

AGRICULTURAL UNIVERSITY OF ATHENS



SCHOOL OF FOOD, BIOTECHNOLOGY AND DEVELOPMENT
DEPARTMENT OF FOOD SCIENCE AND HUMAN NUTRITION
LABORATORY OF CHEMISTRY

Tel.: +30 210 529 4262

Fax: +30 210 529 4265

e-mail: ptara@aua.gr

KROKOS KOZANIS CROP EXTRA 2017

Sample number: 11

Comments

Athens: October 26th, 2018

Chemical requirements for Saffron in filaments and results

STANDARDS ISO 3632-1:2011			RESULTS
Characteristic	Saffron in filaments	Test method	GREEK RED SAFFRON
Moisture and volatile matter at 103°C, % (m/m), max.	12	ISO 3632-2:2010, Clause 7	9.8
Total ash, % (m/m), on dry basis, max.	8	ISO 928 and ISO 3632-2:2010, Clause 12	6.1
Acid-insoluble ash, % (m/m), on dry basis, max.	1.0	ISO 930 and ISO 3632-2:2010, Clause 13	1.0
Soluble extract in cold water, % (m/m), on dry basis, max.	65	ISO 941 and ISO 3632-2:2010, Clause 11	62
Flavour strength, $E_{1cm}^{1\%}$ 257 nm, on dry basis, min. Category I Category II Category III (at this wavelength it has a maximum absorbance of picrocrocin)	70 55 40	ISO 3632-2:2010, Clause 14	97.8
Aroma strength, $E_{1cm}^{1\%}$ 330 nm, on dry basis All categories min. max. (at this wavelength it has a maximum absorbance of safranal)	20 50	ISO 3632-2:2010, Clause 14	43.7
Colouring strength, $E_{1cm}^{1\%}$ 440 nm, on dry basis, min. Category I Category II Category III (at this wavelength it has a maximum absorbance of crocin)	200 170 120	ISO 3632-2:2010, Clause 14	245.9

The analyst

Dr. Charalabos Kanakis
Laboratory Research Analyst

Supervisor

Petros A. Tarantilis, Professor

Head of Department
of Food Science & Human Nutrition