



5006
Перевірка
професійного рівня

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PROFICIENCY TESTING PT.UA.1.2.2016
MAIZE ANALYSIS (QUALITY)
PROFICIENCY TESTING PROGRAMME
– ROUND 11

Kyiv-2026

1. INTRODUCTION

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

The purpose of proficiency testing in corn seeds testing is to demonstrate the laboratory's competence (as described in ISO/IEC 17043:2023[1]) 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.

This proficiency testing scheme is registered in the EPTIS database.

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

Provider is accredited by NAAU in accordance with the requirements of ДСТУ EN ISO/IEC 17043:2017. The list of parameters is specified in the scope of accreditation, which can be found on the website <https://www.metrologyservice.com.ua/> or obtained upon request from the Provider.

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 8 500.00 UAH without VAT. Participation fee for participants from outside of Ukraine is 225.00 USD.

2.1.5. We are expecting from 15 to 40 Participants.

2.1.6. Each participant has a unique identification number what are assigned according to Application form for every round every Programme. This identification number is confidential and can be published only by the permission of the Participant. The Participant should write this unique identification number at Task sheet form for testing and reporting results for identification. If Provider is suspecting collusion or falsification, it applies own procedure for the work with unsatisfied results.

2.2. METHODS

Participants can provide test results for the following Parameters/methods:

	Parameter	Method
	Sample A (2kg)	
1	Broken grains, %	EN 16378:2013/ДСТУ EN 16378:2022
2	Grain impurities, %	EN 16378:2013/ДСТУ EN 16378:2022
3	Miscellaneous impurities, %	EN 16378:2013/ДСТУ EN 16378:2022
4	Broken grains, %	ISO 19942:2018/Amd 1:2020
5	Damaged grains, %	ISO 19942:2018/Amd 1:2020
6	Other grains, %	ISO 19942:2018/Amd 1:2020

7	Miscellaneous impurities, %	ISO 19942:2018/Amd 1:2020
8	Bulk density, kg/hl (use of Nilema litre apparatus)	ДCTY EN ISO 7971-3:2022 (EN ISO 7971-3:2019, IDT; ISO 7971-3:2019, IDT)
9	Test weight, g/l (use of Schopper litre apparatus (manual mass per hectolitre measuring instrument))	ДCTY EN ISO 7971-3:2022 (EN ISO 7971-3:2019, IDT; ISO 7971-3:2019, IDT)
10	Foreign impurities, %	ДCTY 4525:2006
11	Grain impurities, %	ДCTY 4525:2006
Sample B (0,6kg)		
12	Moisture content, %	ISO 6540:2021/ ДCTY EN ISO 6540:2022 (EN ISO 6540:2021, IDT; ISO 6540:2021, IDT)
13	Moisture content, %	ISO 12099:2017
14	Crude protein content, % (Expressed on dry matter, factor for converting nitrogen content to protein content - 6.25.)	ISO 20483:2013/ДCTY ISO 20483:2016/ДCTY EN ISO 20483:2022 (EN ISO 20483:2013, IDT; ISO 20483:2013, IDT)
15	Crude protein content, % (Expressed on dry matter, factor for converting nitrogen content to protein content - 6.25.)	ISO 16634-2:2016
16	Crude protein content, % (Expressed on dry matter, factor for converting nitrogen content to protein content - 6.25.)	ISO 12099:2017
17	Ash yield, % (Expressed on dry matter)	ISO 2171:2023/ДCTY EN ISO 2171:2022 (EN ISO 2171:2010, IDT; ISO 2171:2007, IDT)
18	Fat content, % (Expressed as a mass fraction of the product as received)	ISO 6492:1999/ ДCTY ISO 6492:2003
19	Fat content, % (Expressed as a mass fraction of the product as received)	ISO 11085:2015
20	Fat content, % (Expressed as a mass fraction of the product as received)	ISO 12099:2017
21	Crude fibre content, % (Expressed as a mass fraction of the product as received)	ISO 6865:2000/ДCTY EN ISO 6865:2022
22	Crude fibre content, % (Expressed as a mass fraction of the product as received)	ISO 12099:2017
23	Starch content, %	ISO 6493:2000
24	Starch content, %	ISO 12099:2017
25	Volatile nitrogenous basis, %	GAFTA 7.0:2018
26	Moisture content, %	ДCTY 4117:2007
27	Mass fraction of crude protein, % (Expressed on dry matter, factor for converting nitrogen content to protein content - 6.0.)	ДCTY 7169:2010
28	Mass fraction of crude fibre, % (Expressed on dry matter)	ДCTY 8844:2019
29	Mass fraction of amylose content, % (Expressed on dry matter,)*	ISO 6647-1:2020/ ДCTY EN ISO 6647-1:2022 (EN ISO 6647-1:2020, IDT; ISO 6647-1:2020, IDT)

*will be included in the study if there are at least 5 participants participate.

The Information for methods of preparation of samples and way of testing Participant should use from methods according to clause 2.2.

2.3. SAMPLES

2.3.1. Metrology service Ltd. is using contractors for the selection, production, homogenization and division designs that are satisfactory for the purposes of this programme. The names and addresses of contractors can be given by request after publishing the final report.

Provider uses methods according to clause 2.2. for validation of homogeneity and stability. The quantity of methods can be decreased according to the decision of Provider's technical experts.

Tests, that are required to prove homogeneity and stability of samples are performed by competent contractors according to [2-6]. Provider uses a validated procedure of management

system Metrology service Ltd for the samples' selection, production, division, checking of the quality and storage.

Requirements for the manufacture, quality control, storage and distribution of samples are determined by the relevant procedures of management system Metrology service Ltd. Metrology service Ltd uses the procedure Пp.ПІК02-2017 for the manufacture, homogenization and separation of samples.

2.3.2. 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. Shipping expenses outside of Ukraine are not included in the price of participation.

Maize (*Zéa máys*) (Sample A in an amount of 2kg and Sample B in an amount of 0.6kg) is used as a sample in round 11 for each participant.

2.4. SCHEME AND SCHEDULE

2.4.1. This proficiency testing program is a simultaneous participation schemes according to A.2 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. Participant should use only this form for reporting.

Metrology Service Ltd use statistical methods to analyze results and provide report according to clause. 2.5.

2.4.2. Round 11 schedule.

Participants registration	till 13-00 EET 08.01.2027
Sample shipment	18.01.2027
Reporting results for participants	till 13-00 EET 12.02.2027
Report publication	26.02.2027

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].

2.5.3. Provider 'll express Participant's results for quantitative methods as traditional z-scores.

2.5.4. The assigned value for each analyte was calculated as the robust mean of the trial data using Huber H15 method or Algorithm A variation, Annex C.3

2.5.5. Proficiency testing report will be published in two languages – English and Ukrainian. Basic (reference) language is English. Both version of the report 'll be published at internet <http://www.metrologyservice.com.ua>

3. PARTICIPANT INFORMATION

Participants must provide e-mail request for participation (Annex 1 to the Program) in accordance with the schedule Round (p.2.4.2.).

4. PROVIDER CONTACTS AND PROGRAM MANAGER

Metrology service Ltd., Ukraine, 03022, Kyiv, 18 Yulia Zdanovska st., office 704.

e-mail: pt.smetrology@gmail.com

Nataliia Bozhko

phone: +38(099)305-79-78

5. NORMATIVE REFERENCE

1. ISO/IEC 17043:2023 Conformity assessment – General requirements for the competence of proficiency testing providers.
2. Analytical Methods Committee, Robust Statistics – How not to reject outliers Part 1. Basic Concepts, Analyst, 1989, 114, 1693-1697.
3. Fearn, T. and Thompson, M, A new test for ‘sufficient homogeneity’, Analyst, 2001, 126, 1414-1417.
4. ISO 13528:2022 Statistical methods for use in proficiency testing by interlaboratory comparison.
5. ISO 33405:2024 Reference materials — Approaches for characterization and assessment of homogeneity and stability.
6. ILAC Discussion Paper on Homogeneity and Stability Testing, April 2008.

Addition 1. Application form:

Назва програми ПК, номер раунду: <i>PT Program Name, number of raund:</i>	PT.UA.1.2.2016 MAIZE ANALYSIS (QUALITY) – ROUND 11
Дата подачі заявки: <i>Date of applying:</i>	
Повна назва лабораторії (українською або англійською мовою): <i>The full name of the laboratory (original language or in english):</i>	
Адреса доставки зразка або номер відділення ТОВ «Нова пошта»: <i>Address of samples delivery:</i> <i>(вказати, отримувач юридична чи фізична особа, місто, номер відділення чи адресу доставки, контактні дані отримувача (ПП, телефон, ЄДРПОУ):</i>	
ПІБ відповідальної особи від Учасника і телефон (при можливості мобільний): <i>Name of the responsible person from the Participant and telephone number (if possible, mobile):</i>	
Електронна адреса відповідальної особи від Учасника: <i>Contact email address of the responsible person from the Participant:</i>	
* Адреса доставки сертифіката: <i>Certificate delivery address:</i> номер відділення ТОВ «Нова пошта»: <i>(вказати, отримувач юридична чи фізична особа, місто, номер відділення чи адресу доставки, контактні дані отримувача (ПП, телефон, ЄДРПОУ)), для доставки Укрпоштою вказати індекс і адресу:</i>	
Для договору вказати: Повна назва юридичної особи: <i>Information for a contract: Full legal entity name:</i>	
Юридична адреса: <i>Full legal address:</i>	
Банківські реквізити, <u>ЄДРПОУ</u>, <u>ПН</u>: <i>Company bank's detail(account, tax code, etc):</i>	
ПП, посада особи, що підписує Договір і на підставі чого: <i>Name of the person signing the Contract:</i>	

* All fields are required