

# Analysis of the Basic Theory of Plant Variety Right Pledge Financing

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## Abstract

The innovation and application of intellectual property rights have developed rapidly in recent years, and agricultural intellectual property rights have also been highly valued and developed. New plant variety rights are not only an important part of agricultural intellectual property rights, but also the main intellectual property rights owned by most agricultural research institutes and enterprises. Plant new variety rights have great economic value, but they are often neglected and left idle, resulting in waste of resources. Pledge financing of plant new variety rights can not only effectively relieve the capital demand of enterprises, but also give full play to the economic value of plant new variety rights. It is of great significance to clarify the concept and significance of new plant variety rights and its pledge financing, and to lay the theoretical foundation for carrying out the pledge financing of new plant variety rights.

## Keywords

New Plant Varieties; New Plant Variety Rights; Pledge Financing.

## 1. Foreword

Innovation is the first driving force leading the development, and intellectual property work is an important way to realize the enhancement of national core competitiveness. While the intellectual property work in China is developing at a high speed, agricultural intellectual property has also been highly valued and developed. According to the statistics of China Forestry Intellectual Property Network, as of 2021, China has authorized a total of 3,404 new plant variety rights, of which 2,046 varieties have been authorized in the past four years, nearly two-thirds, which shows that the innovation and protection of new plant variety rights in China has been effective, and the effect is remarkable. However, at present, the pledge financing of new plant variety rights in China is still at the initial stage, and the recognition of the value of new plant variety rights is insufficient, ignoring the huge economic value of new plant variety rights and the lack of attention and concern to the pledge financing of new plant variety rights. Before carrying out the research on the pledge financing of new plant variety rights, we should first clarify the concepts and significance of new plant variety rights and their pledge financing, so as to lay a theoretical foundation for the subsequent research on the system system, supporting measures and other issues.

## 2. Overview of Pledge Financing of New Plant Variety Rights

### 2.1. The Concept and Characteristics of New Plant Variety Rights

#### 2.1.1. The Concept of New Plant Variety Rights

The New Plant Varieties Right, also known as variety rights. Generally speaking, the New Plant Variety Right is the collective name of the exclusive right of the right holder to the new plant

variety owned by him according to law. Article 123 of the Civil Code of China clearly stipulates that the exclusive right to enjoy new plant varieties as the object belongs to intellectual property rights, and the right to new plant varieties is a legal intellectual property right. Article 6 of the Regulations on the Protection of New Varieties of Plants of China stipulates that the unit or individual who has completed breeding shall enjoy exclusive and exclusive rights to its authorized varieties. No unit or individual shall, without the permission of the owner of the variety right (hereinafter referred to as the variety right holder), produce or sell the propagation material of the authorized variety for commercial purposes, and shall not reuse the propagation material of the authorized variety in the production of the propagation material of another variety for commercial purposes. To sum up, the new plant variety right is a kind of legal intellectual property right with the basic characteristics of intellectual property rights, which means that the unit or individual who selects and completes breeding breeds enjoys the exclusive and exclusive right (the right to produce, sell, use and license the use, etc.) of its eligible and authorized plant varieties.

### **2.1.2. Characteristics of New Plant Variety Rights**

Plant new variety rights have the basic characteristics of intellectual property rights such as exclusivity, temporality and territoriality, in addition, plant new variety rights have the unique characteristics that other intellectual property rights do not have, object reproduction. Exclusivity is the core right and the core feature in the new plant variety right, which is the prerequisite for the right holder to use the new plant variety to gain revenue. Our laws clearly enumerate the prohibited matters, i.e. no unit or individual is allowed to produce, sell or reuse in the production of another plant variety for commercial purposes without permission. Temporality refers to the legal duration of new plant variety rights, which is the basic feature of all intellectual property rights. China's laws clearly stipulate the protection period of new plant variety rights, and upon the expiration of the period, the right holder no longer enjoys the exclusive and exclusive right to use, and the right is terminated, and the new plant variety can enter the public domain for circulation and become the common property of the whole society. Territoriality is the validity of new plant variety rights in a regional or national scope according to the laws of China. Plant new variety right is different from copyright in that it can be granted without going through statutory procedures when it is created, and there is no clear limitation on its scope. The granting of new plant variety rights requires an application in accordance with the relevant laws of each region, and the rights are only valid within the scope covered by the law after the application, and those beyond the scope need to apply again in accordance with the laws of the region beyond before they can take effect. The reproduction of the object is the unique feature of the new plant variety right. The new plant variety has the ability of life and self-propagation, and this feature is one of the important features to distinguish it from other rights. And the word reproduction is also clearly mentioned in the description of the characteristics of new plant varieties in China for many times. For example, consistency and stability. Consistency requires that the new plant variety applied for variety right is reproduced and its relevant characteristics or features are consistent except for foreseeable variation. Stability requires that the relevant characteristics or features of the new plant variety applied for variety rights remain unchanged after repeated propagation or at the end of a specific propagation cycle.

## **2.2. The Concept of Pledge Financing of New Plant Variety Rights**

Plant new variety right pledge financing is one of the types of intellectual property pledge financing, which is the use of intellectual property owned by an enterprise or individual to guarantee to financial institutions. To be precise, the property rights in intellectual property are guaranteed to financial institutions, and the financial institutions will decide whether to issue funds after the assessment and determination. In this process, the intellectual property

rights used as collateral are used to urge the debtor to fulfill its debt repayment obligations and to protect the legitimate rights and interests of creditors. The section on pledge of rights in the Civil Code clearly stipulates that if the debtor fails to fulfill its debts after maturity, the creditor has the right to receive priority payment for the intellectual property rights secured by it through discount, auction, sale, etc. This also indicates that the pledge of intellectual property rights is also a guarantee for This also shows that intellectual property pledge financing is a security system to ensure the debtor to fulfill the debt and guarantee the creditor to realize the right. In the pledge financing of new plant variety rights, the right holder or the third party will guarantee the new plant variety rights owned by the right holder to the financial institutions and the funds can be issued only after the financial institutions have examined and passed the examination. The criteria for financial institutions to examine new plant varieties are basically the same as other intellectual property rights, mainly including its legality, property, periodicity and realizability, etc. They conduct a comprehensive investigation, examine the operation of enterprises and the feasibility and advancement of intellectual property rights, and evaluate the guarantee risks before finally determining whether to issue loans and the amount of funds. Combined with the above provisions, it can be concluded that the pledge financing of new plant variety rights refers to the fact that in order to obtain funds, the owner of the new plant variety rights (debtor or third party) will put the new plant variety rights owned exclusively by him into the possession of the creditor, and when the debtor fails to fulfill the debts due or the circumstances agreed by the parties to realize the pledge rights occur, the creditor has the right to discount the property according to law or give priority to the price of the right by selling or auctioning. The right to be paid.

### **2.3. Features of Pledge Financing of New Plant Variety Rights**

#### **2.3.1. Registration of Pledge Financing of New Plant Variety Rights Takes Effect**

Plant new variety right pledge financing is essentially the use of plant new variety right pledge to secure the security right of the main claim, i.e., in fact, it is still the process of plant new variety right pledge. The pledge of new plant variety rights belongs to the pledge of rights, and the relevant provisions of the pledge of rights shall apply. Article 444 of the Civil Code of China stipulates that if property rights in intellectual property such as registered trademarks, patents and copyrights are pledged, the pledge right shall be established upon registration of the pledge. In other words, the pledge right of new plant variety right is established when the pledge is registered. Only after the registration, the pledge right becomes effective and the financing can be carried out smoothly, so this procedure is a necessary process for the pledge financing of new plant variety right. The registration plays a certain role of publicity for the pledge financing of plant variety rights and can, to a certain extent, avoid the transfer of plant variety rights by the pledgee to the third party to generate the risk of ownership agreement, which can protect the legitimate interests of both parties.

#### **2.3.2. Uncertainty of Pledge Financing for New Plant Variety Rights**

The uncertainty of the pledge financing of new plant variety rights can also be called risky, and this risk cannot be eliminated, but only mitigated. Uncertainty is reflected in uncertainty of ownership, uncertainty of value and uncertainty of realization of pledge rights. Uncertainty of ownership refers to the possibility that the pledge of new plant variety rights may be declared invalid due to the claims, objections or appeals of others in the process of financing. Uncertainty of value refers to the possibility that the value of new plant variety rights may be reduced or extinguished due to technological progress or infringement in the process of pledging and financing. Uncertainty of the realization of the pledge refers to the possibility that the pledgor may not be able to realize part or all of the pledge right if the debtor is unable to settle the debt after the debt is due and the value of the new plant variety right cannot offset the debt at this time.

### 2.3.3. Time Limit for Pledge Financing of New Plant Variety Rights

The law stipulates the legal period for the protection of new plant variety rights, which is also the time period for the right holder to enjoy the exclusive rights to the new plant variety, i.e. the legal duration of the new plant variety rights. Once the legal period expires and the right holder loses its exclusive right, the right loses its value to the right holder and can no longer be used for pledge financing. In addition, the value of the new plant variety right is closely related to the temporality. As the legal duration decreases, the value of the new plant variety right will show a trend of gradual decay, which will directly affect the amount of loans granted by financial institutions.

## 3. Legislative Status of Pledge Financing of New Plant Variety Rights

First of all, at the national policy level, in 2019, the State issued the Regulations on Optimizing Business Environment, and in 2021, the State issued the 14th Five-Year Plan, the Action Plan on Intellectual Property Pledge Financing for Enterprises (2021-2023), and the Outline for the Construction of a Strong Intellectual Property State (2021-2035) and other documents to support the development of intellectual property rights. As an important branch of intellectual property rights, the pledge financing of new plant variety rights is an important way to build a "strong intellectual property right country" in China, and it is clearly mentioned in all the documents that the system related to new plant variety rights should be further improved, the utilization level and application efficiency should be enhanced, and a favorable environment should be created for the pledge financing of new plant variety rights. Secondly, at the level of national laws, the new plant variety rights have been used as the basis for the financing.

Secondly, at the national legal level, the laws related to the pledge financing of new plant variety rights are mostly found in the Civil Code and the Regulations on the Protection of New Plant Variety Rights, which mainly involve the following issues: Firstly, the definition of the nature of the rights of new plant variety rights is stipulated in Article 123 of the Civil Code, which specifies that new plant variety rights belong to intellectual property rights. Secondly, whether new plant variety rights can be pledged and the conditions of pledge are stipulated in Article 444, Paragraph 5 of the Civil Code, which specifies that the property rights in new plant variety rights can be pledged according to the law, and the pledge of new plant variety rights must meet the conditions of having property rights and having transferability. Thirdly, whether the new plant variety rights can be transferred is stipulated in Article 9 of the Regulations on the Protection of New Plant Variety Rights, which clarifies that the application rights and variety rights in the new plant variety rights can be transferred according to law. Fourthly, the issues related to the application and granting of new plant variety rights are stipulated in the Regulations on the Protection of New Plant Variety Rights.

Finally, at the level of local legislation, most of the local legislation is comprehensive legislation, that is, the pledge of new plant variety rights is subsumed into the pledge of intellectual property rights, and no longer separate legislation. Furthermore, some regions directly apply the relevant national laws and regulations and do not carry out the relevant legislative work on them. For example, Shanghai has issued the Regulations on Protection of Intellectual Property Rights in Shanghai, in which the legislation related to the pledge financing of new plant variety rights is consistent with the provisions of the Civil Code and the Regulations on the Protection of New Plant Variety Rights, and there is no change, the difference is that the Regulations include the legislation on the pledge financing of new plant variety rights, and there are no separate provisions based on the different adjustment relationships.

## **4. The Importance of Pledge Financing of New Plant Variety Rights**

### **4.1. Beneficial to Alleviate the Difficult Financing Dilemma of Seed Industry Enterprises**

The development of any enterprise is inseparable from the support of capital, especially the research institutes, agricultural technology-based enterprises and other enterprises whose main business is technology research and development, which need a large amount of capital, but such enterprises mostly have the characteristics of light assets and multiple technologies, and lack of traditional mortgage property, so the use of technology such as new plant variety rights for pledge financing has become a new financing way for the development of enterprises nowadays. With the implementation of China's new plant variety protection system, authorized varieties have become the main force to promote food production, the development of the domestic seed market has gradually matured and expanded, and seed industry enterprises have become the main force in the pledge financing of new plant variety rights. The production and research of seed industry enterprises generally has a long time cycle, which requires a large amount of capital during this period, and it takes a long time for new plant varieties to be put into the market from research and development, resulting in the invested capital not being recovered within a short period of time, and the capital gap becomes a problem for enterprise development. However, seed industry enterprises generally have a number of agricultural intellectual property rights, and the use of new plant variety rights pledge financing can make use of the idle agricultural intellectual property rights, such as production and development funds for enterprises, effectively alleviating the problem of shortage of funds.

### **4.2. Favorable to Give Full Play to the Value of New Plant Variety Rights**

Plant new variety rights have great property value, but at present, both banks, enterprises and the public generally do not have a good understanding of its value, not to mention that they do not fully recognize the huge market value of plant new variety rights, and do not fully utilize its value. The promotion of the pledge financing of new plant variety rights is not only conducive to alleviating the capital demand of seed industry enterprises, but also can make full use of the value of new plant variety rights and realize its own value. For example, the first case of pledge financing of new plant variety rights (agricultural seed category) in China was successfully completed in 2021. The company was evaluated and the total value of new plant variety rights was more than 100 million yuan, and finally obtained a credit line of more than 50 million yuan from the bank. This is the first example of pledge financing of new plant variety rights in the country, and the sum of that value is as high as 100 million yuan, which shows the huge economic value contained in new plant variety rights. In addition, the law stipulates the legal duration of the new plant variety right, and the state gives corresponding protection to the patent right and its patentee during the legal duration, and such protection will no longer be provided upon the expiration of the period. The temporal nature of the new plant variety right determines the feature that the value of the new plant variety right decreases with the decrease of the duration, which also determines that the period for the patentee to exchange the value with the patent right is much smaller than the statutory duration. To carry out pledge financing of new plant variety rights not only helps enterprises to obtain funds, but also enables the value of new plant variety rights to be realized, making the best use of things.

### **4.3. Helps to Raise Awareness of Intellectual Property Protection**

The protection work of new plant variety rights is crucial and is the basis of the pledge work of new plant variety rights, if the rights of the right holders are not guaranteed, not to mention the application. Inadequate protection of new plant variety rights will lead to frequent disputes in the attribution and transaction of rights, and also lead to the right holders and enterprises receiving huge losses in their own interests. China is a large agricultural country and a



developing country, many enterprises do not recognize the great value of new plant variety rights, and only pay attention to the protection of tangible assets, while the awareness of property rights in agricultural intellectual property rights, especially new plant variety rights, is weak, and the awareness of treating infringement and protecting their own value is relatively weak, which seriously damages the enterprises' own interests and innovation development. The promotion of the pledge financing of new plant variety rights helps increase the awareness of Chinese seed industry enterprises on the protection of intellectual property rights represented by new plant variety rights, and through the pledge financing of new plant variety rights, enterprises can more clearly recognize the property value of new plant variety rights, so as to strengthen the awareness of protecting new plant variety rights, and then increase the protection measures for new plant variety rights. The implementation of the pledge financing of new plant variety rights will cause the relevant units and the right holders themselves to be aware of the protection of innovative achievements, which is conducive to improving the independent innovation ability and international competitiveness of China's agricultural science and technology, and strengthening the awareness of property rights protection of new plant variety rights will help promote the modernization of China's agriculture and gain a position in the international market.

#### **4.4. Helps Enhance Innovation in the Work of Breeding Institutions**

Science and technology is the first productive force, and finance is the core of modern economy. Science and technology financial cooperation is an important measure to substantially increase the investment in science and technology of the whole society, accelerate independent innovation and cultivate strategic emerging industries. The technological development and innovation of enterprises need to invest a large amount of research and development funds, and need to meet the financial needs of basic research, applied research and development research of new varieties. Since the implementation of the protection of new plant variety rights in China, agricultural breeding scientific research institutions have invested more and more research funds and maintained a faster growth rate. Due to the increase of intellectual property rights protection of new plant varieties breeding innovation subjects can obtain more expected income from research and development, the research and development enthusiasm of breeding scientific research institutions has been greatly mobilized, and under the incentive of independent intellectual property rights, agricultural research enterprises (breeding enterprises) actively apply for variety rights, make full use of market rules and pursue maximum profits. The promotion and encouragement of the pledge financing of new plant variety rights enable breeding research institutions to obtain more benefits from it and give full play to the property attributes of new plant varieties, which in turn encourages the enthusiasm of innovation of breeding research institutions and promotes technological progress. In addition to using the enterprise's own technology to guarantee sufficient funds, the pledge financing of new plant variety rights can also effectively prevent the enterprise's technology from being idle and avoid the waste of idle assets in society.

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