



International Publications Awards  
Cairo University



الاسم : أ.د. / جمال محمد كامل محيسن

القسم : الانتاج الحيواني

كلية الزراعة

### **In Vitro and in Vivo Viability of Vitrified and Nonvitrified Embryos Derived from Egg and FSH Treatment in Rabbit Does**

Gamal Mohamed Kamel Mehaisen\*,\*\*\* Mari'a Pilar Viudes-de-Castro\*\*,  
Jose' Salvador Vicente\*, Raquel Lavara\*

ISSN : 0093-691X

Impact Factor: 2.161

Journal: THERIOGENOLOGY 65 1279-1291 (2006)

#### **Abstract**

This study aimed to evaluate the in vitro and in vivo viability of vitrified and non-vitrified embryos derived from eCG and FSH treatments in rabbit does. Ninety-six nulliparous does were randomly subjected to consecutive superovulation treatments with eCG (20 IU/kg body weight intramuscularly) i.m., eCG group), FSH (3 x 0.6 mg/doe at 24 h intervals i.m., FSH group), or without super-ovulation treatment (control group). Does were artificially inseminated 3 days later and ovulation was induced immediately by hCG (75 IU/doe intravenous). Seven experimental groups were differentiated: first FSH and eCG treatment, second FSH and eCG treatment, eCG-interchanged group (does with previous FSH treatment), FSH-interchanged group (does with previous eCG treatments) and control group. Embryos were collected in vivo by laparoscopy 76–80 h post-insemination in the first and second recovery cycles and post mortem in the third recovery cycles. The ovulation rate was significantly higher in does treated with the first-FSH than in those treated with eCG or in control does (  $25.2 \pm 2.0$  versus  $19.2 \pm 1.4$  to  $11.0 \pm 1.05$  and  $12.2 \pm 1.2$ . first-FSH, first-eCG to second-eCG and control groups, respectively,  $P < 0.05$ ). Significant differences were observed in the total recovery.

#### **Keywords**



International Publications Awards  
Cairo University



الاسم : أ.م / رضوان صدقى فراج

القسم : الكيمياء الحيوية الزراعية

كلية الزراعة

### **Influence of Crude Olive Leaf Juice on Rat Liver and Kidney Functions**

Radwan S. Farag, \* Ebtessam A. Mahmoud, \* Amany M. Basuny\*\* & Rehab F. M. Ali\*

ISSN : 0950-5423

Impact Factor: 0.719

**Journal: International Journal of Food Science and  
Technology 41 790-798 (2006)**

#### **Abstract**

Crude juice of olive leaves (Kronakii cultivar) was obtained by hydraulic press. The level of polyphenolic compounds in the juice was 215 ppm. An aliquots of the concentrated olive leaf juice, represent 600, 1200 and 2400 ppm as polyphenols and butylated hydroxy toluene (BHT; 200 ppm) were administered to rats daily for 6 weeks by stomach tube. The liver (aspartate aminotransferase, alanine aminotransferase and alkaline phosphatase activities) and kidney (bilirubin, uric acid, creatinine and urea) function tests and serum contents (total lipids, total cholesterol and low and high-density lipoproteins) were measured to assess the safety limits of the polyphenolic compounds in the olive leaf juice. The data of the aforementioned measurements indicated that the administration of olive leaf juice did not cause any changes in liver and kidney functions. On the contrary, BHT at 200 ppm induced significant increases in the enzyme activities and the serum levels of total lipids, uric acid, urea and creatinine. Microscopical examinations of kidney and liver tissues of rats administered with the phenolic compounds of olive leaf juice had the histological character as that of control rats whilst, the administration of BHT at 200 ppm altered the features of rat liver tissues and severely damaged the rat kidney tissues.

#### **Keywords**

Histopathological examination; Polyphenols; Rats.



International Publications Awards  
Cairo University



الاسم : أ.د. / رضوان صدقى فراج

القسم : الكيمياء الحيوية الزراعية

كلية الزراعة

### Improving The Quality of Fried Oils By Using Different Filter Aids

Radwan S Farag \* and Ayman M El-Anany\*\*

ISSN : 0022-5142

Impact Factor: 0.996

Journal: Journal of the Science of Food and Agriculture 86  
2228-2240 (2006)

#### Abstract

The present study aimed to improve the quality of fried soybean, sunflower, pahn and cottonseed oils. Synthetk (Magnesol XL) and natural (diatomaceous earth and kaolin) filter aids were used at various levels (1, 2 and 4%) to adsorb the secondary oxidation products of the oil. The metal patterns (the cations Si, Mg, Ca, Fe, Na, K, Al, Cu, MD, Zn and the anions CO)<sub>z</sub>- , HCO)<sub>-</sub> , CI- , NO)<sub>-</sub> , NO<sub>z</sub> - , S04Z-) of Magnesol XL, diatomaceous earth and kaolin were determined. Some physical and chemical properties (refractive index, viscosity, colour, foam height, acid value, peroxide value, thiobarbituric acid value, iodine value, and conjugated diene and polymer contents) of non-fried, fried and fried-treated soybean, sunflower, pahn and cottonseed oils were determined.

The frying process. was performed at 180°C :I: 5°C for 12 h continuous heating. The fried oils were treated with the synthetic and natural filter aids at 105°C for 15 min. The results indicate that Magnesol XL, diatomaceous earth and kaolin contained Si + Mg, Si + Ca and Si + Al, respectively, as the basic metals. Frying soybean, sunflower, pahn and cottonseed oils led to significant increases in refractive index, colour, foam height, viscosity, acid value, peroxide value, TBA value, conjugated diene and polymer contents and decrease in iodine value. Treatment of fried oils with Magnesol XL, diatomaceous earth and kaolin at the 1,2 and 40/0 levels greatly improved the quality offried oils. These findings indicate the high efficiency of the filter aids used in the present study in adsorbing the products of oil degradation.



**International Publications Awards  
Cairo University**



---

**Keywords**

Synthetic and natural filter aids; Fried oils; Physico-chemical Constants; Metals.



International Publications Awards  
Cairo University



الاسم : أ.د. / هانى عبد العزيز الشيمى

القسم : الكيمياء الحيوية الزراعية

كلية الزراعة

### **Molecular Control of Gene Co-Suppression In Transgenic Soybean Via Particle Bombardment**

Hany A. El-Shemy\*\*, Mutasim M Khalafalla \*\*\*, Kounosuke Fujita\*\*\*\* and Masao Ishimoto \*\*\*\*\*

ISSN : 1225-8687

Impact Factor: 1.548

**Journal: Journal of Biochemistry and Molecular Biology 39 61-67 (2006)**

#### **Abstract**

Molecular co-suppression phenomena are important to consider in transgene experiments. Embryogenic cells were obtained from immaque cotyledons and engineered with two different gene constructs (pHV and pHVS) through particle bombardment. Both constructs contain a gene conferring resistance to hygromycin (hpt) as a selective marker and a modified glycinin (11S globulin) gene (V3-1) as a target. sGFP(S65T) as a reporter gene was, however, inserted into the flanking region of the V3-1 gene (pHVS). Fluorescence microscopic screening after the selection of hygromycin, identified clearly the expression of sGFP(S65T) in the transformed soybean embryos bombarded with the pHVS construct. Stable integration of the transgenes was confirmed by polymerase chain reaction (PCR) and Southern blot analysis. Seeds of transgenic plants obtained from the pHV construct frequently lacked an accumulation of endogenous glycinin, which is encoded by homologous genes to the target gene V3-1. Most of the transgenic plants expressing sGFP(S65T) showed highly accumulation of glycinin. The expression of sGFP(S65T) and V3-1 inherits into the next generations. sGFP(S65T) as a reporter gene may be useful to increase the transformation efficiency of transgenic soybean with avoiding gene co-suppression.



**International Publications Awards  
Cairo University**



---

**Keywords**

Gene co-suppression; Green fluorescence protein; Particle bombardment ; Transgenic soybean.