

/ /
/ /

()

;

✻

:

2

• •

 $(\quad)$

()

2

()

•

()

$$P < \frac{1}{2}$$

2

$$P < 1$$

•

•

• •

mt_mazlouni@yahoo.com :

.

 $\vdots$

.

2

.

.

•

•

1

•

•

1

%

1

.()

%

•

—

)

- °C / mmHg - °C

() (

Vaco 5 Zirbus (P< /)

M246

Soofer Co

Herious .()

± ° C

/ - inch Hg

/ / mmHg - °C (° C ° C °C)

/ - °C)

/ % - (

() - °C

Merck

.()

E.Coli

() -

()

()

()

()

() -

()

)

() (

()

(-)

SPSS

(P< /)

(P< /)

					(n=)			
(mm) (n=)	(mm) (n=)	(mm) (n=)	(mm) (n=)	(g/kg) (n=)				
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /

/ ± /	/ ±	/ ± /	/ ± /

/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /
/ ±	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /

%		%		%	
()		()		()	
/ ± / ^a		/ ± / ^b		/ ± / ^{a*}	
/ ± / ^a		/ ± / ^b		/ ± / ^{ab}	
/ ± / ^a		/ ± / ^b		/ ± / ^a	
/ ± / ^a		/ ± / ^b		/ ± / ^a	
/ ± / ^a		/ ± / ^a		/ ± / ^b	
.(P< /) *					

HPLC

mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
/ ± / ^e	/ ± / ^d	/ ± / ^c	/ ± / ^b	/ ± / ^{a*}	
.(P< /) *					

(HPLC)

.(P< /)

.(P< /)

.(P< /)

$$.(P < /)$$

.(P<0.05)

*

(cfu/g)		(cfu/g)	(cfu/g)
±	±	x ± x	x ± x

C1			C2			C3		
(cfu/g)			(cfu/g)			(cfu/g)		
±			±			±		
±		±	±			x	±	x
		±					±	
							±	
±	x	x	±	x		x	±	x

.()

Basker

2

$$(\quad / \quad)$$

.()

/

.()

.()

$$. (P < /)$$

Tsimidou Orfanou .

.()

.()

HPLC

Alonso

Basker .(P< /)

•C

.()

.(P< /)

(P< /)

()

()

(× cfu/g)

Raina .

()

.()

(cfu/g)

.(P< /)

(× cfu/g)

.(P< /)

Raina .

.()

REFERENCES

1. Lozano P, Castellar MR. Quantitative high performance liquid chromatographic method to analyse of commercial saffron (*Crocus sativus* L.) products. *J Chromatography* 1999; 830:477-82.
6. Winterhalter P and Straubinger M. Saffron – Renewed interest in an ancient spice. *Food Rev Int* 2000; 16(1); 35-59.
8. Carmona M, Pardo JM. Influence of different drying and aging on saffron constituents. *J Agric Food Chem* 2005; 53: 3974-9.
9. Negbi M. Saffron (*Crocus sativus* L). Netherland: Harwood Academic Publishers. 1999. PP: 81-92.
11. Raina BL, Agarwal SG, Bhatia AK, Gaur GS. Changes in pigments and volatiles of saffron (*Crocus sativus* L.) during processing and storage. *J Sci. Food Agric* 1996; 71: 27-32.
12. Basker D, Palevitch D, Putievsky E. Saffron the costiest spice: drying and quality and price. *Acta Horticulture* 1993; 344: 86-97.
13. Sama JK, Raina BL, Bhatia AK. Design and development of saffron (*Crocus sativus* L.) processing equipment. *J Food Sci Technology* 2000; 37(4): 357-62.

20. Sujata V, Ravishankar GA, Venkataraman LV. Methods for the analysis of the saffron metabolites crocin, crocetins, picrocrocin and safranal for the determination of the quality of spice using thin-layer chromatography, high performance liquid chromatography and gas chromatography. *J Chromatography* 1992; 624: 497-502.
21. ISO 8587. Sensory analysis - Methodology - Ranking. International Organization for Standardization. 1st ed. Geneva. 1998.
28. Alonso GL, Varon R. Auto - Oxidation of crocin and picrocrocin in saffron under different storage conditions. *Boll Chim Farmaceutico* 1993; 132: 116-20.
29. Orfanou O, Tsimidou M. Evaluation of the colouring strength of saffron spice by UV- Vis spectrometry. *Food Chem* 1996; 57(3): 463-9.
30. Alonso GL, Salinas MR. Safranal content in Spanish saffron. *Food Sci Tech Int* 2001; 7(3): 225-9.

.

.