Statutory Protection of New Varieties of Plants in China

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I. Introduction

In China's planned economy era, the breeding of new plants varieties was exclusively conducted within the research institutions fully controlled by the Government.\(^1\) The breeding was entirely funded by the Government, and the new plant varieties were non-exceptionally State property.\(^2\) As a result, there was no need for protecting the intellectual property rights in plant variety.\(^3\)

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\(^3\) YANG, *supra* note 1.
This situation did not change until the wake of market economy. Over the last two decades, China has taken steps to strengthen intellectual property protection legislation and to bring its intellectual property system more into line with international practice. One of these steps is enacting legislations in conformity with the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), the most comprehensive multilateral agreement on intellectual property to-date. Under Article 27 of TRIPS, member states must protect plant varieties “either by patents or by an effective *sui generis* system or by any combination thereof.” China has chosen to establish an *sui generis* system.

In order to “protect the rights in new varieties of plants, to encourage the breeding and use of new varieties of plants, and to promote the development of agriculture and forestry,” on March 20, 1997, the State Council of the People's Republic of China promulgated the Regulations of the People's Republic of China on the Protection of New Varieties of Plants (Regulations).

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7 TRIPS Art. 27.3 (1995), available online at [http://www.wto.org/english/tratop_e/trips_e/trips_e.htm](http://www.wto.org/english/tratop_e/trips_e/trips_e.htm).  
Although the Regulations were framed in conformity with the 1978 Act of the International Convention for the Protection of New Varieties of Plants (UPOV), in practice, its terms are too general to effectively achieve its stated purposes. Having realized the problem, shortly after China became a member of UPOV,\(^9\) the Ministry of Agriculture and the State Forestry Administration – the two examining and approval authorities of the rights in new plant varieties – each promulgated its part of the Implementing Rules for the Regulations on the Protection of new Varieties of Plants (Rules).\(^{10}\)

II. New Plant Variety

\(^9\) China became a member of the International Convention for the Protection of New Varieties of Plants on April 23, 1999.

The “new plant variety” defined by the Regulations is “a cultivated plant variety, or a developed one based on a discovered wild plant, which is new, distinct, uniform and stable, and whose denomination is adequately designated.”

Article 3 of the Regulations delegates the examining and approving authorities of the rights in new varieties of plants to the Ministry of Agriculture and the State Forestry Administration (Authorities). According to Rules, the Ministry of Agriculture regulates the new varieties of agriculture plants, and the State Forestry Administration regulates the new varieties of forestry plant. Each department determines and publishes its own lists of protected plant varieties. The Regulations only protects the varieties that are on the list.

Accordingly, to be protected by the Regulations, a plant variety must be on the published lists of protected plant varieties, must have the four characteristics – novelty, distinctness, uniformity, stability – and must meet the denomination requirement.

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11 Regulations, Art. 2
12 Id. at Art. 3.
13 “New varieties of agricultural plants shall include those of grains, cotton, oil seeds, hemp, sugar crops, vegetables (including water melon and mask melon), tobacco, mulberries, tea shrubs, fruit trees (except dry fruit), ornamental plants (except woody plants), grass, green manure, herbaceous medicinal materials and tropical crops such as rubber...[and] new varieties of edible fungi.” Rules (Agriculture Part), Rule 2. [New varieties of forestry plants shall include] “forest trees, bamboo, xyloid vine, ornamental woody plants (including woody flowers), fruit trees (dry fruit trees only), and woody oil-bearing, beverage and condiment, as well as woody medicinal materials.” Rules (Forestry Part), Rule 2
14 The State Forestry Administration has promulgated 4 sets of protected varieties lists, which are available online at http://www.cnpyp.net/List.htm (all four sets), the Ministry of Agriculture has promulgated 5 sets of protected varieties lists, which are available online at http://www.agri.gov.cn/blgg/t20021018_15331.htm (the First Set), http://www.agri.gov.cn/blgg/t20030711_99681.htm (the Second Set), http://www.agri.gov.cn/blgg/t20021022_16762.htm (the Third Set), http://www.agri.gov.cn/blgg/t20030710_99513.htm (the Fourth Set), and http://www.hbagri.gov.cn/art/ReadNews1.asp?NewsID=2599 (the Fifth Set)
15 Regulations, Art. 2
Novelty means that the propagating material of the new plant variety in respect of which variety rights are applied for has not been sold prior to the filing date of the application, or has not been for sale, with the consent of the breeder, for more than one year within the territory of China; the propagating material of vines, forest trees, fruit trees and ornamental plants must not have been for sale for more than six years, or the propagating material of other plant varieties for more than four years, in a foreign territory.

Distinctness means that the plant variety in respect of which variety rights are applied for must noticeably distinguish it from any other plant variety known prior to the filing of the application.

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16 However, Article 45 of the Regulations permits the authorities to provide a flexible novelty requirement for the plant varieties newly included in the protected list. Pursuant to the Article, when determining the novelty characteristic, each Part of the Rules gives a time-limited retrospective effect to the list of protected plant varieties:

Rule 14 of the Agricultural Part of the Rules says, “the novelty requirement is met where, within two years from the date of publication of the list of protected new plant varieties, an application for variety rights is filed in respect of the genera and species first included in the said list before the entry into force of the Regulations and those added thereto after the entry into force of the Regulations, provided that the propagating materials of the variety in respect of which variety rights are applied for have not been for sale, with the consent of the variety holder, for more than four years within the territory of China.”

Similarly, according to Rule 12 of the Forestry Part of the Rules, the novelty requirement is met where, “within one year from the date of publication of the first list of the protected genera and species before the entry into force of the Regulations and those added thereto in the subsequent lists after the entry into force of the Regulations, an application for variety rights is filed in request of the genera and species in said lists, provided that the propagating materials of the variety in respect of which variety rights are applied for have not been for sale, with the consent of the breeder, for more than four years within the territory of China.”

18 Id. at Art. 15
Uniformity means that the plant variety in respect of which variety rights are applied for is uniform, subject to the variation that may be expected, in its relevant features or characteristics after propagation.\textsuperscript{19}

Stability means that the plant variety for which variety rights are applied keeps its relevant features or characteristics unchanged after repeated propagation or at the end of a particular cycle of propagation.\textsuperscript{20}

The denomination of a plant variety must “be distinguishable from that for any other known plant variety of the same or similar botanical genus or species,”\textsuperscript{21} and shall not be either of the several prohibited denominations.\textsuperscript{22}

III. Breeder's Rights

\textsuperscript{19} Regulations, Art. 16
\textsuperscript{20} Id. at Art. 17.
\textsuperscript{21} Id. at Art. 18.
\textsuperscript{22} Article 18 of the Regulations prohibits the denomination consisting of only numbers, violating social morals, or misleading as to the features or characteristics of the new plant variety, or the identity of the breeder. The Rules added more restrictions on the appropriate denomination in addition to the Regulations’ requirements. There shall be no denomination made, according to the Rules, using the names of countries, places of administrative district at county level or above, or the names of well know places in foreign countries, or the same or similar identifying names of intergovernmental international organizations or famous international or national organizations, or the known denomination of the same or similar genera or species of plants. See Rules (Agricultural Part) at Rule 15, and Rules (Forestry Part) at Rule 13. Apparently, these detailed restrictions are trying to avoid an over-inclusive and misleading denomination of the new plant variety.
The entity which or the person who has accomplished the breeding has an exclusive right in their protected variety\textsuperscript{23} for 20 years, in cases of vines, forest trees, fruit trees and ornamental plants, or 15 years, in cases of other plants.\textsuperscript{24} The right extends to the “[production or sale] for commercial purposes the propagating material of the protected variety,”\textsuperscript{25} and the commercial use of which “in a repeated manner in production of the propagating material of another variety,”\textsuperscript{26} and the right to assign in accordance with the law.\textsuperscript{27}

For non-commercial use, however, the Regulations permit a third party to exploit the protected variety without authorization from, or payment of royalty to, the rights holder for breeding and other scientific research activities.\textsuperscript{28} In order to protect the underdeveloped agricultural and forestry industries,\textsuperscript{29} the Regulations also permit the unauthorized use without compensation by farmers for-propagating purposes, “on their own holdings, of the propagating material of the protected variety harvested on their own holdings.”\textsuperscript{30}

In addition, the Regulations also permit the examining and approving authorities to grant a compulsory license to exploit new plant varieties in the national or the public interest, provided that the grantee of the compulsory license shall pay the rights holder a reasonable exploitation fee.\textsuperscript{31}

IV. Application Procedure

\textsuperscript{23} Regulations, Art. 6.
\textsuperscript{24} Id. at Art. 34.
\textsuperscript{25} Id. at Art. 6
\textsuperscript{26} Regulations, Art.6.
\textsuperscript{27} Id. at Art 9.
\textsuperscript{28} Regulations, Art. 10(1).
\textsuperscript{30} Regulations, Art. 10(2).
\textsuperscript{31} Id. at Art. 11.
In order to receive protection for the variety rights in China, one must file an application.\textsuperscript{32} For a foreigner or a foreign entity, the application shall be handled under the Regulations in accordance with any agreement concluded between the applicant’s nation and the People's Republic of China, or any international convention to which both countries are party, or on the basis of the principle of reciprocity.\textsuperscript{33} For example, if the applicant belongs to a member State of the UPOV, she will enjoy the same treatment as is accorded to the respective laws of China to its own nationals.\textsuperscript{34} In addition, the Regulations provide that in accordance with any agreement between a foreign country and China, or any international convention to which both countries are party, or on the basis of the principle of reciprocity, an applicant may enjoy a right of priority.\textsuperscript{35} In order the enjoy the right, the applicant must first file an application for the same variety rights in that foreign country within 12 month before filing the application in China, and the applicant must make a written statement when filing the application in China as well as submit a copy of the variety rights application documents that was first filed, as confirmed by the original receiving authority.\textsuperscript{36}

According to the Regulations, to apply for variety rights, Chinese entities or persons may file the application directly to the examining and approving authorities, or

\begin{itemize}
\item \textsuperscript{32} Id. at Art. 19.
\item \textsuperscript{33} Regulations, Art. 20.
\item \textsuperscript{35} Regulations, Art. 23.
\item \textsuperscript{36} Id.
\end{itemize}
it can be filed through a representative agency.\textsuperscript{37} The application must be written in Chinese.\textsuperscript{38}

Together with the application, an applicant shall also submit a photograph of the variety and the specification of it to the examining and approving authorities.\textsuperscript{39}

\textsuperscript{37} Id. at Art. 19.
\textsuperscript{38} Id. at Art. 21.
\textsuperscript{39} Id.

The ministry of Agriculture requires that a description shall include the following elements:

i) a provisional denomination of the new variety, which shall be the same as that in the application;

ii) the denomination both in Chinese and in Latin of the genera and species to which the new variety belongs;

iii) an indication on the background information concerning the comparison between the new variety and similar varieties both at home and abroad;

iv) an indication on the breeding process and methods, including the genealogical table, cultivating details and the parent seeds or propagating materials used;

v) an indication on its sale;

vi) a detailed description of distinctness, uniformity and stability;

vii) an indication on the region or environment suitable for its growing and on the cultivating techniques.

A set of application forms for the forestry plant variety application can be downloaded at \url{http://www.cnpvp.net/old-www/ftp/forms.zip} (Chinese Version).
Upon receipt of the required material, the examining and approving authorities will assign a filing number and within one month serve notice on the applicant to pay an application fee.\textsuperscript{40}

Upon receipt of the application fee, the authorities will conduct a preliminary examination, including the jurisdiction of the authorities, novelty of the variety, denomination of the variety, and whether the variety is on the protected list published by the authorities.\textsuperscript{41}

After the application passes the preliminary examination, the authorities will have it published and serve notice on the applicant to pay an examination fee\textsuperscript{42}. Upon receipt of the examination fee, the authorities will conduct a substantive examination of the distinctness, uniformity and stability of the variety.\textsuperscript{43}

\footnotesize{\textsuperscript{40} Id. at Art. 24.\textsuperscript{41} Regulations, Art 27.\textsuperscript{42} Id. at Art 28.\textsuperscript{43} Id. at Art. 29.}
During the substantive examination, the authorities will review the application forms and other documents provided by the applicant.\textsuperscript{44} If the authorities find the mere review of the written documents is insufficient to evaluate the new plant variety, they may request the applicant to furnish necessary information and the propagating material\textsuperscript{45} of the variety in question, and entrust a designated testing institution with the DUS test.\textsuperscript{46}

If the application passes the substantive examination, the authorities will grant the variety rights, issue the new variety rights title, and have it registered and published.\textsuperscript{47} On the other hand, if the application fails the pass the substantive examination, the authority will refuse the application and notify the applicant.\textsuperscript{48} However, if an applicant is not satisfied with the decision, the applicant may request a re-examination conducted by a Re-Examination Board created by the authorities.\textsuperscript{49} Within 6 months, the applicant will be notified the decision of the re-examination.\textsuperscript{50}

\begin{itemize}
\item \textsuperscript{44} Id. at Art. 30.
\item \textsuperscript{45} The applicant at the request of the authorities must within three months provide with the material that meets the following requirement:
\begin{enumerate}
\item The material must not have suffered from accidental damage or been under chemical treatment;
\item The material must be fresh and healthy, and must be free from quarantinable and harmful organisms;
\item The material must be provided with a quantity enough for the test, and must be provided to the appropriate institution pursuant to the instructions from the authorities.
\end{enumerate}

See Rules (Agriculture Part) at Rules 25-28 and Rules (Forestry Part) at Rules 22-25.
\item \textsuperscript{46} Id.
\item \textsuperscript{47} Id. at Art. 31.
\item \textsuperscript{48} Id. Note that a refusal by the authorities is different from a withdrawal by the applicants. According to the Regulations, if the applicant fails to comply with the procedural requirements of the application, the application will be deemed to have been withdrawn by the applicant, and will be deemed as having never been existed at all. Id. at Arts. 25, 29. Only a refusal is appealable. Id. at Art. 32.
\item \textsuperscript{49} Id. at Art 32.
\item \textsuperscript{50} Id.
\end{itemize}
the applicant is not satisfied with the decision, the applicant may file a suit in the People's Court according to administrative action procedures.\textsuperscript{51}

V. Remedies

\textsuperscript{51}Id. at Art 32.
If the protected variety right is infringed upon, the Regulations provide the rights holder with both civil and criminal remedies. The injured party may directly file a suit with the People's Court, or request the competent administrative authorities to handle the dispute.\textsuperscript{52}

In handling the dispute, the competent administrative authorities may issue an injunction, confiscate the unlawful earnings and punish the infringer with a fine.\textsuperscript{53} The authorities may also, at the will of the parties to the dispute, mediate the compensation of damages caused by the infringement.\textsuperscript{54} If there is no accord reached through the mediation, the injured party may file a suit with the People's Court according to civil action procedures.\textsuperscript{55}

In addition, if the new plant variety in question is counterfeited, injunction, confiscation and fine will be mandatory. If the circumstances of the case are so serious as to constitute a crime, the party concerned will be subject to criminal liability investigation.\textsuperscript{56}

VI. Conclusion

\textsuperscript{52} Regulations, Art. 39.
\textsuperscript{53} Id. This is an administrative fine, which is retained by the administrative authorities, and should be distinguished from the compensation to the injured party, which is a result of the mediation between the parties conducted by the administrative authorities or of a civil action brought in the People's Court.
\textsuperscript{54} Id.
\textsuperscript{55} Id
\textsuperscript{56} Id. at Art. 40. Meanwhile, the injured party may still enjoy the administrative and civil remedies mentioned in the earlier paragraph.
The Regulations were drafted based on the 1978 Act of the UPOV Convention, however, a majority of the UPOV members have adopted the 1991 Act, which has more stringent provisions and consequently has a wider and a more extensive protection for the plant variety rights.

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59 DUAN, *supra* note 53.
1978 Act permits the member States to selectively protect the plant genera and species,\(^{60}\) therefore, China has been publishing the list of protected plant varieties, and only protects the plant varieties that are on the list.\(^{61}\) 1991 Act, by contrast, requires the member States to protect all plant genera and species.\(^{62}\) As to the scope of the breeder's rights, the 1978 Act limits the breeder's rights within the commercial production, sale and marketing of the propagating material of the protected variety.\(^{63}\) The 1991 Act extends the protection to the harvested material of the propagating material.\(^{64}\) For example, a new plant variety “A” has been authorized to John. If Mike wants to use “A” in his experiment to produce “B,” another new plant variety; it is permissible under both Acts that Mike conduct the experiment without John's authorization. However, if Mike succeeds in the experiment, and wants to reproduce “B” for commercial purposes without John's authorization, this process will be prohibited by the 1991 Act. 1991 Act also extends the scope from mere commercial sale and marketing to export and import,\(^{65}\) which prohibits the importing of the protected plant variety from a country where the rights has not been registered.\(^{66}\)

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\(^{60}\) UPOV Act of 1978 Article 4(3) provides that each Member State of the Union shall apply the provision to at least twenty-four genera or species within eight years from the date of the entry into force of the Convention in its territory.

\(^{61}\) By the end of 2004, the Ministry of Agricultural and the State Forestry Administration have published 9 sets of lists of protected plant varieties, which included 73 genera or species of plants. See supra note 14.

\(^{62}\) UPOV Act of 1991 Article 3(1)(ii) requires the States that are already members of the Union apply the provision of the Convention at latest by the expiration of a period of five years after the date on which it becomes bound by the Convention, to all plant genera and species. Article 3(2)(ii) requires the new members of the Union apply the provisions of the Convention at latest by the expiration of a period of 10 years from the date on which it becomes bound by the Convention, to all plant genera and species.

\(^{63}\) UPOV Act of 1978, Article 5(1).

\(^{64}\) UPOV Act of 1991, Article 14(1)(b).

\(^{65}\) UPOV Act of 1991, Articles 14(1)(a)(v), (vi).

\(^{66}\) CHEN, supra note 29.
China is a developing country which has just awoken from its long period of planed economy. A higher and more stringent protection to the plant varieties may have a negative impact on the local breeding industry, which might be a reason why China has chosen to adopt the 1978 Act. However, as China plays a more and more important role in the world trade arena, the possibility of China's adopting 1991 Act in the near future is very promising.\textsuperscript{67}

\textsuperscript{67} Id.