In accordance with the Laws of the Republic of Belarus “On Quality and Safety of Alimentary Raw Materials and Food Products for Human Life and Health” and “On Protection of Consumer Rights”, a customer (buyer, purchaser) shall have a right to credible information on food products, including on the content of GMOs or their components in them. Normative legal acts that determine the labelling rules for products, containing genetically modified components, and that implement the above-mentioned right to the GMO-related information shall serve this objective. The GMO label “Contains GMOs” is mandatory in the Republic of Belarus. The label “Contains No GMOs” is non-mandatory. The basis for a mark sign “Contains GMOs” or “No GMO-contained” is the documents that include laboratory research results in qualitative and quantitative examination of food products on the GMO purity. The examination should be carried out in the accredited, in accordance with the Accreditation System of the Republic of Belarus, Laboratories for GMO Detection (LDGMOs). Accreditation of laboratories is conducted according to the State Standards, the main one of which is ISO / IEC STB 17025. As of January 2018, 17 laboratories located in different regions of the Republic of Belarus were accredited to the right to carry out testing of alimentary raw materials and food products with a view of genetically modified components’ detection. LDGMOs are in departmental subordination to the National Academy of Sciences of Belarus, the Ministry of Health, the Ministry of Agriculture and Food, the University (table 1).

There is a list of agricultural crop and products mandatory for screening on a regular basis with a view of genetically modified components’ identification in them (the Resolution of the Ministry of Health of the Republic of Belarus and the Committee for Standardization, Metrology and Certification approved by the Council of Ministers of the Republic of Belarus on June 8, 2005 No. 12/26 "On Approval of a List of the Production Raw Material and Food Products Subject to Control over the Presence of Genetically Modified Components). A list of products, subject to mandatory control, contains 25 names of soya and corn products.

**Table 1 - Laboratories for GMO Detection (LDGMOs) accredited in Belarus that exercise control over the content of GM-ingredients (GMIs) in food raw material, food products, feeds, feed additives and seeds**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name**  **of the Test Laboratory** | | **Name**  **of the enterprise (organization)** | | **Name of the Certificate of Accreditation; registration date** | | **Product description** |
| ***National Academy of Sciences of Belarus*** | | | | | | |
| 1. National Coordination Biosafety Centre | | State Scientific Institution “The Institute of Genetics and Cytology”, NAS of Belarus” | | ВY/112 02.1.0.1599  of December 7, 2009 | | Alimentary raw materials, food and agricultural products; feeds and seed material |
| 2. Laboratory for Testing and Research of Products and Raw Materials | | The Scientific and Practical Center for Foodstuffs | | ВY/112 02.1.0.0038  of November 25, 1994 | | Alimentary raw materials, food products, animal feeds |
| ***The State Committee for Standardization*** | | | | | | |
| 3. Test Department of  Food and Agricultural Products | | The Belarusian State Institute of Metrology | | ВY/112 02.1.0.0008  of March 15, 1994 | | Alimentary raw materials and food products; feeds |
| 4. Test Laboratory for Food Products and Alimentary Raw Materials | | The Republican Unitary Enterprise “Brest Center for Standardization, Metrology and Certification” | | ВY/112 02.1.0.1230 of December 5, 1996 | |
| 5. Test Laboratory | | The Republican Unitary Enterprise “Vitebsk Center for Standardization, Metrology and Certification” | | ВY/112 02.1.0.1226 of August 14, 1996 | |
| 6. Test Department of  Food and Agricultural Products | | The Republican Unitary Enterprise “Gomel Center for Standardization, Metrology and Certification” | | ВY/112 02.1.0.1228  of December 14, 1996 | |
| 7. Test Department | | The Republican Unitary Enterprise “Grodno Center for Standardization, Metrology and Certification” | | ВY/112 02.1.0.1235 of February 17, 1998 | |
| ***Ministry of Health of the Republic of Belarus*** | | | | | | |
| 8. Research and Methodological test Department | | State Institution “The Republican Scientific and Practical Center for Hygiene” | | ВY/112 02.1.0.0341  of January 19, 1999 | | Alimentary raw materials and food products |
| 9. Laboratory Service | | State Institution “The Republican Center for Hygiene, Epidemiology and Public Health” | | ВY/112 02.1.0.1222  of January 22, 1996 | |
| 10. Laboratory Service | | State Institution “Minsk City Center for Hygiene and Epidemiology” | | ВY/112 02.1.0.0484  of March 31, 2006 | |
| 11. Laboratory Department | | State Institution “Brest Regional Center for Hygiene, Epidemiology and Public Health” | | ВY/112 02.1.0.0040  of November 14, 1994 | | Alimentary raw materials and food products |
| 12. Laboratory and Hygiene Department | | State Institution “Gomel Regional Centre for Hygiene, Epidemiology and Public Health” | | ВY/112 02.1.0.1301  of November 10, 1997 | |
| 13. Laboratory Department | | State Institution “Grodno Regional Centre for Hygiene, Epidemiology and Public Health” | | ВY/112 02.1.0.0033  of November 14, 1994 | |
| 14. Laboratory Service | | Health Care Institution “Mogilev Regional Centre for Hygiene, Epidemiology and Public Health” | | ВY/112 02.1.0.0014  of June 15, 1994 | |
| ***Ministry of Agriculture and Food*** | | | | | | |
| 15. State Institution “Central Scientific Research Laboratory for Grain Products” | State Institution “Central Scientific Research Laboratory for Grain Products” | | ВY/112 02.1.0.0080  of July 10, 1995 | | Alimentary raw materials and food products, animal feeds | |
| 16. State Institution “Belarusian State Veterinary Centre” | State Institution “Belarusian State Veterinary Centre” | | ВY/112 02.1.0.0358  of August 2, 1999 | | Alimentary and feed raw materials, feeds, food products | |
| ***University*** | | | | | | |
| 17. Scientific research Laboratory of «DNA technologies» | Grodno State Agrarian University | | ВY/112. 2.4786  of April 22, 2016 | | Alimentary and feed raw materials | |

Labelling applies to food products subject to control in accordance with the legislation on control over the presence of genetically modified components, developed by genetic engineering methods from genetically modified organisms. At the same time, due to the updating requirements on labeling of products containing LMO (increase of threshold from 0% to 0, 9%) and due to the lack of the developed screening schemas for approved and unapproved LMOs specialists from the Republic of Belarus have strong need in retraining and counseling in new methods and methodology for LMO detection and identification, need in development of reliable and inexpensive screening schemas for registered in the Republic of Belarus and unapproved LMOs, including stacked events, LMOs developed by new techniques as well as administrative-legal requirements to accreditation of laboratories (in particular of an international level) in the given field of activities. Countries’ need are trainings and counselling of the personal of 17 Republican LDGMOs and custom`s control officers on proper, effective and low-cost screening methods and schemas of LMO identification, including theoretical and practical courses, as well as counselling with regard to administrative and legal requirements.

The SSI “Institute of Genetics and Cytology at National Academy of Sciences of Belarus” is the leading scientific institution in the country, which was entrusted with duties of the National Coordination Biosafety Centre (NCBC). NCBC accredited on detection and identification of LMOs in accordance to National Standards, main of which is State Standard ISO 17025 and equipped with all necessary laboratory equipment to provide laboratory analyses for LMO detection and identification. In 2017 the National Coordination Biosafety Centre was re-equipped with the new equipment for quantitative and digital PCR. The Institute of Genetics and Cytology has long-term (since 1998) experience and consistent capacities to serve as the Center of Excellence, to ensure continue national and regional trainings of laboratory personnel, having qualified laboratory staff, laboratory facilities and equipment. At the same time there is a capacity-need in international expert consultations from experienced countries and practical trainings in the country for LDMOs specialists of all the national laboratories with involvement of experts from Joint Research Center and ENGL network. It should also be mentioned that the need for such trainings was expressed not only by national laboratories, but also by a number of countries in the region.