About agricultural products, raw materials and food with improved characteristics (scientific commentary on the Federal Law)

B A Voronin, I P Chupina*, Ya V Voronina, V S Kukhar and N N Simachkova

Ural State Agrarian University, Yekaterinburg, Russia

*E-mail: irinacupina716@gmail.com

Abstract. The production of ecological agricultural products in all countries of the world is one of the main tasks of the further existence of society. Nowadays, this direction is usually called the "green economy". But, if in many European countries this direction has been developing quite successfully for several decades, then in Russia it is only at the initial stage of development. Our country occupies 12% of the entire world territory and has a favorable geographical position between Europe and Asia. And now Russia must occupy its own niche in the world market for the production of environmentally friendly products. For this, a number of legislative acts and federal laws were adopted in the country aimed at creating environmentally friendly agricultural products and in industrial production. Adopted on June 11, 2021, Federal Law No. 159-FZ "On agricultural products, raw materials and food with improved characteristics" [1] establishes the legal basis for the implementation of agricultural and other activities related to the production, storage, transportation and sale of agricultural products, food, industrial and other products with improved characteristics.

1. Introduction

The topic of this scientific article is relevant, since it provides a legal analysis of the content of the new Federal Law regulating relations in the agricultural sector of the economy, ensuring the production of agricultural products, raw materials and food with improved characteristics.

The study of the problem in the context of the analyzed Federal Law, due to its adoption, is not yet traced. At the same time, certain areas, for example, on the quality and safety of food products, were considered in scientific publications. There are scientific articles on the greening of agricultural production and on other topics consonant with the content of the new Federal Law.

The expediency of developing the topic indicated in this scientific article is due to the fact that there is a need for a legal analysis of the content of the Federal Law, its compliance with the rules of legal and legislative technology.

The scientific novelty of the topic of this study is due to the legal analysis of the content of the new Federal Law aimed at the implementation of legal support for the production of agricultural products, raw materials and food with improved characteristics.

The purpose of this research topic is to assess the content of Federal Law No. 159-FZ dated 06/11/2021 for its quality and completeness of legal regulation of relations in the agricultural sector related to the production and sale of agricultural products and food with improved characteristics.
The objectives of this study are related to the identification of insufficiently regulated concepts and categories that may adversely affect the quality of the legal settlement of the problem. The theoretical significance of this work is due to the possibility of introducing a new section on the legal regulation of the production of agricultural products, raw materials and food with improved characteristics into agrarian-legal science. The practical significance of this work lies in the possibility of using the research material in the agricultural management system in the educational process when studying the disciplines "Agrarian Law" and "Agrarian Economics".

2. Materials and Methods
The article uses statistical data of the federal and regional levels. To summarize the research results, the methods of analysis and synthesis and the forecasting method were used. The method of legal analysis is used in the proposals of the authors to improve the legal framework for the effective functioning and development of modern agriculture on the issues of greening products.

3. Results and Discussion
Article 2, paragraph 3 of the Federal Law under consideration states that the subject of legal regulation is industrial and other products with improved characteristics, which are used in the production of improved agricultural products and food, including agrochemicals, pesticides, the quality and consumer characteristics of which meet the requirements established by this Federal law (improved characteristics), the production, storage, transportation and sale of which complies with the requirements of this Federal Law.

Article 4 of this Federal Law establishes requirements for the production, storage, transportation and sale of improved agricultural products and other products.

Clause 3 of this article states that it is necessary to use in the production of improved agricultural products and other products of agro-industrial and other technologies that meet the established environmental, sanitary-epidemiological, veterinary and other requirements and have a minimal negative impact on the environment.

Federal Law № 159-FZ of 06/11/2021 provides for the specifics of technical regulation and standardization of improved agricultural products and other products, the creation of a Unified State Register of Products with improved characteristics, labeling of improved agricultural products, industrial food and other products.

The Federal Law under consideration focuses on state support for producers of improved agricultural products and improved food, the legal framework of which is set out in the Federal Law of December 29, 2006 "On the Development of Agriculture" [2].

Federal Law № 159-FZ dated 06/11/2021 entrusted information and methodological support in the production of improved agricultural products and foodstuffs to the Ministry of Agriculture of the Russian Federation, as a federal executive body responsible for the development of state policy and legal regulation in the field agro-industrial complex and fishing, and subordinate federal state budgetary institutions.

A detailed legal analysis of the content of Federal Law № 159-FZ of June 11, 2021 indicates non-compliance with the rules in the development of this legislative act. We are talking about the absence of the concept of "agricultural products, raw materials and food with improved characteristics." As a result of this approach, it is difficult to understand what constitutes the production of improved food.

If we take environmental characteristics as a basis, then in this area, from 01.01.2020, Federal Law № 280-FZ of 03.08.2018 "On organic products and on amendments to certain legislative acts of the Russian Federation" [3], in which the concept of "organic products" is given.

Federal Laws № 280-FZ of 03.08.2018 № 159-FZ of 11 June 2021 sets out the requirements for the production of products. Let's consider their content.

1.Requirements for the production of organic products (Article 4 of Federal Law № 280-FZ of 03.08.2018).
In the production of organic products, the following basic requirements are observed:
- separation of the production of organic products from the production of products that are not related to organic products.

It means that organic products are a subsistence economy, where fertilizers exclude the use of chemicals and pesticides. But here the question can also be controversial. If you do not use chemical means of protection, this is not yet a fact of obtaining organically pure products, since harmful microorganisms can be found in the soil, or can be carried by the wind from neighboring areas. Again, the use of organic fertilizers does not guarantee the absence of the same microorganisms.

Another problem in the production of organic products is a significant decrease in yields. Therefore, special techniques are needed to maintain soil fertility and plant protection. These techniques mean biological plant protection. These areas include tinning, the use of green manure crops and biological products.

- a ban on the use of agrochemicals and pesticides, antibiotics, stimulants of growth and fattening of animals, hormonal preparations, with the exception of those that are permitted for use by the national, interstate and international standards in force in Russia in the production of organic products.

The Rosselkhoznadzor must monitor compliance with the requirements for the use of pesticides, since if the standards for the use of agrochemicals are not observed, this can lead to the death of crops and the accumulation of chemicals in the soil.

As for antibiotics, they enter the human body with food. They enter the human body not only from livestock products, but also penetrate into plant products through water and soil. According to expert estimates, more than 600 thousand people die annually from antibiotic resistance in the world. And this is now one of the main problems of the present and future in agricultural production.

The use of drugs that stimulate the growth of animals also negatively affects the product. Basically, such drugs are used for growing piglets and chickens - broilers. The weight of piglets and chickens increases with the use of drugs by about 25%. WHO, when conducting research on the use of animal growth, has made significant arguments about the negative effects of these drugs.

- a ban on the use of embryo transplantation, cloning and genetic engineering methods, genetically modified and transgenic organisms, as well as products made using genetically modified and transgenic organisms.

The ban on the use of embryo transplantation is caused by the problem of poor-quality recipients for embryo transfer. Recipients may not be suitable for transplantation for various reasons.

- a ban on the use of the hydroponic method of growing plants.

The hydroponic method of growing crops and other plant species is a soilless method. The soil is served by special solutions, endowed with nutrients. Plants grown in this way do not differ from plants grown in the ground. But many growers use harmful chemical elements to speed up the growth of plants in the pursuit of profit. Therefore, manufacturers care little about the quality of products. At the same time, growth and taste accelerators can negatively affect human health. Here, the danger may come from nitrates and heavy metals, which can accumulate in the human body, if manufacturers use a large amount of chemical elements for plant growth. In addition, not all crops are suitable for growing with this method. Vegetables that form the root system are not suitable for growing in this way, as the root system will rot. These include potatoes, beets, and carrots. In addition to vegetables, this method is not suitable for growing mushrooms and flowers.

- ban on the use of ionizing radiation.

Here it is necessary to say about the consequences of food irradiation. On the one hand, ionizing radiation should destroy various kinds of pests on root crops. But there is evidence that such roots change at the cellular level. This treatment does not guarantee the destruction of all microorganisms. Destruction of vitamins E and B1, as well as proteins, can also occur.

- the use of biological products for the control of pests, diseases of plants and animals.

This is the application of biological methods of pest control in order to minimize the damage caused to crops by the use of pesticides. For this, bio-baits are used and useful birds are attracted to the sites.
- selection of breeds or species of farm animals, taking into account their adaptive abilities and resistance to diseases.

Selection means a zootechnical method of improving breeds. There are several types of selection. First of all, it is natural selection, in which those individuals who have adapted better survive and adapt in the environment. Artificial selection, unlike natural selection, implies the selection of animals for their productivity and vitality. In group selection, animals are divided into groups according to the purposes of breeding on farms. In the process of technological selection, animals are selected that are adapted to any specific conditions of detention.

- the use of food additives provided for by the national, interstate and international standards in the production of organic products in force in the Russian Federation.

The use of food additives is provided for in the technological documentation. These include glazing agents, acids, preservatives, various emulsifiers and fillers. It is also allowed to use flavor and aroma enhancers. It is also allowed to use coloring for foodstuffs.

- the use of biological, including probiotic, microorganisms traditionally used in food processing.

Biotechnology is the use of biological agents to make useful products. These include ribonucleic acids and proteins. For example, yeast is used when baking bread. And dairy products are made using lactic acid bacteria. With the help of yeast fermentation, glycerin is obtained. With modern biotechnology methods, food protein can be recovered using nanofiltration systems to extract protein from raw materials and food waste. Therefore, it is now possible to turn waste into protein products. And this is very important, considering that human needs for proteins and carbohydrates are much higher than we can get them from animal and plant sources.

Food ingredients are used for a long shelf life, to preserve the nutritional value of the product, to enhance the aroma and taste of the product. The main goal in the processing of food raw materials is to achieve waste-free production.

- a ban on mixing organic products with non-organic products.

Organic products do not use pesticides and mineral fertilizers. Also, growth stimulants and hormones should not be used in these products. This product should not be manufactured near industrial facilities. It must be a natural product grown in an environmentally friendly environment.

- a ban on the use of packaging, consumer and transport containers that can lead to pollution of organic products and the environment.

Here it must be said about the prohibition of mixing organic and inorganic products. This also applies to packaging. If the container can lead to contamination of products or the environment, such container should not be used. These ingredients for packaging include polyvinyl chloride for packaging.

2. Requirements for the production, storage, transportation and sale of agricultural products, foodstuffs, industrial and other products (Article 4 of Federal Law № 159-FZ of 11.06.2021).

In the production, storage, transportation and sale of improved agricultural products, food, industrial and other products, the following basic requirements are observed:

- the production of improved agricultural products, foodstuffs, industrial and other products should be separated from the production of other products.

- in the production of improved agricultural products and food, agricultural raw materials with improved characteristics are used.

In other words, we are talking about "green" products. Such products will not have genetically modified organisms, ionizing radiation and the use of pesticides in their production. It is also planned to tighten the requirements for the content of heavy metals in mineral fertilizers. Environmental requirements will also be more stringent in the production of green products. But at the same time, it is quite permissible to use agro-industrial technologies that meet sanitary requirements. It should be a protected brand of domestic clean "green" products, where only ingredients safe for humans and high quality production will be used.
- use in the production of improved agricultural products and other products of agro-industrial and other technologies that meet the established environmental, sanitary-epidemiological, veterinary and other requirements;
- a ban on the use of packaging, consumer and transport containers that can lead to contamination of improved agricultural products, raw materials and food;
- use of recyclable and / or biodegradable packaging and packaging materials.

Only 10% of plastic film packaging is then recycled after use. The rest of the accumulation of plastic indicates a large environmental threat of environmental pollution. And if we take into account that every year such accumulations increase significantly, then it is premature to guarantee environmental safety in the world. Already, the European Union has banned the production of disposable tableware, which is then not recycled. If until recently it was believed that biodegradable materials can be used for packaging, then recently it turned out that they do not decompose completely, and after their decay, particles enter water sources and living organisms. Now some companies are using polypropylene packaging, which can then be recycled.

Comparison of the requirements for the production, storage, transportation and sale of organic agricultural products and food shows that almost the same requirements apply to the production of goods with improved characteristics.

It should be recalled that the State Duma is currently considering a draft federal law "On ecologically clean agricultural products, raw materials and food" [4], which sets out the requirements for the production of such products, mirroring the requirements of the two above federal laws.

The question involuntarily arises, what is the need to issue federal laws that do not improve, but introduce confusion into agrarian and environmental legislation?

If the new federal law is attributed to the regulation of the "green agricultural economy", then again it does not reflect the concept of a "green" agricultural economy and the place of the federal law under consideration in the system of development of the "green" economy.

As for the industrial production of herbicides and pesticides, in the Russian Federation, since 1997, the Federal Law "On the Safe Handling of Pesticides and Agrochemicals" [5] has been in effect, which could be supplemented or changed to meet the requirements of improved characteristics. In any case, it would be a legal document of direct action and would improve legal regulation in this area.

In our opinion, the same approach can be applied to the problem of legal regulation of the use of genetic engineering methods, genetically modified and transgenic organisms.

Since 1996, the Federal Law "On State Regulation in the Field of Genetic Engineering" [6] has been in effect in the Russian Federation, in which it is advisable to introduce norms on the use of technologies with improved characteristics.

Finally, speaking about the production of agricultural products, raw materials and food with improved characteristics in the federal law No. 159-FZ of 06/11/2021, there is not even a mention of the fact that the country has Federal Law № 29-FZ of 01/02/2000. "On the quality and safety of food "[7], which sets out in a complex the norms on the production, storage, transportation and sale of food products produced in the agricultural sector of the economy.

4. Conclusion
The analysis of the legal content of the Federal Law "On agricultural products, raw materials and food with improved characteristics" dated 06.11.2021 revealed serious shortcomings in the development of this legislative document.

In particular, there are questions to the conceptual apparatus. And without a well-defined concept, the quality of enforcement of any legal act suffers, especially when the adopted federal law contains not clearly stated goals and objectives of legal regulation.

In a detailed study of the content of the federal law, one has to realize that its designed approach did not take into account the rules of normography and legislative technique, which affects not only the form of law, but also its content [8], [9].
Analyzing ecological agriculture at the present time, it should be said about the problems that still hinder its development. As we have already said above in this article, this is the absence of a systematic approach in the regulatory framework at the federal level for the production of ecological products. It is necessary to pay attention to the growth of entrepreneurs who pass off counterfeit products as environmentally friendly products that do not meet the requirements of the production of environmental products. The lack of specialists in the control and certification of ecological products is also an important obstacle in the production of ecological products. And the next reason follows from this - the absence of an internal market for ecological products, not to mention the external market. The extremely low level of support for domestic producers also leaves this problem unresolved.

For a successful solution, it is necessary to create legal conditions for the development of the domestic market for the production of environmentally friendly products. It is necessary to take a number of measures to protect domestic consumers from counterfeit products and unfair advertising.

On the formation of an effective quality control system in the new federal law is noted. But it is necessary to expand the scope of control over ecological production of products. Only in this case Russian products will be considered really high quality and will be able to compete in the international market. For this, it is still necessary to create an information system that will have information about truly clean ecological products.

State support should consist not only in supporting producers for the production of environmentally friendly products, but also in a number of other areas. These areas should include a consulting service for ecological production, financing of scientific research and training of qualified personnel in the field of ecological production of agricultural products.

Still, it is important to understand, in the end, is this federal law aimed at improving the legal regulation of agricultural production and the quality of food products from domestic agricultural raw materials, or at ensuring environmental requirements in a "green" agricultural economy?

Obviously, in the analyzed version of the Federal Law № 159-FZ dated 06.11.2021, it will not be a legal act of direct action and will not be able to provide high-quality legal regulation of agrarian and environmental relations in the modern Russian Federation.

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