LIST OF NOTATIONS

FFA	free fatty acids
SE	standard error
R2	coefficient of determination
RBO	rice bran oil
OBs	oil bodies
RB	refined-bleached
BHA	Butylated hydroxyl anisole
BHT	Butylated hydroxyl toluene
TBA	Thiobarbituric acid
CD	conjugated diene
PV	peroxide value
TBARS	Thiobarbituric acid reactive substances
TPC	total phenolic contents
PP	Pomegranate peels
MBE	mean bias error
x^2	chi –square
RMSE	root mean square error
r	correlation coefficient

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5-SUMMARY AND CONCLUSION

A study was conducted at the Rice Mechanization Center,Agric.Eng. Institute, Kefir EL-Sheikh Governorate. carried out to test and evaluate the effect of accelerated drying of canola on seeds moisture content, and stabilization of the extracted oil using a conduction heating rotary dryer. the drying temperature was set at approximately(85,95,105,115,125,135, and 145^0c) and the drying time was set at (3,6,9,12,15, and18 min) and the moisture content of canola seeds was (21%-27%-31%)

The Measurements:

bulk temperature of the heat-treated canola seeds.

1. Moisture content of canola seeds.
2. Free fatty acids (FFA%)in the extracted canola oil.
3. percntage of oil content(hexane extract).

Accelerated Drying of canola seeds:

1. seeds bulk temperature increase of exposure time ,longer exposure time gave a chance for canola seeds to gain heat until approaching a level close to that of heating surface temperature.
2. Rapid moisture removal from seeds obvious in all experiments particularly at higher heating surface temperature and longer exposure duration .Meanwhile, all the drying process occurred at the falling rate period.
3. The values of the drying constant (k_s)were varied with the drying temperature in which it was increased with the increase of drying temperature .
4. the reduction rate of seeds moisture content was dependent on drying temperature and decayed exponentially with the increase of the drying time .Also ,the simple drying equation could

satisfactorily describe drying behavior of canola seeds during the accelerated drying process.

5. The free fatty acids of the control sample (sun dried seeds to a moisture content of about 6.85 (w.b) approached a level of 17.76% while it was ranged from1.75% to3.61% for the heat treated samples.

THE CONCLUSION:

From the obtauied data ,it can be concuded that the accelerated drying and heat stabilization of canola seeds using the conduction heating rotary dryer may be considered as an effective procedure for moisture reduction ,and oil stabilization.

The heating surface temperature of 115^{o} C and the exposure time of 18 minute decreased the moisture content of canola seeds to the safe level of 5.9% w.b., and percentage of free fatty acid 1.75.