

# ILPS & ELMA: Harmonization of Lecithin Analytical Methods | Project #Pt02

Even though there are official methods for lecithin analyses, the laboratory results of the various laboratories are often quite different.

In order to harmonize the Lecithin Analytical Methods, this project was initiated.

## **Name of the project:**

ILPS & ELMA: Harmonization of Lecithin Analytical Methods  
Round Robin test on Lecithins (ILPS-ELMA)

**Status:** ongoing

Stage 1 was initiated in 2020.

Stage 2 was initiated in August 2021.

## **Synopsis**

### **Stage 2**

Second Round Robin test (stage 2) was initiated in August 2021.

Stage 2 was to verify if the new harmonized ILPS Official Method showed consistent results for each method.

Only laboratories, which were recommended by ILPS and ELMA Members, participated in this stage, next to the five laboratories, which participated as well in stage 1.

List of country distribution (participating laboratories, stage 2)

Brazil 2, France 2, Germany 4, Hungary 1, India 7, Italy 1, the Netherlands 5, Romania 1, Russia 1, Spain 1, UK 1, Ukraine 1 (Total 27).

In contrast to Stage 1 were liquid soya, sunflower and rapeseed lecithin samples were analysed in Stage 2 only different samples of liquid sunflower lecithins have been selected, homogenized, filled and sealed by one of the working group members at its facility (per sample 2 containers of approx. 500 g each, in total 6 containers of three different batches). They have been sent in August 2021 to the (27) participating laboratories together with the harmonized ILPS methods (***Annex A \*1***).

The participating laboratories were requested to proceed as follows:

- 1) The laboratories should perform the analyses using the corresponding ILPS Official Methods only;
- 2) From each Sample (A, B and C), a double analysis for each method should be done;
- 3) Each participating laboratory should report the results as well as, comments and suggestions;
- 4) All documentation involving the laboratory work should be sent as raw data.

The data received was evaluated and discussed within the appointed working group. A summary of the work, as well as all data, was gathered in a power point presentation. This power point presentation was presented on the ILPS Annual General Board & Membership Meeting, held on November 29th, 2021 and was sent as pdf document to all ILPS members (**Power Point Presentation Y1 \*2**).

Another neutralized version was created and sent as pdf document to all participating laboratories (**Power Point Presentation Y2 \*3**).

All comments received from the participating laboratories were compiled anonymously in one document and, classified into general comments across all methods and specific comments on each method (**Annex B \*5**).

Between December 2021 and June 2022, the appointed working group continued to discuss the outcome of Stage 2, as the results have not shown less variation in the analytical results by using the harmonized ILPS methods.

An additional specialist for laboratory data analytics from an ILPS/ELMA member participated in order to contribute with its knowledge and point of view, regarding the interpretation of the results and recommendations for the "ILPS methods" of Stage 2. The conclusion of the working group was that the data were insufficient and not suitable for statistical conclusion based on ISO standards or other calculation models.

Also further harmonization of the results will be only possible by the use of same equipment and by further minimizing the freedom in analysis. Unfortunately, the ILPS, as an external organization, won't be able to define requirements for specific equipment and control internal and external laboratories in such a way as an individual company can do. The working group decided to present the outcome of the project at the ELMA General Meeting, held on April 26<sup>th</sup>, 2022, in order to gather feedbacks, comments and suggestions, within ELMA (**Power Point Presentation Y3 \*4**).

**Annex Notes:**

**\*1) Annex A** are available upon request to ILPS members, ELMA members and Project #1 (Stage 1 & 2) participating laboratories.

**\*2) Power Point Presentation Y1** is available upon request only to ILPS members and ELMA members.

**\*3) Power Point Presentation Y2** is available upon request to ILPS members, ELMA members and Project #1 (Stage 1 & 2) participating laboratories.

**\*4) Power Point Presentation Y3** is available upon request to ILPS members and ELMA members.

**\*5) Annex B** is available upon request to ILPS members, ELMA members and Project #1 (Stage 1 & 2) participating laboratories.

For any information regarding the annexes listed in this document, please contact ILPS Executive Director, Rute Azevedo (azevedo@ilps.org).