





**MINIMALLY PROCESS OF HYBRID SWEET CORN (BIG FRUIT, 926)  
BY USING DIFFERENT TEMPERATURE HOT WATER TREATMENT**

**By  
Azirah binti Akbar Ali**

**Research Report submitted in partial fulfillment of  
The requirements for the degree of  
Bachelor of Science in Agrotechnology (Post Harvest Technology)**

**DEPARTMENT OF AGROTECHNOLOGY  
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## ENDORSEMENT

The project report entitled **Minimally Process Of Hybrid Sweet Corn (Big Fruit, 926) By Using Different Temperature Hot Water Treatment** by **Azirah binti Akbar Ali** Matric Number **UK14902** has been reviewed and corrections have been made according to the recommendations by examiners. This project is submitted to the Department of Agrotechnology in partial fulfillment of the requirement of degree of Science in Agrotechnology (Post Harvest Technology) Faculty of Agrotechnology and Food Science, Universiti Malaysia Terengganu.



(SITI NORDAHLIAWATE BT MOHD SIDIQUE)

### MAIN SUPERVISOR

SITI NORDAHLIAWATE MOHAMED SIDIQUE

*Lecturer*  
Department of Agrotechnology  
Faculty of Agrotechnology and Food Science  
Universiti Malaysia Terengganu  
21030 Mengabang Telipot

DATE: 22/4 /2010



(ROSHITA BT IBRAHIM)

### CO-SUPERVISOR

ROSHITA IBRAHIM

*Pensyarah*  
Jabatan Agroteknologi  
Fakulti Agroteknologi dan Sains Makanan  
Universiti Malaysia Terengganu

DATE: 22/4 /2010

## **DECLARATION**

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged

**Signature** :  
**Name** : Azirah Binti Akbar Ali  
**Matric No** : UK14902  
**Date** : 4 April 2010

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## ABSTRACT

Sweet corn known as maize and its binomial name *Zea Mays*. This study was conducted to determine the effect of different storage temperature on the shelf-life of minimally process of sweet corn. The hybrid sweet corn (Big Fruit, 926) were obtained from Jabatan Pertanian Kuala Berang, Terengganu. Sweet corns are divided into 4 treatments; T1: control, T2: 30°C, T3: 40°C and T4: 50°C. All the treatments were stored in temperature  $5 \pm 1^\circ\text{C}$ . The analyses involved physical analysis including texture, weight loss and color changes while chemical analyses are Total Soluble Solid (TSS) and Titratable acidity (TA). The statistical analyses were done by using SPSS version 16. There was no significantly different ( $P>0.05$ ) for all treatments in texture (firmness), color changes, Total Soluble Solid (TSS), Titratable Acidity (TA) but there was significantly different ( $P<0.05$ ) for weight loss. This is a new report on minimally processed of hybrid sweet corn for variety Big Fruit (926).

## ABSTRAK

Jagung manis dikenali dengan nama saintifiknya *Zea Mays*. Kajian ini dilakukan untuk melihat kesan jagung manis yang disimpan pada suhu  $5\pm 1^{\circ}\text{C}$  setelah melalui rawatan air panas. Jagung Manis hibrid (Big fruit, 926) diperolehi dari Jabatan Pertanian Kuala Berang, Terengganu. Sebanyak empat rawatan dibuat iaitu T1: kawalan, T2:  $30^{\circ}\text{C}$ , T3:  $40^{\circ}\text{C}$  dan T4:  $50^{\circ}\text{C}$ . Analisis yang dilakukan adalah analisis fizikal iaitu pengujian tekstur, analisis kehilangan berat, dan perubahan warn. Bagi analisis kimia pula merangkumi perubahan jumlah pepejal terlarut dan perubahan asid tertitrat jagung. Akhir sekali data-data dianalisis menggunakan SPSS edisi 16. Semua jagung tidak menunjukkan perubahan ketara ( $P>0.05$ ) tetapi terdapat perubahan yang ketara ( $P<0.05$ ) pada kehilangan berat buah. Ini merupakan kajian terkini berkenaan proses minimal bagi Jagung manis variety 'Big Fruit' (926)