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## Breeding Achievement in Animal Husbandry as an Object of Intellectual Property Rights and an Object of Inheritance in Ukraine and the World

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### Abstract

Global trends are now focused on such challenges as climate change, food security, the development of biotechnology and genetic engineering, and the transition to non-conventional fuels. The problems of promoting each of them in the global world are related to the need for free agricultural potential, the availability of effective and unified legal regulation, first of all, of breeding achievements in animal husbandry regarding the intellectual property rights of breeders, its protection both during life and for heirs, since a patent for an animal breed is an indisputable right of the inventor, which acts as a kind of legal monopoly, the provision of which is guaranteed by the state, and patent protection negates commercial use in the absence of the consent of its owner. The purpose of the study is to analyse certain issues of legal regulation of intellectual property rights to breeding achievements in animal husbandry in Ukraine and proposals for its improvement through the implementation of the global experience. The research methods were chosen considering the goals and objectives. During the research, philosophical (hermeneutical), general scientific (logical, generalisation, praxeological, modelling, predictive, and bibliographic), and special legal (formal-legal, comparative-legal) methods of scientific knowledge were used. The study examines the current state of breeding achievements in animal husbandry and the legal basis for regulating its establishment, protection, and the possibility of inclusion in the breeder's inherited property. Problematic issues in the legal framework for the establishment and implementation of intellectual property rights to breeding achievements in animal husbandry, ways to eliminate relevant conflicts are proposed. The study analyses the international experience in processing law enforcement documents for breeders and the possibility of protecting their rights. The research materials can be useful for lawyers-researchers, business entities engaged in breeding in animal husbandry, teachers, postgraduates, students of law schools, civil servants, and all those who are not indifferent to the issues under study

**Keywords:** legal relations in the field of intellectual property, results of intellectual activity in the field of animal husbandry, results of intellectual activity as part of the inherited property, protection of intellectual property rights, protection of the rights of the breeder and their heirs

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## Introduction

The global biotech market is expected to grow by about 15.5% from 2020 to 2027 and reach a market value of over 850.5 billion USD by 2027. The global biotechnology market is divided into technology and application. By technology, the market is divided into nanobiotechnology, tissue engineering and regeneration, DNA sequencing, cell-based analysis, fermentation, PCR technology, chromatography, etc. By application, the market is divided into healthcare, nutrition and agriculture, natural resources and environment, industrial processing, bioinformatics, etc. In this market structure, agricultural biotechnologies occupy 24% [1].

Even in the Middle Ages, there were communities that conducted control and protection of the intellectual property rights of breeders. However, patent legislation began to form at the end of the 18<sup>th</sup> – beginning of the 19<sup>th</sup> century. The first patent law was passed in 1790 in the United States, and a regulatory act directly related to plant protection – in 1930 [2]. In a time, characterised by a high level of instability, the presence of crisis phenomena of climatic, military, economic, and therefore food nature, breeding achievements in the field of animal husbandry as objects of intellectual property rights are gaining special importance. The national policy focuses its efforts on the introduction of new programmes and projects for the development of the agro-industrial sector of the economy, the implementation of which provides, among other things, for the establishment and functioning of the state register of breeding animals, providing breeding entities with new genetic resources and increasing demand for their export. According to the president of the NAAS, the import of genetic resources in certain sectors has reached critical values (for example, in dairy farming – 62%, in poultry farming from industrial meat production – 100%), which should encourage farmers and other market participants to their own breeding studies [3].

A special information system of the National Intellectual Property Authority (hereinafter referred to as NIPA) has been created in Ukraine and intellectual property centres are functioning. These are business entities whose activities are aimed at implementing educational and scientific programmes, respectively, and improving the skills of participants in the field of intellectual property; which could take on the functions of providing legal assistance in the field of implementation and protection of intellectual property rights in the field of biological and food safety. The issue of intellectual property rights to breeding achievements in animal husbandry was investigated by both agricultural researchers and representatives of legal science. In particular, S.L. Voitenko [4] summarised the results of research obtained during the improvement of Myrhorod pigs and their use in crossing, highlighted positions on methods for preserving local Ukrainian pig genotypes, in particular, the patented method for creating a genotype (Myrhorod + wild boar). T.V. Pidpala [5]

determines that the selection of animals of domesticated populations is the main way to improve the genetic potential of cattle and pig breeds, which, accordingly, will contribute to the growth of production of high-quality products and preserve the profitability of livestock industries [2]. R.G. Shchokin justifies the allocation of objects of intellectual property rights in separate groups [6], H. Fedotova and S. Fyl [7] investigate the content of the object of patenting and the conditions of patentability of biotechnological inventions in accordance with the norms of international and national legislation. Ye.F. Bobonych [8] investigated the issues of inheritance as a form of alienation (transfer) of rights to intellectual property objects, in particular, to plant varieties in Ukraine. M.S. Clancy and G. Moschini [9] investigate the relationship between intellectual property rights, market structure, and pricing of patented factors of production in agriculture. J.K. Yu and Y.S. Chung [10] identify the mechanisms for protecting the rights of breeders to plant varieties and the specific features of the activities of The International Union for the Protection of New Varieties of Plants (UPOV).

*The purpose of the study* is to examine the legal basis for establishing intellectual property rights to breeding achievements in animal husbandry, analyse it as an object of inheritance, and establish the possibility of implementing the experience of individual countries in solving such issues. The originality of the study consists in combining the problems of legal regulation of the establishment and protection of intellectual property rights to breeding achievements in animal husbandry, both for the breeder and their heirs; investigation of the possibility of implementing certain international norms.

## Materials and Methods

The main materials of the study are the norms of national legislation: the Constitution of Ukraine [11], the Civil Code of Ukraine [12], the Law of Ukraine “On Breeding Business in Livestock Breeding” [13], the Law of Ukraine “On Protection of Rights to Inventions and Utility Models” [14], the Order “On the Approval of the Regulation on the State Register of Subjects of Breeding Business in Animal Husbandry” [15], “Regulations on the State Register of Breeding Achievements in Animal Husbandry” [16] and other by-laws in the field of breeding livestock and the Practice of the Supreme Court of Ukraine in cases of inheritance [17]. The study was also based on international regulations: Agreement on Trade-Related Aspects of Intellectual Property Rights [18], Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights [19] and the European Patent Convention [20]. Information from the State Register of breeding achievements in animal husbandry [21] and the State Statistics Service of Ukraine [22], data from the World Intellectual Property Organisation (WIPO).

The use of the logical method allowed for fully formulating conclusions. The formal legal method has become the basis for a comprehensive analysis of the special legislation of Ukraine on intellectual property rights in the field of animal husbandry and Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights. Based on the formal legal method, the content of norms and standards defining the concept and procedure for state registration of breeding achievements in animal husbandry is established. The comparative-legal method was used to review and examine the relevant legal literature, basic scientific approaches to determine the tasks that were outlined for research and analysis of national and international patent legislation. The comparative legal method was used to review, study, and compare relevant legal sources, the main scientific approaches that are aimed at solving the tasks of research, analysing national and international legislation on intellectual property rights. The use of the hermeneutical method allowed analysing of the content of the norms of international intellectual property law in the field of animal husbandry, and the norms enshrined in the current legislation that reflect the procedure for establishing the rights of an inventor in the field of animal husbandry, and the content of norms that ensure the proper level of protection of intellectual property rights. The hermeneutical method was useful for establishing the concept of breeding achievement in animal husbandry as an object of inheritance. The praxeological, modelling, and predictive methods are used to determine the prospects for improving the level of protection of inventors and their legal successors (heirs) in Ukraine, considering existing challenges: non-functioning of the Supreme Court of intellectual property and inconsistency of special legislation with the norms of the Civil Code of Ukraine. The method of generalisation is used in the formulation of conclusions and proposals based on the results of the study, determining the range of prospects and vectors of further research. The bibliographic method was useful in identifying and compiling bibliographic characteristics of normative acts of legislation on intellectual property rights in the field of animal husbandry.

### **Results and Discussion**

Updating the patent legislation will give an impetus to the development of a competitive environment with the involvement of national breeders, which will lead to the development of the country's agriculture and its investment attractiveness and export potential. Researchers make a forecast about the further growth of demand for the results of intellectual activity, which determines the need for their effective legal protection [6, p. 152]. The position that intellectual property rights can be crucial for modern agriculture is reasonable. They make agriculture attractive by encouraging investment in new technologies and creating assets suitable for trade. Among

the main intellectual property rights related to agricultural innovation are: patents that protect inventions and rights to plant varieties, the development of new and distinctive plant varieties [24]. Chinese researchers define "agricultural intellectual property" as a driving force for the development of the agricultural sector, and an important part of the national strategy for strengthening the country [25]. Undoubtedly, intellectual property rights are recognised as important for agribusiness, which are only strengthened by the collection and processing of agricultural data and the subsequent ability to package results into improved products, processes, and services through platform providers. This type of relevant intellectual property rights also complements, in particular, conventional plant breeding, and the impact of these innovations on agribusiness is estimated at 7% for agrobiotechnologies [26]. Biological innovations in agriculture have not enjoyed the protection of official intellectual property rights for a long time, but recently there has been a tendency to substantially expand and strengthen these rights [9]. In particular, to motivate continuous innovation in the development of varieties, the system should provide incentives for breeders to create new effective varieties, for example, exclusive ownership of the production and sale of these varieties [10]. In turn, inheritance is multifaceted and demonstrates complexities of various origins from conventional, legislative, and religious sources [27].

The agro-industrial complex, the key component of which is agriculture, forms food, and within certain limits, economic, environmental, and energy security, guarantees the progress of technologically compatible sectors of the Ukrainian economy, and also contributes to the establishment of socio-economic prerequisites for rural development. However, according to the state statistics service of Ukraine [22], the structure of livestock production by main components in 2021 was different for different organisational and legal forms: for enterprises – 57%, for households – 30.9%, and in general in farms of all categories – 41.4%. At the beginning of 2022, the number of cattle decreased by another 6.5%, pigs – by 4.4%, sheep and goats – by 4.3%, and only the number of poultry increased by 0.8% [22]. Therewith, according to the State register of breeding achievements, in particular, in relation to cattle, over the past decade, only one breeding achievement was registered – the factory line of the leader of the 1926780 Ukrainian red-piebald dairy breed of cattle [21].

Ways to solve the accumulated problems in the field of animal husbandry include the implementation of measures for the conservation and reproduction of the diversity of farm animal breeds in accordance with the provisions of the Convention on the Protection of Biological Diversity [28]. The most acute problem remains that the vast majority of relevant participants do not have substantial prerequisites for increasing the number of farm animals and taking action to increase the volume of livestock production. Along with this,

industrial animal husbandry uses specialised, highly productive genotypes of imported breeding, which ultimately leads to the loss of genotypes of domestic breeding and creates the problem of a substantial reduction in genetic diversity, reducing animal resistance, and a substantial dependence on the import of breeding (genetic) resources. Evidently, creating conditions for the conservation of agricultural animal breeds is a multi-component and urgent problem not only for Ukraine but also for the vast majority of states, primarily regarding the choice of forms, varieties of methods, and minimum quantitative indicators of animals for conservation. The UN concept is based on the reproduction of the active component of the population by purebred breeding methods and encouraging the remaining ones to intensify their use in the crossing process. Therewith, the minimum number, for example, of sows for conservation is considered not less than a hundred, and the main boars – ten heads or the corresponding amount of sperm available [4].

The state guarantees national agricultural producers of the latest selection, breeding (genetic) resources a number of preferences: improvement and creation of security conditions for the effective functioning of the state register of farm animals, implementation of measures to introduce a system for assessing and establishing the breeding value of animals, organisation of breeding accounting by creating automated information databases on breeding (genetic) resources and increasing their export potential. However, the Draft Concept of the state program of cattle breeding industry development in Ukraine 2030, presented for review in the relevant ministry, according to the Deputy Minister of the Ministry of Economy of Ukraine [29], establishes only a mechanism for reducing the cost of attracting investment in this industry.

Therewith, actions to implement each programme are directly related to funding, which is conducted in such a way that it requires additional resources to attract even without martial law. At the current stage, the allocation of funds from the budget to finance the “Breeding Programme in Livestock and Poultry Breeding at Enterprises of the Agro-Industrial Complex” is not conducted in the amount that was provided for by the bylaw of the regulatory regulation, and compensation for the cost of acquired corresponding genetic resources is provided at the level of 80% of their price [30]. Limited access to funding is a substantial obstacle to the activities of small organisational forms, and this applies not only to Ukraine. Small and medium-sized enterprises, which are the driving force for innovation, growth, job creation, and social cohesion, are severely limited in their ability to attract credit, both in high-income countries and in emerging economies. According to the World Bank, the volume of trade loans between legal entities in France exceeds 50%, and for Morocco, it is less than 40%. The study shows that the problem of financing can be solved through a system of co-crediting, credit risk insurance,

expanding supply chains, and areas for using factoring services. The World Bank, in turn, offers its own credit programmes in export chains. Such measures should lead to major changes in the financial integration of small businesses and provide them with the necessary financial resources for development [31].

Since now breeding achievements in the field of animal husbandry are formed as a result of purposeful creative activity of groups of breeding animals (breeds, breed types, lines, families, etc.), which are characterised by new genetic traits that are steadily transmitted to offspring, and whose productivity indicators are ahead of the types of animals that were before, then legally they have the status of inventions (Art. 1 and 25 of the Law of Ukraine “On Breeding Business in Livestock Breeding”, hereinafter – the Law) [13].

Breed, along with its bio-zootechnical understanding and legal “nature” (due to patentability), is also an economic category, a means of production. The rate of breed transformation is directly mediated by the growth of public needs for livestock products and the growth of urbanisation processes. Currently, there are challenges to the growth of agricultural livestock production with an increase in its quality indicators, which requires extremely high rates of the breeding process [5, p. 35].

According to Art. 1 of the Law, purebred or obtained in accordance with the approved breed improvement programme animal, that has been registered in the state books of breeding animals is characterised by breeding (genetic) value and is suitable for use in the breeding process in accordance with breeding programmes. Objects of breeding animal husbandry can be: cattle, pigs, sheep, goats, horses, poultry, fish, bees, silkworms, fur-bearing animals, and rabbits, which are reproduced to obtain the products of their vital activity, and participants in breeding in animal husbandry are: owners of breeding (genetic) resources; legal entities of various organisational and legal forms of various forms of ownership and individuals – business entities that take part in the development, storage, use, establishment, mediation of the breeding value of breeding (genetic) resources, the conclusion of contractual structures that determine the transfer of ownership rights to breeding (genetic) resources, and transactions that provide for the services that are directly related to breeding in animal husbandry; owners of non-breeding animals – consumers of breeding (genetic) resources, and customers of breeding services in animal husbandry.

It was previously provided for the signing of a joint order (for example, the establishment of a new breed of chickens was jointly approved by the National Academy of Agrarian Sciences and the relevant ministry [32]) to be able to obtain legal protection and establish a new breed of the animal by breeding achievements. The provisions of the Law of Ukraine “On Protection of Rights to Inventions and Utility Models” [14] recognise the invention of animal breeds without

extending legal protection to such an object (part 2 of Art. 6) and provide for registration actions and entering information in the State Register of breeding achievements in animal husbandry of Ukraine (hereinafter – Register) [16]. As of the end of the first half of 2022, according to the Register, 7 breeding achievements were registered in sheep breeding, 15 in cattle breeding, 5 in fish farming, and in general – 45 breeding achievements in animal husbandry [21].

Even considering the fact that private companies, universities, and individual “bioenterprises” in the United States have issued a total of over 660 patents for animals, including 26 patents from 1997 to 2012 (World Intellectual Property Organization, WIPO [23]), since 1999 the patent law has been changed and provides for the possibility of challenging any recently issued patent in the Federal District Court or the Supreme Court, and such an appeal procedure has been conducted in relation to two patents for animals [33]. Since June 2017, the European Patent Office has introduced amendments to the European Patent Convention (rule 28) [20]. It was decided that patents for conventionally bred plants and animals will no longer be issued and applications will not be accepted accordingly. However, there are still “gaps”, in particular, the European Patent Office did not consider the differences between genetic engineering (which is patentable (rule 27) [20]) and breeding (not technical, which is non-patentable), that is, in the practice of this department, plants obtained as a result of random genetic changes are patentable inventions (for example, patent – EP 3560330) [34, p. 4]. Currently, there is an opinion that patents issued for the use of natural genes, seeds, plants, and their crops are one of the most substantial threats to food security at the global level and may limit regional food sovereignty. Patents create monopolies, that is, provided that patents are issued for conventionally bred plants and animals within geographical boundaries, the patent owner can deprive other breeders of the opportunity to use them for breeding new varieties or breeds, restrict their rights through the existence of license agreements [34].

The Law, unlike Art. 485 and 487 of the Civil Code of Ukraine [12], does not establish opportunities for obtaining such a law enforcement document as a patent for breeding achievements in animal husbandry with the establishment of appropriate rights. Owners of breeding (genetic) resources can take actions to obtain certificates of breeding (genetic) resources that will document the quality and tribal value of breeding (genetic) resources in the context of conducting actions for purchase or sale (Art. 1 and 13 of the Law). Therewith, Art. 485 identifies two types of intellectual property rights to an animal breed according to the criterion “basis of occurrence”, namely: intellectual property rights to an animal breed certified by a patent, which correlate with the provisions of Art. 424 of the Civil Code of Ukraine and cover exclusive and other intellectual property rights; another type of intellectual property

right to distribute an animal breed is confirmed by a certificate of breeding (genetic) resources. This is a document containing information about the breed of the animal, the results of a genetic examination, and the owner of the breeding animal. The study suggested entering information about the insurance contract in the form of the Certificate of breeding (genetic) resources [35].

National legal mechanisms for recognising a selection achievement as an object of intellectual property provide for registration actions of the Ministry of Agrarian Policy and Food of Ukraine and entering relevant data in the State Register of breeding achievements in animal husbandry. There is a procedure for recognising a breeding achievement through the approbation procedure, which ends with the registration of an act of the expert commission, making an entry in the State book of breeding animals and signing a corresponding order on the recognition of a new breeding achievement in animal husbandry. As a result, the order determines the share of the breeder’s involvement in a particular breeding achievement and the name of the subject of breeding, which is assigned the status of the original [16]. Therewith, the Law contains provisions on the recognition of breeding achievements in animal husbandry as an invention, but in accordance with the established procedure, and it provides for the approbation of sectional achievements in animal husbandry.

The legal regulation of the patentability of animal breeds remains partially open both at the national level and at the level of the European Union. It is possible to consider the main provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights [18], so it is necessary to consider the possibility for the inventor to create conditions for the protection of intellectual property rights by appropriate means and methods. Among the issues that arise with the development of biotechnologies and the distinction between natural breeding and genetic engineering, European researchers are increasingly raising the question of the ethics of patenting animals [36]. The theory of “subjectivisation” of animals is gaining scientific and normative justification. The decision of the High Court of the states of Punjab and Haryana of India, adopted in 2019, according to which all animals are recognised as legal entities, and their owners were declared persons in loco parentis (instead of the father), deserves special attention [37]. Among the countries of the European Union, the first on this path was Germany, which in 2002 started guaranteeing animal rights [38].

Among the new areas of examination of the problem is the introduction of transgenic animals into the wild, which can pose a threat to biodiversity, and possible harm to agriculture, which will consist in a substantial increase in the cost of agricultural production [36].

Within the EU, according to The European Patent Convention [20], there is a regional procedure for obtaining a European patent based on a previously issued national patent. A European patent for biotechnologies

can be issued if they are of originality, inventive level, and industrial suitability. A substance that was isolated for the first time and information about its existence was not available is recognised as a new substance. The same procedure is introduced for microorganisms. The DNA sequence, although it is listed in a known gene library, will not be considered new until the special hybridisation zones that are necessary for its isolation and characterisation are considered known [7].

The author expresses support for the position of the national scientific community on the expediency of implementing Directive No. 2004/48/EC of the European Parliament and the EU Council of 29 April 2004 on ensuring intellectual property rights in the relevant procedural codes of Ukraine [39]. For the full implementation of the procedure for ensuring the rights of a breeder, a specialised judicial branch of government should function in the country. The beginning of the work of the IP court (specialised court for consideration of cases on intellectual property rights) will contribute to improving the quality of consideration of relevant cases, encourage the establishment of the same type of judicial practice, and have a positive impact on the terms of consideration of disputes. With the advent of a wide range of methods of proof in the process, there is a real need to improve the quality level in evaluating a substantial amount of evidence coming to court [40].

One of the factors that determine the level of protection of intellectual property rights can be the degree of certainty of the breeder's hereditary rights and the possibility of their protection. According to the provisions of civil legislation, the results of intellectual activity are objects of civil rights and can conduct free circulation, including in the order of inheritance, provided that they are not withdrawn from civil circulation, not restricted in it, or not integral to the author. Objects of inheritance include all the rights and obligations of the testator at the time of opening the inheritance, which are not terminated due to their death (Art. 1218, 1219 of the Civil Code of Ukraine [12]). The corresponding position is taken by the practice of the Supreme Court of Ukraine [17].

It was noted above that there are two types of intellectual property rights to an animal breed that have different grounds for occurrence (patent and registration actions). This raises one of the problems of forming an estate – the inclusion of intellectual property rights to an animal breed. On the one hand, the absence of a legal mechanism for obtaining a patent, but the introduction of an approbation mechanism, on the other – the term of validity of property rights to an animal breed, which is established in Art. 488 of the Civil Code of Ukraine [12]. The intellectual property right to distribute a variety has no validity period and is confirmed by a certificate of breeding (genetic) resources. For heirs whose testator is included in the relevant order on the recognition of a breeding achievement in animal husbandry, there are legal opportunities to consider it a

law enforcement document and issue a certificate of inheritance rights to intellectual property rights to a breeding achievement in animal husbandry, the validity period of which has not ended. In contrast to the provisions of the Law of Ukraine "On the Protection of Rights to Plant Varieties" [41], where there is a norm granting heirs the right to apply for registration of a plant variety (Art. 18), such a position is not provided for breeding achievements in animal husbandry.

The need to improve the legal mechanisms for establishing and protecting intellectual property rights to breeding achievements in animal husbandry also determines the substantial need for IP-specialisation of judges. The full-fledged work of a specialised court is a crucial prerequisite for obtaining a high-quality, properly motivated court decision, and the very existence of a professional court will demonstrate the readiness of the state to work together with both breeders-inventors and investors in breeding.

The Ukrainian state has taken many steps towards the establishment of a legal system for the protection of intellectual property in the field of biotechnology, first of all, the signing of the Convention for the Protection of Biological Diversity, the Paris Convention for the Protection of Industrial Property and the International Convention for the Protection of New Plant Varieties. The Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure, the Agreement on Trade-Related Aspects of Intellectual Property Rights, the Association Agreement between the European Union and Ukraine, etc. should also be added to this list. [7]. Based on the conducted research, the author of the study expresses the following suggestions.

The positions of the Ukrainian legislative framework on intellectual property rights to breeding achievements in animal husbandry and scientific positions determine the importance not only of the object itself but also its legal recognition and protection at various levels – national and international. The position of Matthew S. Clancy and GianCarlo Moschini [9] that biological innovations in agriculture require official recognition of intellectual property rights and now there is a tendency to expand and strengthen them, which is directly related to the structure and level of market development is considered relevant and justified. It is impossible not to agree with the position of X. Zhang [25] on the importance of intellectual property in agriculture for effective governance of the country. The position of researchers of T.V. Pidpala [5], and S.L. Voitenko [4] on maintaining at the state level its genetic potential in animal husbandry is important. The position of H. Fedotova and S. Fyl [7] regarding the substantial impact on the basic principles of patentability of progress in modern biotechnologies, through the manifestation of a wide range of ethical and moral problems that arise with the formulation of criteria for patentability of all living things, is justified. The position of Ye.F. Bobonych,

M.K. Karpych, and O.M. Myron [8], which consists in the fact that in the absence of a law enforcement document for selection achievement, registration of inheritance cases in an undisputed manner will be possible only with the introduction of appropriate changes to national legislation is one that will ensure the protection of the rights of the breeder's heirs not only in crop production. The analysis of judicial practice on the protection of intellectual property rights in general and in matters of inheritance of intellectual property rights identified an urgent need for an effective specialised judicial mechanism. National statistics of the livestock industry indicate a gradual decrease in the number of all animal species. Analysis of data from the State Register of breeding achievements in animal husbandry gives grounds to assert that the number of breeding achievements over the past decade is minimal. It is promising and effective to involve breeding entities in the issue of harmonisation of national legal regulation with European legislation.

### Conclusions

The legal basis of intellectual property rights and breeding achievements in animal husbandry requires unification, and not only at the national level. The position of the Civil Code of Ukraine should be continued in bylaws, which will allow the effective implementation of the intellectual property rights of both breeders and their heirs. In the context of the modern world and global challenges (military, biological, environmental, etc.), this issue is becoming even more important. Based on regulatory sources related to the establishment and functioning of breeding activities in animal husbandry, it is possible to conclude that it is necessary to support national breeding

findings, which will serve the development of the agricultural market not only within the country but also at the international level, guaranteeing food security. The adopted development concepts require the introduction of legal mechanisms for their implementation and proper funding from the state, and the search for ways to attract private investors and international organisations. The national legal doctrine should consider the current practice of European and international approaches to updating patent legislation in relation to animals. Move not only along the path of an anthropometric approach but also consider ecocentric trends and extrapolate them when solving issues related to the protection of breeders' rights. The relevant novelties should also be included in the draft law, which will be adopted to protect breeding achievements in animal husbandry. The decisive factor for the full existence and emergence of breeding achievements in animal husbandry should be the full protection of the intellectual property rights of the breeder and their heirs, the legal mechanisms for the entry of intellectual property rights of the breeder into the inheritance property, and compliance with ethical standards for animals (other living organisms). The main function of protecting the rights of breeders should be implemented through the execution of activities and effective professional decisions of the Supreme Court on intellectual property issues. The subject of further legal investigation should be the development and adoption of norms that will ensure an appropriate level of regulation of the breeder's rights, and the solution of the issues of implementation of coordination and adaptation of the national and international legislation in the field of intellectual property rights to breeding achievements in animal husbandry.

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## Селекційне досягнення у тваринництві як об'єкт права інтелектуальної власності та об'єкт спадкування в Україні та світі

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### Анотація

Світові тенденції нині зосередились на таких викликах, як-от: кліматичні зміни, продовольча безпека, розвиток біотехнологій та генної інженерії, перехід на нетрадиційні види палива. Проблематика просування кожного з них у глобальному світі пов'язана з потребою вільного аграрного потенціалу, наявності ефективного та уніфікованого правового регулювання насамперед селекційних досягнень у тваринництві щодо права інтелектуальної власності селекціонерів, його захисту як за життя, так і для спадкоємців, оскільки патент на породу тварин є беззаперечним правом винахідника, який виступає свого роду юридичною монополією, забезпечення якої гарантується державою, а патентний захист зводить нанівець комерційне використання за відсутності згоди його власника. Метою статті є дослідження окремих питань правового регулювання прав інтелектуальної власності на селекційне досягнення у тваринництві в Україні та пропозиції щодо його удосконалення через імплементацію світового досвіду. Методи дослідження було обрано з урахуванням його мети та завдань. Під час дослідження використовувались філософські (герменевтичний), загальнонаукові (логічний, узагальнення, праксеологічний, моделювання, прогностичний і бібліографічний) та спеціально-юридичні (формально-юридичний, порівняльно-правовий) методи наукового пізнання. Досліджено сучасний стан селекційних досягнень у тваринництві та правові засади регулювання щодо його встановлення, захисту та можливості включення до спадкового майна селекціонера. Встановлено проблемні питання в правовому регулюванні встановлення та реалізації прав інтелектуальної власності на селекційні досягнення у тваринництві та запропоновано способи усунення відповідних колізій. Проаналізовано міжнародний досвід щодо оформлення правоохоронних документів для селекціонерів та можливості захисту їхніх прав. Матеріали дослідження можуть стати у пригоді юристам-науковцям, суб'єктам господарювання, що займаються племінною справою у тваринництві, а також викладачам, аспірантам, студентам юридичних навчальних закладів, державним службовцям та всім небайдужим до порушених питань

**Ключові слова:** правовідносини у сфері інтелектуальної власності, результати інтелектуальної діяльності у сфері тваринництва, результати інтелектуальної діяльності у складі спадкового майна, захист права інтелектуальної власності, захист прав селекціонера та його спадкоємців