DEDICATION

To

Those who lightened my life

and my way by their candles

Father

Mother

Husband

Brothers, sisters and

Friends

Hagir

ACKNOWLEDGEMENT

I praise almighty Allah, who gave me the health and strength to complete this work after a lot of efforts and constraints that faced me.

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ABSTRACT

To produce high quality of raw sugar it is necessary to achieve good clarification using suitable chemicals at optimum dosage.

The goal of this research was to quality control of raw sugar and determine the optimum dose to have the best result for raw sugar. All experiments were conducted in Kenana Sugar Company Laboratories. It is concluded that : with increase in phosphate content there was a decrease in pH which resulted in inversion of sucrose and formation of reducing sugars.

The presence of reducing sugars foster colour intensity in raw sugar. Increase in colour of raw sugar that means decrease in quality.

Also increase in ash content, moisture and turbidity lead to decrease of quality. In order to increase in purity and pol lead to high quality in raw sugar.

ملخص الدراسة

للحصول على سكر خام ذو جودة عالية لا بد من تنقية جيدة بإستخدام المواد المناسبة بالكميات المثلى.

أجري هذا البحث لضبط جودة السكر الخام ولتحديد الجرعات المثلى التي يمكن إضافتها للحصول على أفضل النتائج للسكر الخام.

تمت كل التجارب بمعامل شركة سكر كنانة. من التجارب تبين انه مع زيادة الفوسفات ينتج نقصان في الرقم الهيدروجيني مما يتسبب في تحلل السكروز وتكوين السكريات المختزلة مما يساعد في زيادة لون السكر الخام.

زيادة لون السكر الخام تعني نقصان الجودة أيضاً زيادة الرماد والرطوبة والعكورة تؤدي إلى نقصان الجودة بينما الزيادة في النقاوة والبول يؤدي للحصول على جودة عالية.

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UNDERSTANDING AND CONTROLLING RAW SUGAR QUALITY PARAMETERS OF KENANA SUGAR FACTORY

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