sprouting percentage and water loss, there were a relationship between sprouting and solanine content, the starch decreased gradually during storage, Also the sugar and phenolic compounds increased at the end of storage period.

Key Words: Storage, Growth regulators, Sprouting, Potato tubers, Chemical composition

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