



Bozhko Nataliia  
November 21<sup>st</sup> 2018

**PROFICIENCY TESTING PT.UA.1.5.2017**  
**OILSEEDS (QUALITY)**  
**PROFICIENCY TESTING PROGRAMME – ROUND 5(ENG)**

Kyiv-2018

## 1. INTRODUCTION

Given the key role of reliable test results that are needed during world trade and agriculture in general, requirements for the competence of laboratories that perform such tests should be confirmed.

The purpose of proficiency testing in oilseeds testing is to determine the characteristics of the operation (as described in ISO\IEC 17043 [1-2]) and improve the reliability of test results.

This proficiency testing involves the use of inter-laboratory comparisons to confirm the performance of individual laboratories' abilities and/or identify areas of improvement.

The functioning management system Metrology service Ltd. (further - Provider) complies with ISO\IEC 17043:2010[1-2] requirements and covers all aspects of proficiency testing(further - PT) for all proficiency tests

## 2. DESCRIPTION

### 2.1. PARTICIPATION

2.1.1. Minimum methods for participation. Any organization, providing testing by at least one of methods in clause 2.2 may participate in this voluntary Program.

2.1.2. Participant may provide results for all the methods according to clause 2.2.

2.1.3. Metrology service Ltd. assigns a unique identification number to each participant that is confidential and reported only to this participant.

2.1.4. Participation fee for participants from Ukraine is 4 200.00 UAH without paying VAT. Participation fee for participants from outside of Ukraine is 180.00 USD.

### 2.2. METHODS

Participants can provide test results for the following methods:

	Parameter	Method	Note
1.	Moisture and volatile matter content, %	ISO 665:2000/ ДСТУ ISO 665:2008	
2.	Total impurities content, %	ISO 658:2002/ ДСТУ ISO 658:2006	
3.	Oil content, %	ISO 659:2009/ ДСТУ ISO 659:2007	Expressed as a percentage by mass of the product as received
4.	Acidity of oil (as oleic acid), %	ISO 660:2009/ ДСТУ ISO 660:2009	
5.	Acidity of oil (as oleic acid), %	ISO 729:1998/ ДСТУ ISO 729:2005	
6.	Glucosinolates content, $\mu\text{mol/g}$	ISO 9167-1:1992/ ДСТУ ISO 9167-1:2007	
	Gas chromatography of fatty acid methyl esters		Extraction of oil according ISO 659:2009
7.	Erucic acid C22:1n9, %	ISO 12966-4:2015	
8.	Moisture, %	ДСТУ 4811:2007	
9.	Foreign impurities, %	ДСТУ 4966:2008/ ГОСТ 10854-88	

	Parameter	Method	Note
10.	Oleaginous impurities, %	ДСТУ 4966:2008/ ГОСТ 10854-88	
11.	Oil content, %	ДСТУ 7577-2014	Expressed on dry matter, in seeds, cleaned according of ГОСТ 10854-88
12.	Acid value, mg KOH	ГОСТ 10858-77	
13.	Moisture, %	Express	Infrared spectroscopy method
14.	Oil content, %	Express	Infrared spectroscopy method
15.	Glucosinolates content, $\mu\text{mol/g}$	Express	Infrared spectroscopy method

## 2.3. SAMPLES

Metrology service Ltd. is using a validated procedure and appropriate technical experts and contractors for the selection, production, homogenization and division designs that is satisfactory for the purposes of this program. Tests, that are required to prove homogeneity and stability of samples are performed by competent contractors according to [3-7].

Metrology service Ltd .will send appropriately identified and packaged sample together with task sheet form for testing and reporting results via courier delivery service of Nova Poshta LLC or other delivery service chosen by participant.

**Rapeseed is used as a sample in round 5 in an amount of approximately 1 kg for each participant.**

## 2.4. SCHEME AND SCHEDULE

2.4.1. This proficiency testing program is a simultaneous participation schemes according to A.3 of appendix A ISO\IEC 17043[1]. Selected samples, prepared according to clause 2.3, from a source of material being distributed simultaneously to participants for concurrent testing. After completion of the testing, the results are returned to Metrology service Ltd. Task sheet form for testing and reporting results is distributed with the sample according to clause 2.3. Metrology use statistical methods to analyze results and provide report according to clause.2.5.

2.4.2. Round 1 schedule.

Participants registration	<b>till 13-00 EET 10.05.2019</b>
Sample shipment	<b>13.05.2019</b>
Reporting results for participants	<b>till 13-00 EET 27.05.2019</b>
Report publication	<b>till 08.06.2019</b>

## 2.5. REPORT AND PROCESSING RESULTS

2.5.1. Metrology service Ltd. processes and analyses results according to [1-6].

2.5.2. Metrology service Ltd. publishes the Proficiency testing report according to [1,2].

2.5.3. Proficiency testing report will be published in two languages – English and Ukrainian. Basic (reference) language is English.

2.5.4. For quantitative methods Provider will express Participant's results as traditional z-scores.

### 3. PARTICIPANT INFORMATION

Participants must provide the following information by **e-mail in any form**:

1. Full name (English and/or Ukrainian), Bank details, address, registration number, detail of person, who will sign a contract;
2. Full name and address of laboratory (testing facility) if it is not equal to clause 1;
3. Address of shipment of samples or Nova Poshta LLC department number (with the choice of shipment type);
4. Participant contact person full name;
5. Contact telephone number (e.g. mobile) and e-mail address of the participant contact person.

### 4. PROVIDER CONTACTS AND PROGRAM MANAGER

Metrology service Ltd., Ukraine, 03022, Kyiv, 45 Vasilkivska st., office 403.

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### 5. NORMATIVE REFERENCE

1. ISO/IEC 17043:2010 Conformity assessment -- General requirements for proficiency testing
2. ДСТУ EN ISO/IEC 17043:2017 Оцінка відповідності. Загальні вимоги до перевірки кваліфікації лабораторій
3. ISO 13528:2015 Statistical methods for use in proficiency testing by interlaboratory comparisons
4. FOOD ANALYSIS PERFORMANCE ASSESSMENT SCHEME (FAPAS). Protocol for the organization and analysis of data, sixth edition, 2002
5. Fearn, T. and Thompson, M, A new test for 'sufficient homogeneity', Analyst, 2001, 126, 1414-1417
6. ISO Guide 35:2017 Reference materials -- General and statistical principles for certification
7. ILAC Discussion Paper on Homogeneity and Stability Testing, April 2008.