

Abstract

Yoonjin (Jean) Byun is currently a third-year student at the University of Oklahoma College of Law. A native of the Republic of Korea, Ms. Byun wrote this article under the direction of Professor Drew Kershen for the Project on Intellectual Property Rights in Living Matter. Below, Ms. Byun provides an overview of South Korea's Seed Industry Law which incorporates the principles and requirements of the UPOV (*Union internationale pour la Protection des Obtentions Végétales*) Convention. Ms. Byun's discussion consists of a brief introduction (Part I), an overview of the scope and variety of protections offered by SIL (Part II), the rights created by SIL's protections (Part III), and the duration of protection (Part IV).

Edited by Steve Ruby

**PLANT VARIETY PROTECTION IN THE REPUBLIC OF KOREA: SEED
INDUSTRY LAW**

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I. Introduction

The Republic of Korea became the 50th contracting party to the UPOV (*Union internationale pour la Protection des Obtentions Végétales*) Convention¹ after the deposit of its instrument of accession to the 1991 Act on December 7, 2001. The UPOV is a system of plant variety protection based on the International Convention for the Protection of New Varieties of Plants of 1961, which was revised in 1972, 1978 and 1991. It reflects worldwide recognition of plant breeders' intellectual property rights in their varieties, seeking to

¹ International Union for the Protection of New Varieties of Plants, *The UPOV System of Plant Variety Protection*, at http://www.upov.int/en/about/upov_system.htm (last visited Jan. 2, 2005).

encourage breeders to develop new varieties of plants. Under Chapter I article 2 of the UPOV Convention,² member states are required to grant and protect breeders' rights.

The South Korean Government enacted the Seed Industry Law (SIL)³ on December 6, 1995 and introduced the Plant Variety Protection System on December 31, 1997. Since then, the number of applications and the number of registered varieties has been increasing steadily.⁴

Currently, 113 plant genera and species are entitled to Plant Variety Protection (hereinafter "PVP").⁵ However, the protection under SIL will expand to all the plant varieties over the next several years, for the UPOV Convention requires granting protection

² International Convention for the Protection of New Varieties of Plants, Dec. 2, 1961, 33 U.S.T. 2703, 815 U.N.T.S. 89, as Revised at Geneva on Nov. 10, 1972, on Oct. 23, 1978, and on Mar. 19, 1991, ch. I, art. 2 http://www.upov.int/en/publications/conventions/1991/act1991.htm#_14 (last visited Jan. 22, 2005) [hereinafter UPOV Convention].

³ Republic of Korea Ministry of Agriculture and Forestry, *Seed Industry Law* [SIL], Consolidated Text of SIL 5024 (1995), Revised Text of SIL 5668 (1999), Revised Text of SIL 6374 (2001), <http://www.upov.int/en/publications/npvlaws/korea/KR-Seed-Industry-Law-26-01-01.pdf> (last visited Jan. 2, 2005) [hereinafter SIL].

⁴ Since the enactment with the Seed Industry Law, the number of applications is 224, 72, 94, 221, 602, and 463 in 1998, 1999, 2000, 2001, 2002, and 2003, respectively. However, in 1998, out of 224 varieties, 195 of them were filed by interim measures for known varieties at the time of enactment of the Law, which was developed before enactment of the Law. From 1999 to 2002, total number of applications increased every year steadily. Accordingly, the number of registered varieties is 22, 76, 310, and 450 in 2001, 2002, 2003, and 2004, respectively, as of August, 31, 2004; see National Seed Management Offices, at <http://www.seed.go.kr>. (last visited Jan. 2, 2005). (website text is in Korean; translated by the author).

⁵ See National Seed Management Offices, *Introduction*, at <http://www.seed.go.kr/english/index.jsp> (last visited Jan. 2, 2005); see also You Me Patent & Law Firm, *Plant Patents*, at <http://www.youme.com/2003/english/know7.asp> (last visited Jan. 2, 2005); see also Kwoon-Soon Yoon, *Plant Variety Protection in the Republic of Korea* (Apr. 8-10, 2004), <http://www.ipagcon.uiuc.edu/yon.html>.

to all plant genera and species for a period of ten years for new members such as South Korea and five years for existing members after accession to the Convention.⁶ The purpose of such phase-in introduction of PVP rights in South Korea is to cushion the sudden economic impact on farmers through the enforcement of the PVP system by the imposition of a heavy burden of royalty payments for certain popular species such as roses.

This eBrief discusses the protection of new plant varieties in Korea based on the current legal system, SIL, in comparison with the UPOV Convention.

II. Scope of Variety Protection

A. Definitions of “Variety” and “Breeder”

According to the Consolidated Text of SIL:

“[V]ariety” means a plant grouping within a single botanical taxon of the lowest known rank, which grouping, irrespective of whether the conditions for the grant of a breeder’s right are fully met, can be i) distinguished from any other plant grouping by the expression of at least one of the characteristics, and ii) considered as a unit with regard to its suitability for being propagated unchanged.⁷

This definition includes two of the three items enumerated in the definition of “variety” in the UPOV Convention version.⁸

⁶ UPOV Convention, *supra* note 2, ch. II, art. 3(2)(ii).

⁷ SIL, *supra* note 3, art. 2.

⁸ Under the 1991 UPOV Convention, chapter I, article 1(iv), “‘variety’ means a plant grouping within a single botanical taxon of the lowest known rank, which grouping...can be i) defined by the expression of the characteristics resulting from a given genotype or combination of genotypes. . . .” UPOV Convention, *supra* note 2. (The other two items are the same as mentioned above in the definition of “variety” under SIL.)

“‘Breeder’ means the person who has bred, or developed from discovery, a variety.”⁹

This definition is narrower than the definition of the UPOV Convention, which also covers the employer or the successor of the person who bred or developed a variety. Although “breeder” leaves out certain categories of people in its definition, entitlement to the rights created under SIL is still vested not only in the breeder but also in his successor according to Article 17 of the SIL. Moreover, where two or more persons breed, or discover and develop a variety jointly, the entitlement to protection is vested in them jointly under SIL.¹⁰

Likewise, although there are slight discrepancies between the two laws in terms of definitions, there are few differences in the ultimate scope of the protection.

B. Conditions of Variety Protection

Under SIL, protection shall be granted to a variety, provided such variety is new, distinct, uniform, stable, and of a suitable denomination.¹¹ These five criteria are consistent with the UPOV Convention.¹²

First, a variety is new if, at the date of filing of the application, propagating material or harvested material of the variety has not been assigned, by or with the consent of the breeder, for the purposes of exploitation of the variety in the territory of the Republic of

⁹ SIL, *supra* note 3, art. 2(v).

¹⁰ SIL, *supra* note 3, art. 17(2).

¹¹ *Id.* art. 12(v).

¹² UPOV Convention, *supra* note 2, ch. III, art. 5.

Korea, for longer than one year, or in a territory other than that of the Republic of Korea for longer than four years.¹³ In the case of trees or fruit trees, the applicable term is six years or longer.¹⁴ The definition of novelty under SIL is basically in conformity with the UPOV Convention, which differs only in that it uses “sold or otherwise disposed of to others” instead of “assigned.”¹⁵ It is unclear at this time whether this difference really has a significant consequence.

Second, under both SIL and the UPOV Convention, a variety is distinct if it is clearly distinguishable from any other variety whose existence is a matter of common knowledge at the time of the filing of the application.¹⁶ In making the comparison between the variety being claimed and a “common knowledge” variety, the “common knowledge” variety must fall within the definition of a variety set out in both laws as discussed above.¹⁷ However, a variety that is of common knowledge does not have to be a protected variety that fulfills all of the conditions.¹⁸

¹³ SIL, *supra* note 3, art. 13.

¹⁴ SIL, *supra* note 3, art. 56.

¹⁵ UPOV Convention, *supra* note 2, ch. III, art. 6(1).

¹⁶ SIL, *supra* note 3, at art. 14; UPOV Convention, *supra* note 2, ch. III, art. 7.

¹⁷ SIL, *supra* note 3, at art. 2(iv); UPOV Convention, *supra* note 2, ch. I, art. 1(iv).

¹⁸ World Intellectual Property Organization Working Papers and Links, *Introduction to Plant Variety Protection under UPOV Convention 7*, at

http://www.wipo.int/sme/en/activities/meetings/china_most_03/wipo_ip_bis_ge_03_11.1.pdf [hereinafter WIPO].

Third, the variety is uniform if, subject to the variation that may be expected from the particular features of its propagation, it is sufficiently uniform in its basic characteristics.¹⁹ Moreover, the criterion of uniformity is met if it is sufficiently uniform in its “relevant” characteristics under the UPOV Convention.²⁰ According to the explanation made by WIPO (World Intellectual Property Organization), the uniformity requirement in the context of the UPOV Convention has been established to ensure that variety can be defined as far as it is necessary for the purpose of protection.²¹ Therefore, it does not seek absolute uniformity and takes into account the nature of the variety itself. Furthermore, it relates only to the characteristics that are relevant for the protection of the variety. Under SIL, likewise, the criterion is inferred to relate only to basic characteristics for the protection of the variety.

Fourth, the stability criterion is met under both laws if its basic characteristics remain unchanged after repeated propagation (or, in case of a particular cycle of propagation such as F1 hybrid, at the end of each such cycle).²² This criterion ensures that the identity of the variety, as the subject matter of protection, is kept throughout the period of protection.²³

¹⁹ SIL, *supra* note 3, art. 15.

²⁰ UPOV Convention, *supra* note 2, ch. III, art. 8

²¹ WIPO, *supra* note 18.

²² SIL, *supra* note 3, art. 16; UPOV Convention, *supra* note 2, ch. III, art. 9.

²³ WIPO, *supra* note 18.

Article 12 of the UPOV Convention provides that any decision to grant a breeder's right shall require an examination for compliance with the conditions set forth therein.²⁴ Satisfaction of these criteria is determined by the national authority responsible for making such determinations, usually after growing the variety over at least two seasons.²⁵ Under the SIL system, the Minister of Agriculture and Forestry directs examiners to inspect applications for variety protection.²⁶ The Minister may entrust a research institute, university, or any appropriate person with investigation or testing to perform the examination to see whether an applied variety meets the requirements.²⁷

Finally, apart from the four aforementioned conditions, a variety shall not be subject to any further or different conditions, provided that the variety is designated by a denomination established pursuant to any of the following three classifications: a variety for which an application for variety protection is to be filed, a variety for which an application for the entry in a catalogue of varieties is to be filed, or a variety for which a declaration to produce and sell its seed is to be filed.²⁸ Where a denomination is already registered, or

²⁴ UPOV Convention, *supra* note 2, ch. IV, art. 12.

²⁵ Groombridge, B., *Intellectual Property Rights for Biotechnology*, GLOBAL BIODIVERSITY: STATUS OF THE EARTH'S LIVING RESOURCES 495 (1992), at <http://www.ciesin.org/docs/008-265/008-265i.html>.

²⁶ SIL, *supra* note 3, art. 33(1).

²⁷ *Id.* arts. 35(1)-(2).

²⁸ *Id.* art. 108(1).

registration for the denomination is applied, in the Republic of Korea or in another country, that denomination alone shall be used; however, a denomination which is contrary to *ordre public* or morality shall not be used.²⁹ There are some requirements that a variety denomination be registered under the Article 109 of SIL. For example, if the variety denomination is indicated solely in terms of a number or sign, or solely in terms of the origin, quality, yield, price, use or production time of the variety or harvested material of the variety, the denomination may not be registered.³⁰ Moreover, if the variety denomination is identical or similar to the variety denomination of another variety of the plant species or genus, it is likely to cause mistake or confusion. Thus, it may not be registered.³¹

III. The Plant Variety Protection Right under SIL

A. Effects of the Variety Protection Right

Under SIL, a variety protection right holder shall have an exclusive right to exploit the protected variety commercially and industrially.³² Instead of enumerating each act requiring the authorization of the right holder in the text of the law as the UPOV Convention does,³³ SIL seeks to encompass any kind of commercial industrial exploitation, leaving

²⁹ *Id.* art. 108(2).

³⁰ *Id.* arts. 109(i)-(ii).

³¹ *Id.* art. 109(iii).

³² *Id.* art. 57(1).

³³ UPOV Convention, *supra* note 2, ch. V, art. 14(1)(a) states:

[T]he following acts in respect of the propagating material of the protected variety shall require the authorization of the breeder:

- (i) production or reproduction (multiplication),

ample room to interpret the text. Here, “exploiting” is defined as “an act of propagating, producing, processing, assigning, leasing, exporting, importing, or offering for sale [including displaying for assignment or lease³⁴] of the seeds to be protected.”³⁵ Where the variety protection right is subject to an exclusive license, such exclusive right to exploit the protected variety is for the exclusive licensee.³⁶ This potentially broad protection is still consistent with the UPOV Convention, which allows each member state to include additional acts.³⁷

A variety protection right holder also has an exclusive right to exploit harvested material and the product which has been made directly from harvested material of the seed of the protected variety commercially and industrially.³⁸ However, it is not applicable to the case where the product is made directly by a person who has no knowledge of the right when producing the product.³⁹ This provision protects foreseeable uneducated farmers or

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- (ii) conditioning for the purpose of propagation,
 - (iii) offering for sale,
 - (iv) selling or other marketing,
 - (v) exporting,
 - (vi) importing,
 - (vii) stocking for any of the purposes mentioned in (i) to (vi), above.

³⁴ “Displaying” is the correct word in the legal text of Korean. Some common English synonyms include the following: advertise, arrange, demonstrate, disclose, exhibit, expose, illustrate, lay bare, lay out, make known, manifest, model, open out, parade, present, set out, show off, and showcase.

³⁵ SIL, *supra* note 3, art. 2(ix).

³⁶ *Id.*

³⁷ *Id.* art. 14(4).

³⁸ *Id.* art. 57(2).

³⁹ For example, if one person makes bread out of a certain wheat variety without knowing that he has no right to use it, he is not in violation of SIL. SIL, *supra* note 3, art. 57(2).

manufacturers who, being unaware of such right, could unintentionally infringe on the right of the variety protection right holder.

The variety right also applies to varieties which are essentially derived from the protected variety (where the protected variety is not itself an essentially derived variety), varieties which are not clearly distinguishable from the protected variety, and varieties whose production requires the repeated use of the protected variety.⁴⁰ This extension of the variety protection coverage is also consistent with the UPOV Convention.⁴¹

B. Exceptions to Plant Variety Protection under SIL

Generally, there are two kinds of exceptions in the application of SIL: certain types of non-infringing uses and exhaustion. First, the effects of the variety protection right do not extend to exploitation of the protected variety for self-consumption and for non-commercial purposes, exploitation of the protected variety for experimental and research purposes or exploitation of the protected variety for the purpose of breeding other varieties.⁴² The exception for the purpose of breeding other varieties, known as the “breeder’s exemption,”⁴³ is a fundamental element of the UPOV system of plant variety protection. It is distinct from the exception for experimental and research purposes. While the latter focuses on the benefit

⁴⁰ *Id.* art. 14(3).

⁴¹ *Id.* arts. (2)-(3), (5).

⁴² SIL, *supra* note 3, art. 58(1).

⁴³ WIPO, *supra* note 18, at 13.

from academic and scientific side, the former emphasis on the benefit to society in general. This is based on a recognition that real progress in breeding, as is the goal of intellectual property rights in this field, relies on access to the latest improvements and new variations.⁴⁴

A variety protection right can be restricted if a farmer collects the seeds of the variety for himself for the purpose of self-production.⁴⁵ (“self-production” and “self-consumption” can be used interchangeably.⁴⁶) This “farmer’s privilege” is also recognized as optional exception under the UPOV convention, while “breeder’s exemption” and other aforementioned exploitations of the protected variety are recognized as mandatory exceptions.⁴⁷ The optional provision allows each member state to take account of a common

⁴⁴ *Id.*

⁴⁵ SIL, *supra* note 3, art. 58(2) states, “The Minister of the Ministry of Agriculture and Forestry may restrict a variety protection right for a variety, if a farmer collects the seeds of the variety for himself for the purpose of self-production.”

⁴⁶ NAVER KOREAN ECONOMIC DICTIONARY, at <http://ecodic.naver.com>.

⁴⁷ UPOV Convention, *supra* note 2, ch. V, art. 15 states:

Exceptions to the Breeder’s Right:

(1) [Compulsory exceptions] The breeder’s right shall not extend to

- (i) acts done privately and for non-commercial purposes,
- (ii) acts done for experimental purposes and
- (iii) acts done for the purpose of breeding other varieties, and, except where the provisions of Article 14(5) apply, acts referred to in Article 14(1) to (4) in respect of such other varieties.

(2) [Optional exception] Notwithstanding Article 14, each Contracting Party may, within reasonable limits and subject to the safeguarding of the legitimate interests of the breeder, restrict the breeder’s right in relation to any variety in order to permit farmers to use for propagating purposes, on their own holdings, the product of the harvest which they have obtained by planting, on their own holdings, the protected variety or a variety covered by Article 14(5)(a)(i) or Article 14(5)(a)(ii).

practice of farmers saving their own seed on their own holding when providing protection so long as the farmer's privilege is regulated within reasonable limits and subject to the safeguarding of the legitimate interests of the breeder.⁴⁸

Second, there are circumstances where the variety protection right is exhausted. Variety protection does not extend to acts concerning any material of the protected variety which has been sold or otherwise marketed in the Republic of Korea by the holder of the variety protection right, an exclusive or non-exclusive license, its harvested material, or any material directly made from said material.⁴⁹ The rule of exhaustion is aimed at ensuring that the holder of a breeder's right can only exercise his right once in each stage of propagation. This ensures that the breeder's right to prohibit further or unauthorized propagation of the variety is never exhausted.⁵⁰

The rule of exhaustion does not apply, however, to the following acts: 1) an act of propagating the seed of the protected variety by using the seeds of the protected variety which has been sold or otherwise marketed, its harvested material, or any material directly made from said material; or 2) an act of exporting the seeds of the protected variety, its harvested material, or any material directly made from said material for the purpose of

⁴⁸ WIPO, *supra* note 18, at 14.

⁴⁹ SIL, *supra* note 3, art. 59.

⁵⁰ WIPO, *supra* note 18, at 14.

propagation.⁵¹ Thus, the variety protection right still exists exceptionally under those circumstances.

In comparison, while the UPOV Convention uses the language “by the breeder or with his consent”⁵² instead of “by the holder of the variety protection right, or an exclusive or non-exclusive license,”⁵³ there does not seem to be a material difference in the ultimate effect of the provision.

IV. Duration of Variety Protection Right and Prevention from Infringement of Variety Protection Right

The variety protection right expires at the end of the twentieth calendar year following the registration of its establishment; for trees and fruit trees, it shall expire at the end of the twenty-fifth year.⁵⁴ SIL is in compliance with the UPOV Convention as it sets forth the minimum period as twenty years and twenty five years, respectively.⁵⁵

Under SIL, there are many ways to prevent the infringement of variety protection rights. Chapter VI, entitled “Protection of the Variety Protection Right Holder,” provides a variety of legal means for both prevention and recourse such as injunction and prevention against infringement, right to claim compensation for damage, presumption of negligence,

⁵¹ SIL, *supra* note 3, art. 59.

⁵² UPOV Convention, *supra* note 2, ch. IV art 16(1).

⁵³ SIL, *supra* note 3, art. 59.

⁵⁴ SIL, *supra* note 3, art. 56.

⁵⁵ UPOV Convention, *supra* note, 2, ch. V, art. 19.

and recovery of reputation of variety protection right holder or exclusive licensee.⁵⁶ Until now there have been very few disputes concerning the variety protection right, but the current situation will likely change soon due to the recent inclusion of the species of flowers and fruits in the variety protection under SIL.⁵⁷ Also, Article 169 of SIL prescribes an infringement on the variety protection right as a penal offense, punishable by imprisonment for no more than five years or a fine not exceeding thirty million Won.⁵⁸

V. Conclusion

The purpose of the plant variety protection system under SIL is to develop a seed industry and to contribute to stability of agriculture, forestry, and fishery by enacting provisions in Korea regarding protection of the breeder's right and management of variety performance of major crops, seed production, certification, marketing, etc.⁵⁹

The Seed Industry Law is in conformity with the UPOV Convention, and is expected to stimulate breeding activities and consequently, widen the spectrum of varieties available to farmers and increase the genetic variability for breeders to develop new varieties.⁶⁰ SIL balances benefits between farmers and breeders as well as amongst breeders for farm-saved

⁵⁶ SIL, *supra* note 3, ch. VI.

⁵⁷ National Seed Management Offices, *supra* note 5.

⁵⁸ SIL, *supra* note 3, art. 169(1).

⁵⁹ SIL, *supra* note 3, art. 1.

⁶⁰ Dr. Keun Jin Choi, *The Status of the Protection of New Varieties of Plants in Korea*, at http://seed.agron.ntu.edu.tw/IPR/report/kor_04.htm.

seed, as examined above.⁶¹ Any act undertaken for the purpose of breeding new varieties is excluded from the scope of the breeder' right, farmer's privilege and breeder's exemption, respectively.⁶²

⁶¹ SIL, *supra* note 3, art. 58.

⁶² Choi, *supra* note 54.