

## NOTE & COMMENT

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# Border Enforcement of Plant Variety Rights: A Comparison between Japan and Taiwan

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*Article 24 of the Plant Variety and Plant Seed Act of Taiwan stipulates that right-holders have exclusive rights to import/export propagating materials, harvested materials and products made directly from the harvested materials of protected plant varieties. However, detailed provisions of border measures and enacting rules have not yet been written both in the Act and the associated enforcement rules. Although Taiwan and China have built a close relationship in agriculture and trade, tightening export suspension measures may serve as an effective means of preventing the agricultural counterfeit issue from worsening, and reduce the possibilities of illegal re-importation. China is the principal country to which plant materials from Taiwan and Japan are smuggled for further propagation and then shipped back to their original markets. Japan's effective border measures for addressing plant variety right infringement and their PVP G-Men system could be a useful paradigm for Taiwan.*

### Keywords

Plant Variety Right, Border Measures, G-Men, Import Suspension, Ex Officio, Suspension of Release

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## 1. Introduction

With the increasing number of intellectual property right infringements in international trade, effective measures of safeguarding rights have become a crucial issue in implementing intellectual property protection. Although there are measures such as infringement investigation and prosecution in place, controlling the likely distribution of suspected goods from the source has become the preferred strategy. It is particularly important in agriculture as breeding new plant varieties requires significant time and investment, but to propagate new plant varieties can be achieved with minimal effort and resources. This is why plant breeders are driven to apply for plant variety protection to ensure their monopoly rights in a prospective market. Taiwan and Japan are small countries in terms of arable land. However, both suffer from the consequences of new plant variety seedlings being smuggled into mainland China for mass-propagation with the harvested materials, such as flowers, fruits or seeds being then shipped back impacting the domestic markets.<sup>1</sup>

Preliminary research conducted in both countries have suggested that setting up effective border measures is the first vital step in ‘goal keeping’ against such outlawed trade.<sup>2</sup> Japan first adopted the Agricultural Seeds and Seedlings Law in 1947. This law has gone through several amendments in the legal text in subsequent years, and has become a leading model for other Asian countries. It has also helped stop protected plant material from being imported onto Japanese soil. Taiwan lags behind Japan by more than forty years in setting up a plant variety rights protection (“PVP”) system; it is still trying to strike a balance between agricultural policy subsidy and royalty claims from the growers. As a result, the PVP system in Taiwan is only being enacted in a muddled way.

This paper attempts to draw a parallel between Japan and Taiwan in plant variety right border control, and to provide some insights into how these differences originated. This paper is composed of six five parts including Introduction and Conclusion. Part II will compare Plant Variety Right Protection Border Measures between Japan and Taiwan. Part III will examine the relevant regulations of Taiwan’s Foreign Trade Act. Part IV will make suggestions for the Taiwanese government.

<sup>1</sup> Li-Hua Chung, *COA Reports: Many of Taiwan’s Plant Varieties Have Been Taken to China*, THE LIBERTY TIMES, available at <http://www.libertytimes.com.tw/2011/new/may/21/today-fo2.htm> (available only in Chinese) (last visited on Mar. 17, 2012). For Japanese situation, see Takahashi Nobuyoshi, *Reinforcement of Plant Breeder’s Right-Amendment of Plant Variety Protection and Seed Act*, MINISTRY OF AGRICULTURE, FORESTRY AND FICHERIES (“MAFF”), available at <http://www.maff.go.jp/kyusyu/seiryuu/hana/hana01.pdf> (available only in Japanese) (last visited on Mar. 17, 2012).

<sup>2</sup> *Id.*

## 2. Plant Variety Right Protection Border Measures

### A. Japan

The legal protection of plant variety rights in Japan dates back in 1947 when the Law on Agricultural Seeds and Seedlings was passed. As the title suggests, originally the law was intended to offer protection for seeds and seedlings for the purpose of agriculture. However, as the concern for intellectual property rights protection grew, in 1978, the Japanese government amended the title of the law to the Seeds and Seedlings Law, expanding the protection scope to cover plant propagating materials. In 1982, Japan became an official signatory member of the 1978 version of the International Convention for the Protection of New Varieties of Plants (hereinafter UPOV 1978) and the work of building up the PVP system continued. Because of growing complaints that the UPOV1978 did not offer enough protection for new variety breeders as there were loopholes in protecting asexually propagated plants, and that ‘cosmetic breeding’ was being used to bypass technically the likely infringement of plant variety rights, the UPOV 1978 was amended in 1991 (hereinafter UPOV 1991), which is the most recent regulations protecting new plant varieties in the world.<sup>3</sup> The Japanese government, though hesitant about their technical ability at the outset, finally decided not only to become a UPOV 1991 member in 1998, but also to further amend the then prevalent Seed and Seedlings Law to the Plant Variety Protection and Seed Act<sup>4</sup> to include all plant genera and species eligible for protection. This new law further broadened the protection scope to cover harvested and directly processed products of protected varieties conditionally, and to include those of the essentially derived varieties.<sup>5</sup>

<sup>3</sup> Yasunori Ebihara, *Plant Variety Protection System and Enforcement of Plant Variety Protection in Japan*, MAFF available at [http://www.apsaseed.org/images/lovelypics/Documents/Pre-Congress08/Japan\\_PVP%20Enforcement\\_08.pdf](http://www.apsaseed.org/images/lovelypics/Documents/Pre-Congress08/Japan_PVP%20Enforcement_08.pdf) (last visited on Mar. 17, 2012).

<sup>4</sup> The Plant Variety Protection and Seed Act 種苗法 (Act No. 83 of May 29, 1998, as amended by Act No. 49/2007; 平成十年五月二十九日法律第八十三号), available at <http://www.hinsyu.maff.go.jp/en/about/pvpsa.pdf> (last visited on Apr. 23, 2012).

<sup>5</sup> *Id.* art. 20. (Effects of the Breeder’s Right). It reads as follows:

(2) The holder of the breeder’s right for a registered variety shall also have an exclusive right in relation to varieties described in following items, the scope of which shall be the same as the right which the breeders of the said varieties would, if registered, be granted. In this case, the proviso of paragraph (1) of this Article shall apply *mutatis mutandis*:

(i) varieties which are bred by changing some of the expressions of the characteristics of the registered variety while retaining their essential expressions of the characteristics using such methods as selection of a mutant, backcrossing, transformation by genetic engineering or other methods specified by the Ordinance of the Ministry of Agriculture, Forestry and Fisheries and which are clearly distinguishable from the initial registered variety on the basis of the expressions of the characteristics; or (ii) varieties whose production requires the repeated use of the registered variety.

Furthermore, in order to deal with the time gap between the application date and the right granted date, a provisional protection mechanism introduced in the UPOV 1991 was incorporated into the 1998 amendments. However, as PVP infringement cases were being reported more frequently, the Japanese government felt the pain, and decided to combat infringement by reinforcing the law. This led to another amendment of the Plant Variety Protection and Seed Act. The resulting amendment was the first time the government had opted to try to reduce infringement by means of criminal sanctions. According to the amendment, an infringer could be fined up to one hundred million Japanese yen and be jailed for up to three years. Three million Japanese yen will be fined for this. Since 2005, partially because of the advancement of the DNA testing which provided a powerful tool in infringement assessment, the Japanese government's attitude towards protecting plant variety rights has changed. On the one hand, Japan extended the duration of protection from the original 20 years to 25 years for general plants, and from 25 years to 30 years for trees and perennial plants.<sup>6</sup> Additionally, the government has discussed increasing criminal sanctions. The Ministry of Agriculture, Fishery and Forestry ("MAFF") suggested that, in order to provide new variety breeders with better protection and to effect the PVP system, it had become necessary to harden criminal punishment.<sup>7</sup> This suggestion led to an amendment of the Plant Variety Protection and Seed Act in 2007: where the criminal sanctions against a legal person were raised to a historic record of three hundred million yen; and the penalty against a natural person were raised from the original three years to 10 years imprisonment with possible monetary sanctions of up to ten million yen. With regard to the preventive measures to be deployed, the Japanese government has incorporated clauses concerning infringed plant materials imported and exported into the Customs Law in 2003 and 2006, in order to implement substantial border control.<sup>8</sup> As the executing authority, the Japanese Customs and Tariff Bureau established a group of intellectual property officers under the customs clearance division to take charge of intellectual property rights

(3) Where a registered variety is bred by changing some of the expressions of the characteristics of a variety other than the registered variety while retaining its essential expressions of the characteristics using methods specified by the Ordinance of the Ministry of Agriculture, Forestry and Fisheries prescribed in item 1 of paragraph (2) of this Article, for the purpose of the application of paragraph (2) of this Article and paragraph (2) of Article 21, the words "the following items" in paragraph (2) of this Article and the words "each item of paragraph (2) of Article 20" shall be deemed to be replaced with the words "item 2" and the words "item 2 of paragraph (2) of Article 20," respectively.

<sup>6</sup> Takahashi Nobuyoshi, Reinforcement of Plant Breeder's Right-Amendment of Plant Variety Protection and Seed Act, available at <http://www.docin.com/p-107119684.html> (last visited on Apr. 23, 2012).

<sup>7</sup> See The Official Opinion, available at [http://www.maff.go.jp/j/law/bill/166/pdf/riyu\\_4.pdf](http://www.maff.go.jp/j/law/bill/166/pdf/riyu_4.pdf) (available only in Japanese) (last visited on Mar. 17, 2012).

<sup>8</sup> For import, see Japan Customs Law art. 69-11(9); the 2003 amendment of Customs Tariff Law. For export, see the 2006 amendment of Customs Law art 69-2(1).

investigation at the border. For plant varieties, in view of the technical complexity, their Customs formed an alliance with the Japanese patent office, the MAFF, as well as the Ministry of Economy, Trade and Industry (“METI”), to work together on suspected goods identification procedures.<sup>9</sup> In order for investigators at the border to execute their duty more efficiently, in 2008, more than 140 training courses were held nationwide to enrich knowledge of intellectual property rights and to enhance the professional skills required to protect those rights. These courses covered a wide range of topics from application for suspension, identification procedures, seizure records, types of rights subject to customs enforcement, to reporting procedures and contact details.<sup>10</sup> Brochures were also published and distributed as training materials among trainees.<sup>11</sup>

In addition, a special task force, the PVP G-men was organized to help coordinate different government agencies. The role of PVP G-men, as well as the service they provide, will be discussed in the following section.

### 1. The PVP G-men

The PVP G-men<sup>12</sup> system was set up in April 2004, as an *ad hoc* agency to help counseling and investigation of plant variety rights infringements. The office was located within the National Center of Seeds and Seedlings (“NCSS”), which has its headquarters in Tsukuba-shi, Ibaraki. It has eleven branch offices spread over the whole country.<sup>13</sup> Along with the growing number of consultation cases, the PVP G-men staff has grown from four to 20 people as of 2010. These G-men not only have professional knowledge about plant variety rights, but are also skilled in conducting technical testing for Distinctness, Uniformity and Stability (hereinafter DUS testing), which are requirements to be met before a plant variety right can be granted.<sup>14</sup> In addition to consultation and investigation, the PVP G-men also file reported cases and help secure

<sup>9</sup> See IPR Protection-The Role of Japan Customs: Report on IPR Enforcement in 2009, at 9, available at [http://www.customs.go.jp/mizugiwa/chiteki/pages/ipr\\_p.pdf](http://www.customs.go.jp/mizugiwa/chiteki/pages/ipr_p.pdf) (last visited on Oct. 12, 2011). See also *supra* note 3, at 33, 4-2-1 (Collaborating with Customs on border measures).

<sup>10</sup> *Id.* at 12, 3.1 (Training Seminars for Identifying Infringing Goods).

<sup>11</sup> *Id.* at 12, 3.2 (Outreach Activities).

<sup>12</sup> G-men got the name from the US movies to indicate government men. (This information is based on a private interview with the NCSS staff at Workshop on the Enforcement of Plant Breeders’ Rights under the UPOV Convention, Tokyo on November 15 - 17, 2006).

<sup>13</sup> These branch offices are Hokkaido-chuo station, Shiribeshi sub-station (under Hokkaido-chuo station), Iburi station, Tokachi station, Kamikita station, Tsumagoi station, Yatsugatake station, Nishi-nihon station, Unzen station, Kagoshima station and Okinawa station. See Organization, NCSS, available at [http://www.ncss.go.jp/main\\_e/org/org.html](http://www.ncss.go.jp/main_e/org/org.html) (last visited on Mar. 16, 2010).

<sup>14</sup> *Supra* note 4, art. 3 (Condition for Variety Registration). It reads as follows.

(1) Any person who has bred (meaning the fixation or determination of the expressions of the characteristics resulting from artificial or natural variation; the same shall apply hereinafter) a variety fully meeting the requirements set forth below or his/her successor in title (hereinafter breeder) may obtain a registration for the variety (hereinafter variety registration).

suspected goods seized for subsequent litigation. Although the consultation service is free of charge, the documenting and seizing suspected goods as well as testing the likelihood of infringement are subject to fees.

The PVP infringement investigation procedures are usually initiated by request of the right holder.<sup>15</sup> The PVP G-men will then suggest that the right holder take certain preliminary actions. If agreed, the PVP G-men may work together with the right holder to investigate and collect samples and document the evidence. When further investigation is warranted, the PVP G-men are able to provide services such as the DNA testing, *ex situ* planting and the DUS testing.<sup>16</sup> The right holder may request suggestions whether to settle the case or to pursue litigation with the aid of an attorney. Investigations are not only limited to domestic cases, but can also deal with international issues.<sup>17</sup> The following table illustrates the activities of the PVP G-men.

Table1: Activities of the PVP G-Men

PVP Right Holder		PVP G-Men
<b>Collect information regarding infringement</b>	Consultation →	Advice on counter actions
<b>Gather evidence</b>	request →	Make official report of assessment
<b>Seize infringed products</b>	request →	Deposit of infringed products
<b>Confirm infringement</b>	request →	DUS testing/DNA testing
<b>Negotiate</b>	request →	Advice on negotiation
<b>Initiate legal proceedings (licensing, settlement, litigation, border measures)</b>	request →	Referring to legal aid

Source: Ebihara, *supra* note 3, at 27 (Modified by the author).

(i) the variety is clearly distinguishable, by at least one of its expressions of the characteristics, from any other variety whose existence is a matter of common knowledge in Japan or in any foreign state at the time of the filing of the application for variety registration.

(ii) all of the plants of the variety at the same propagation stage are sufficiently similar in all of its expressions of the characteristics.

(iii) all of the expression of the characteristics of the variety remain unchanged after repeated propagation.

<sup>15</sup> *Supra* note 3, at 27.

<sup>16</sup> *Id.* See also NCSS, available at [http://www.ncss.go.jp/main\\_e/functions/PVP\\_G-menHP\(En\).htm](http://www.ncss.go.jp/main_e/functions/PVP_G-menHP(En).htm) (last visited on Apr. 23, 2012).

<sup>17</sup> *Id.* at 24.

According to the NCSS statistics, between April 1, 2005 to March 31, 2011, 192 cases of plant variety right infringement consultations were reported. Of these, 76 percent were domestic cases and 24 percent were international. 37 percent of the cases concerned herbaceous ornamental plants.<sup>18</sup> Table 2 shows the detailed statistics of other infringements.

Table 2: Infringement Cases by Category

Plant kinds	Percentage
Herbaceous ornamental plants	37 percent
Vegetables	18 percent
Fruit trees	15 percent
Ornamental trees	10 percent
Industrial crops	8 percent
Food crops	6 percent
Mushrooms	6 percent

Source: Compiled by the author, available at [http://www.ncss.go.jp/main\\_e/functions/PVP\\_G-menHP\(En\).htm](http://www.ncss.go.jp/main_e/functions/PVP_G-menHP(En).htm) (last visited on Apr. 23, 2012).

According to Article 69 of the Japan Customs Law, when a right holder discovers the import/export of plant materials suspected of infringement, the right holder can opt to apply to the customs office individually or through the aid of PVP G-men for a preliminary injunction in order to suspend importation or exportation of the allegedly infringing goods.<sup>19</sup> After receiving a valid application, the customs office have to decide within a month whether to issue such an administrative order. The aspects to be considered are whether the applicant is the right holder, the validity of relevant certificates, the veracity of the claim, any supporting evidence, and whether the accused goods are identifiable or not.<sup>20</sup> The suspension can be as long as two years and is extendable. If the order is not granted, eventually, the applicant may appeal to a higher administrative authority within two months.<sup>21</sup>

<sup>18</sup> NCSS, *supra* note 16.

<sup>19</sup> See Japan Customs Law arts. 69-4 & 69-13; the Order for Enforcement of the Customs Law arts. 62-13 & 62-17 for export and import, respectively.

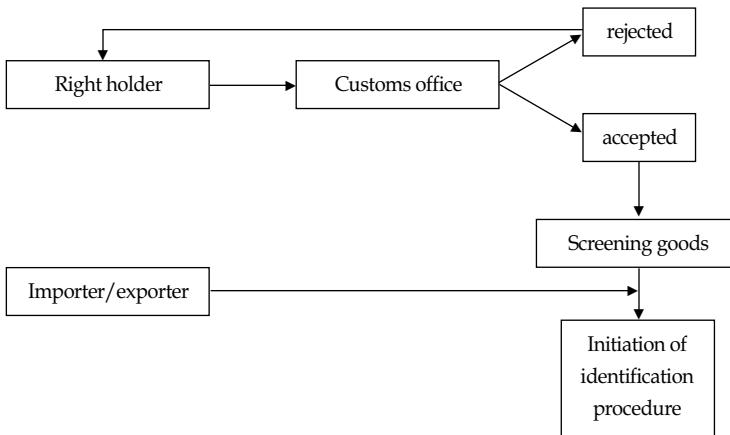
<sup>20</sup> Finance Japan, *Ad hoc* Committee, available at [http://www.customs.go.jp/mizugiwa/chiteki/pages/h\\_18e-flo.htm](http://www.customs.go.jp/mizugiwa/chiteki/pages/h_18e-flo.htm) (available only in Japanese) (last visited on July 1, 2011).

<sup>21</sup> See The results of non-acceptance, will I be contacted or how the acceptance of an injunction petition? 差止申立ての受理又は不受理の結果についてはどのように連絡されるのですか? available at [http://www.customs.go.jp/mizugiwa/chiteki/pages/qa\\_001.htm#06 Q6&Q7](http://www.customs.go.jp/mizugiwa/chiteki/pages/qa_001.htm#06 Q6&Q7) (available only in Japanese) (last visited on Apr. 24, 2012).

## 2. Identification

After the application has been filed, the customs intellectual property officers start a visual examination of the goods sample to determine whether a subsequent identification letter will be issued to notify the right holder in the beginning of the identification procedure.<sup>22</sup> However, once the notification letter has been sent, the two sides will be given up to ten days (or three days for perishable goods) to submit opinions or evidence in order to help identify the goods in question. In some cases, right holders can even demand the opportunity to examine the goods being suspended in person.<sup>23</sup> The following chart illustrates the application procedure.

Chart 1: Import/Export Suspension-STEP 1



Source: Compiled by the author.

Because identifying plant varieties requires sophisticated technological knowledge, it appears very difficult for custom officers to spot infringed goods at first sight. Therefore, a detailed yet feasible mechanism to help identification is necessary. Although the Japanese Customs law empowers customs officers to suspend the suspected infringing products,<sup>24</sup> the suspension can only be executed subject to the DNA testing or when a phenotype comparison result is confirmed. If the identification work cannot be

<sup>22</sup> Japan Customs Law art. 69-12, ¶ 1; The Order for Enforcement of the Customs Law art. 62-16.

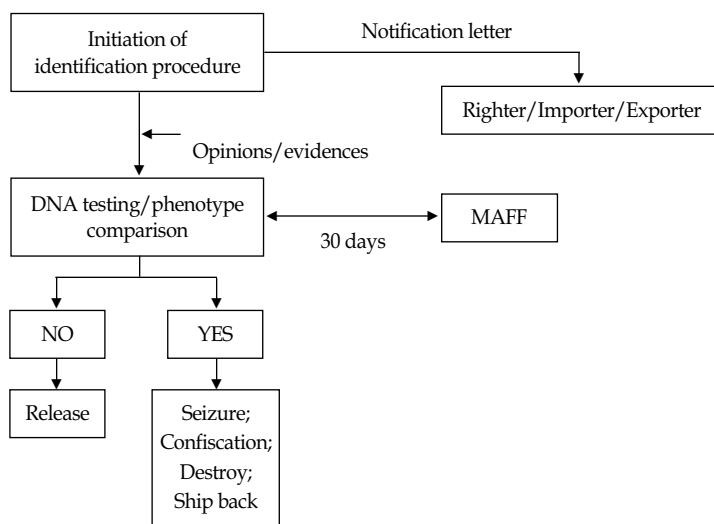
<sup>23</sup> Chun-chi Chen, *How to Implement Plant Variety Right Protection System: An Introduction to the Enforcement of Plant Variety Right Infringement in Japan*, 59 SEED SCIENCE AND TECHNIQUE (July 2007), at 3, available at [http://tss.coa.gov.tw/files/web\\_articles\\_files/tss/960/389.pdf](http://tss.coa.gov.tw/files/web_articles_files/tss/960/389.pdf) (available only in Chinese) (last visited on Apr. 24, 2012).

<sup>24</sup> Japan Customs Law art. 69-3(1) for export identification; *Id.* art. 69-12(1) for import identification.



completed by customs alone, the head of the customs office may request for help from the MAFF who must respond within 30 days.<sup>25</sup> Chart 2 shows this detailed procedure.

Chart 2: Import/Export Suspension-STEP 2 Identification



Source: Compiled by the author.

### 3. Security Assurance

According to Article 69-6(1) and Article 69-15(1), a security deposit bond may be required in case of damage caused by import or export suspensions. The customs office will send out an invoice for a security deposit before the identification procedures are initiated. The applicant has to clear the bill within 10 days (three days for perishable goods) before identification can proceed.<sup>26</sup> Otherwise, the government will rescind the application, release seized goods, and rights holder may be subject to a possible damage award by the property owners. Calculation of the security deposit bond is subject to factors such as loss of profits during the seizure period, storage fees, deterioration of perishable goods, and substantial damage caused by the seizure, etc.<sup>27</sup>

<sup>25</sup> Finance Japan, *Identification Procedure*, available at [http://www.customs.go.jp/mizugiwa/chiteki/pages/c\\_001.htm](http://www.customs.go.jp/mizugiwa/chiteki/pages/c_001.htm) (available only in Japanese) (last visited on Mar. 11, 2012).

<sup>26</sup> Japan Customs Law art. 69-6(1) for export; *id.* art. 69-15(1) for import.

<sup>27</sup> Finance Japan, *Security Assurance & Deposit System*, available at [http://www.customs.go.jp/mizugiwa/chiteki/pages/c\\_002.htm](http://www.customs.go.jp/mizugiwa/chiteki/pages/c_002.htm) (last visited on Mar. 11, 2012).

#### 4. Management of Seized Goods

When infringement is confirmed, the infringed goods can be ordered to be shipped back to their place of departure, or the authority can confiscate the goods or destroy them before passing the border. Otherwise, the customs office cannot delay the detention and has to release the suspended products as quickly as possible at the conclusion of the proceedings.<sup>28</sup>

#### 5. Infringement Cases

Although the PVP infringement cases were reported early in 2001, only since 2005 have the official statistics started to show a significant rise in the number of cases. During 2001 and 2002, a variety of white bean had been reportedly circulated in the Japanese market. After the DNA testing, it was confirmed that this white bean was identical to a Hokkaido bred protected variety. The investigation further discovered that propagating material of the registered Hokkaido variety had been smuggled to China for mass production. The harvests were then shipped back to Japan under a different name and were being circulated in the domestic market.<sup>29</sup> After the right holder sent out warnings to the importer, the importer then took the self-disciplinary measure to cease importation of said variety from China. A similar scenario happened with the red bean, which was first brought to China for production and then exported back to Japan for sale at a much lower price.<sup>30</sup> A new variety of strawberry, 'red pearl' was licensed to be grown and sold in some areas of South Korea.<sup>31</sup> However, the red strawberry variety was later mass-propagated beyond its license and the harvest was then exported back to Japan. Due to fear of litigation, the importer finally settled and stopped importing from South Korea. Other notable cases such as a Japanese cherry taken to Australia, a carnation and a chrysanthemum taken to China have not raised such alerts within the Japanese government.<sup>32</sup>

In a landmark case involving rush grass, the Japanese government imposed criminal sanctions against the infringing party. The case was brought to light in 2003 when a Japanese farmer from Kumamoto Prefecture bought some rush grass imported from China and sent it for variety identification. The DNA test result showed that the tested

<sup>28</sup> Japan Customs Law art. 69-20. See also The Order for Enforcement of the Customs Law arts. 62-31 & 62-32.

<sup>29</sup> See MAFF Report on Current Situation of Agricultural Products and Food Industry IP Creation, Application and Infringement, available at [http://www.maff.go.jp/j/kanbo/tizai/brand/b\\_senryaku/expert\\_meeting/01/pdf/data04.pdf](http://www.maff.go.jp/j/kanbo/tizai/brand/b_senryaku/expert_meeting/01/pdf/data04.pdf) (available only in Japanese) (last visited on Apr. 23, 2012).

<sup>30</sup> *Id.*

<sup>31</sup> Harakenzo World Patent & Trademark Office, Plant Registration Support Station: Introduction of Contents, available at <http://www.intellelution.com/en/plant/jpn.html> (last visited on Apr. 23, 2012).

<sup>32</sup> For details on the *Chrysanthemum* case, see *supra* note 29.

variety was identical to a protected variety 'hino green' which is the crucial raw material for making Japanese 'tatami' mats.<sup>33</sup> The farmers group then sought assistance from the Kumamoto Prefecture administration to invoke the Customs Law to commence border measures against such importation from China. In March 2005, Yashiro Nagasaki Customs confiscated 8.8 tons of 'hino green' at the Yatsushiro Port; the importer was prosecuted at Kumamoto District Public Prosecutors Office. The court eventually ruled that the president of the trade company be fined one million yen and serve one year in prison, with over four years of probation.<sup>34</sup>

### 6. Policy Survey

In 2006, in order to investigate the status of plant variety protection in Japan, the MAFF funded the Society for Techno-innovation of Agriculture, Forestry and Fisheries ("STAFF") to conduct a survey.<sup>35</sup> According to their results, more than one third of the interviewees of the 536 questionnaires collected responded that they had experienced plant variety infringement.<sup>36</sup> Of these cases, 75 percent were domestic, with the common feature of unauthorized propagation and marketing of propagating material or harvested material within Japan. The remaining cases were comprised of unauthorized marketing of the propagating material and/or harvested material in other countries (approximately 18 percent), unauthorized importation (approximately 13 percent), and exportation to third countries (approximately 3 percent).<sup>37</sup> When asked how the respondents knew about the infringement, 75 percent responded that they usually receive notice from an authorized farmer. 70 percent responded that they obtained the information from a wholesale market or retail dealers.<sup>38</sup> Self-investigation also accounted for 60 percent of the cases. Other information sources included the internet, magazines, and other media. Surprisingly when asked how to deal with the infringement case, more than half of the respondents opted to do nothing (approximately 56 percent); some opted for consultation with lawyers (approximately 12 percent), slightly fewer opted for resorting to government support (approximately 11

<sup>33</sup> For details on the Japanese rush grass case, see Development of a new cultivar-discrimination method based on DNA polymorphism in a vegetatively propagated crop, OpenAgris, available at <http://agris.fao.org/openagris/search.do?recordID=JP2007006839> (last visited on Apr. 23, 2012).

<sup>34</sup> Oda Techno International Patent Attorneys, IP Section on Agriculture, Forestry and Fishery 農林水産知財専科 available at <http://www.ondatechno.com/nourin/faq/4.html> (available only in Japanese) (last visited on Apr. 23, 2012). See also *supra* note 29.

<sup>35</sup> This is the most updated survey result as no similar one has been carried out since 2006.

<sup>36</sup> *Supra* note 3, at 9.

<sup>37</sup> *Id.* at 11.

<sup>38</sup> *Id.*

percent).<sup>39</sup> Those who consulted with the PVP G-men accounted for less than 7 percent of all respondents. In terms of legal action, 40 percent of respondents claimed they would take no action, 23 percent would initiate negotiations, 20 percent would send cease and desist letters, and only five percent would resolve the dispute in court.<sup>40</sup> Although government support is not often sought, the great majority still felt that the government should do more to help identify suspected varieties and collect infringement information. The PVP G-men added four staff members in 2005 and 12 more in 2008, in order to improve services to right holders.<sup>41</sup>

## B. Taiwan

Article 24, paragraph 1 of Taiwan's Plant Variety and Plant Seed Act<sup>42</sup> provides that a variety right holder has the right to exclude others from production, propagation, conditioning for the purpose of propagation, offering for sale, selling or otherwise marketing, importing or exporting, and holding for any of the above purposes.<sup>43</sup> Paragraphs 2 and 3 further expand these rights to cover harvested material obtained through the use of plant seeds of such plant varieties, and products obtained directly through use of the harvested material, if right holders have not had a reasonable opportunity to exercise their rights previously. Additionally, pursuant to Article 26, acts of exporting protected plants to a country that does not protect the plant genera or species to which the plant variety belongs are subject to the permission of the right holders, except in cases where the purpose of the exportation is for final consumption.<sup>44</sup>

<sup>39</sup> *Id.*

<sup>40</sup> *Id.*

<sup>41</sup> Currently, PVP G-Men staffed nation-wide as follows: Headquarter (5 people); Hokkaido-chuo station (2 people); kamikita station (2 people); unzen station (2 people); Nishi-Nihon station (3 people); Okinawa station (2 people). See *supra* note 3, at 22, available at [http://www.apsaseed.org/images/lovelypics/Documents/Pre-Congress08/Japan\\_PVP%20Enforcement\\_08.pdf](http://www.apsaseed.org/images/lovelypics/Documents/Pre-Congress08/Japan_PVP%20Enforcement_08.pdf) (last visited on Mar. 17, 2012).

<sup>42</sup> The Plant Varieties and Plant Seedlings Act of Taiwan 植物品種及種苗法, available at <http://law.moj.gov.tw/Eng/LawClass/LawAll.aspx?PCode=M0030024> (last visited on Apr. 23, 2012).

<sup>43</sup> *Id.* art 24. It reads: "The holder of a plant variety right shall have the exclusive right to preclude others from engaging, without the consent of the holder, in the following acts with respect to plant seeds to which the holder has the plant variety right: 1. production or propagation; 2. conditioning for the purpose of propagation; 3. offering for sale; 4. selling or otherwise marketing; 5. importing or exporting; or 6. holding for any of the purposes in the preceding five subparagraphs."

<sup>44</sup> *Id.* art. 26. It reads: "The protection of a plant variety right shall not extend to any of the acts in the following subparagraphs: 1. acts by an individual for non-profit purposes; 2. acts for experimental or research purposes; 3. acts for the purpose of breeding other varieties, but not including acts for the purpose of breeding dependent varieties set forth in Paragraph 1 of the preceding Article; 4. acts by farmers of keeping, for the farmer's own use, plant seeds of a variety protected by a plant variety right or of the harvested material obtained from plant seeds of dependent varieties as set forth in subparagraphs 1 & 2 of Paragraph 1 of the preceding Article; 5. acts, at a farmer's request and for the purpose of providing the farmer with propagating material, of engaging in the conditioning and nursing

In other words, although Article 24 grants the right holder consent to export the protected plants, Article 26 requires additional condition to be met when a potential exporter intends to export products that have been legally purchased. Only when the purpose of exporting to a country which does not protect the plant genera or species to which the plant variety belongs, and such export is for final consumption, no further consent is needed. Otherwise, further agreement should be sought before exportation.<sup>45</sup> This regulation is basically in line with Article 16(1) (ii) of the UPOV 1991. Although the import/export of genetically modified plants is not allowed unless otherwise permitted,<sup>46</sup> the current policy is generally liberal regarding the import and export of plant seeds, their harvested material, and products directly from their harvested material.<sup>47</sup> This makes it unlikely that both Articles 24 and 26 of the Plant Variety and Plant Seed Act will be implemented.

First, the issue of the PVP is not fully understood or supported by the general public. Although the Council of Agriculture is the central competent authority with regard to the Plant Varieties and Plant Seedlings Act, it has been heavily criticized both for spending taxpayer money on research and claiming royalty payments for using the research results from farmers. Admittedly, most of the liable farmers receive long-term governmental subsidy for purposes of social security.<sup>48</sup>

of harvested material obtained from the propagating material of a variety protected by a plant variety right, or of its dependent variety; 6. acts of domestically selling or otherwise circulating any material of a variety protected by a plant variety right, or its dependent variety, as undertaken voluntarily by or with the consent of the holder of the plant variety right, but not including acts of further propagation of such protected variety; or 7. acts with respect to any material derived from the material set forth in the preceding subparagraph, but not including acts of further propagation of such protected variety. Subparagraphs 4 & 5 of the preceding Paragraph shall apply only to plant species published by the central competent authority for the purposes of ensuring food safety. The 'material' as referred to in Paragraph 1 shall mean any propagating material, any harvested material, and any products made directly from the harvested material, of a plant variety. Such harvested material shall include entire plants or parts of plants. Acts under subparagraphs 6 & 7 of Paragraph 1 shall not include acts of exporting propagating material of such protected variety to a country that does not protect the plant genus or species to which the plant variety belongs, provided that this provision shall not apply where the purpose is for final consumption."

<sup>45</sup> *Id.* art. 26, ¶ 2.

<sup>46</sup> *Id.* art. 52.

<sup>47</sup> *Id.* art. 51, ¶ 1.

<sup>48</sup> In addition to apply for direct and indirect subsidies on electricity, water, and capacity building from the central government and local government, elderly farmers aged over 65 years old are entitled to have monthly allowance of 7000 NT dollars for life. See Article 4 of the Interim Regulation of Elderly Farmers Welfare 老年農民福利津貼暫行條例, available at <http://law.moj.gov.tw/LawClass/LawAll.aspx?PCode=M0090015> (available only in Chinese) (last visited on Apr. 24, 2012). Health Insurance is also subsidized for farmers. For the regulation, Bureau of Labor Insurance, Insurance Benefits, available at <http://www.bli.gov.tw/en/sub.aspx?a=%2bZrQZWKLnVA%3d> (last visited on Apr. 24, 2012). Recently Yun-lin county has launched a "Stable Development Fund for Agriculture" on top of the current benefits for farmers. For details, see Stable Development Fund for Agriculture 農業發展安定基金, available at <http://ifarm430.yunlin.gov.tw/index.asp> (available only in Chinese) (last visited on Apr. 24, 2012).

Second, even though the drafting of the Plant Varieties and Plant Seedlings Act in Taiwan followed the template set by the UPOV 1991, plants eligible for variety protection are not without restriction, as laid down at Article 4 of the Act which stipulates that: "Seed plants, ferns, and other plants designated as botanical taxons as governed by this Act shall be declared by the central competent authority." Therefore, for those plants that are not published in the official documents of the central competent authority, the possibility of protection is inapplicable, so it naturally follows that there will be no mention of import/export protection, either.

Third, although the governing law regulates not only plant intellectual property rights protection, but also seeds and seedlings management, there are neither detailed stipulations nor enacting rules concerning how to put border measures into practice. The only law that relates directly to international trade, the Foreign Trade Act sets out principles for import/export management. Both the Plant Varieties and Plant Seedlings Act and the Foreign Trade Act merely set out the general principles for the PVP plant materials to be regulated. Concerning botanical taxons, rules regarding the regulation of quantities, geographic areas, time periods, importation and exportation, harvested material, and derivative products have yet to be published after the central competent authority consulted with the relevant authorities.<sup>49</sup> Despite the fact that the PVSA has laid the foundation for a PVP system, there is still nothing to build upon; the current situation seems a legal crisis in the making because the legal vacuum provides a safe haven for illegal trade.<sup>50</sup>

Finally, in Taiwan, although the illegal import/export of plant variety materials can be subject to punishments by the Foreign Trade Act, the infringement of plant variety rights is not considered a criminal offense and no criminal sanctions are imposed. Could the PVP border measures in Taiwan be ineffective because the governing law lacks penal provisions? Originally, Article 41 of the Plant Seedlings Act of 1988 stipulated that anyone who promotes or sells a protected variety without authorization will be sentenced for up to two years in prison, detention and/or fined up to 20,000 NT dollars; a person who uses a protected variety without authorization could be sentenced to six months in prison, detention and/or fined up to 5,000 NT dollars. In 2000, subsequent amendments increased fines to 60,000 NT dollars and 15,000 NT dollars,

<sup>49</sup> *Supra* note 42, art. 51, ¶ 2.

<sup>50</sup> Hsiang-chun Cheng, Agricultural & Fishery Technology are utilized in China illegally, COA: Both Sides of the Strait Signed an IP Agreement, available at [http://www.abrd.cpc.tw/Abrd/Web/CMSWebNewsShow01.aspx?KMRelaLinkGuid=ed5eb896-42ca-4066-a5fa-1b69a23a7974&KMCodeID=UK&Target=\\_parent](http://www.abrd.cpc.tw/Abrd/Web/CMSWebNewsShow01.aspx?KMRelaLinkGuid=ed5eb896-42ca-4066-a5fa-1b69a23a7974&KMCodeID=UK&Target=_parent) (available only in Chinese) (last visited on Apr. 23, 2012).

respectively.<sup>51</sup> However, in order to follow international trends, the legislature intended to de-regulate the criminal sanctions in the patent system. Should any infringement occur, it is only subject to civil remedies. Given the prohibition on plant patents in Taiwan, the Plant Seedlings Act of 1988 was promulgated to provide alternative protection for new plant varieties. The de-regulation rationale of the patent system was naturally adopted by the 2004 amendment of the Plant Seedlings Act.<sup>52</sup> As a result of all the complications in lawmaking and addressing the issue of the PVP border measures and related authorities such as Council of Agriculture, the Ministry of Finance and the Ministry of Justice, all appear to turn a blind eye infringement and smuggling issues. Thus far, only the provisions found in the Foreign Trade Act seem applicable in dealing with transboundary movement of plant materials in violation of plant variety rights.

### 3. The Foreign Trade Act of Taiwan

Article 2 of the Foreign Trade Act<sup>53</sup> defines ‘foreign trade’ as the “actions of exporting/importing goods and related activities.” Paragraph 2 of the same Article further refers to goods “which rights attached thereto”; these can be trademarks, patent rights, copyrights, and any other intellectual property rights protected by the laws enacted. In this regard, the interpretation of the said paragraph in terms of intellectual property right does not exclude plant variety rights as the law has been promulgated for decades. According to the Act, cross-border transportation shall be restricted either when certain plant seeds subject to import/export restrictions under international treaties or trade agreements are involved, or when public safety, sanitation, environmental protection, ecological protection, or policy needs are at risk.<sup>54</sup> With reference to commodities classification code 441 of Taiwan, unless specially permitted, the following plant materials are not to be exported: banana corms, suckers and tissue culture seedlings, unrooted cuttings of sugar-cane, tea tree branches or seedlings, guava branches, guava trees, certain mushroom spawn, certain bamboo planting stock, rice in

<sup>51</sup> See Chinese Legislations Database, available at <http://lis.ly.gov.tw/lgcgi/lglaw> (available only in Chinese) (last visited on Mar. 17, 2012).

<sup>52</sup> The Plant Seedlings Act of 1988 art. 41. It reads: “Anyone who promotes or sells protected variety without authorization, will be sentenced for up to 2 years in prison, detention and/or with fine up to 20,000 NT dollars. To use without authorization, 6 months in prison, detention and/or with up to 5,000 NT dollars. The subsequent amendments of 2000 raised the fine to 60,000 NT dollars and 15,000 NT dollars respectively.”

<sup>53</sup> See Foreign Trade Act of Taiwan 貿易法, available at <http://law.moj.gov.tw/Eng/LawClass/LawAll.aspx?PCode=J0090004> (last visited on Apr. 23, 2012).

<sup>54</sup> *Id.* art. 11.

the husk (paddy or rough), husked (brown) rice, glutinous rice, other semi-milled or wholly milled rice (whether or not polished or glazed), broken rice, vegetable soybeans seeds (whether or not broken, hundred seeds weight over 30grams), pachira fruits and sugar cane.<sup>55</sup> Furthermore, suspected goods may be seized and the responsible persons shall be liable for civil and criminal sanctions for acts falling into one of the following categories:<sup>56</sup>

1. Infringement of any intellectual property rights protected by the laws of any country;
2. Failing to label, or untruthfully labeling the source identification or the country of origin as required;
3. Failing to declare, or untruthfully declaring the source identification code or trademarks;
4. Using false export/import permits, or false relevant trade permits/certificates;
5. Failing to perform business contracts honestly or in good faith;
6. Disturbing trade order through undue means; and
7. Committing any other acts damaging the goodwill of this country or creating trade barriers.

Article 28(5) of the Foreign Trade Act stipulates that for committing any of the prohibited acts prescribed above, the Bureau of Foreign Trade may issue a warning or impose an administrative fine of not less than 30,000 NT dollars, but not more than 300,000 NT dollars. Additionally, the right to import and export may be suspended for not less than one month, but not more than one year.

However, plant materials can be exported for diplomatic purposes. According to Article 3 of the Guidelines on Export of Plant Seedlings for Diplomatic Purposes, plants of no public use or variety right protection over the preceding five years are not allowed to be exported.<sup>57</sup> In addition, the Council of Agriculture also has to consider issues such as plant breeding, impact on local industry and market, and competition in the international market before permission can be granted.<sup>58</sup> Although the guidelines are set to facilitate forging diplomatic connections with friendly countries, there is nothing to prevent plant material from either being exported to a third country for mass-

<sup>55</sup> Bureau of Foreign Trade, Classification of Commodities and Regulations: Import and Export Regulations, available at <https://fbfh.trade.gov.tw/rich/text/indexfhe.asp> (last visited on Mar. 17, 2012).

<sup>56</sup> *Supra* note 53, art. 17.

<sup>57</sup> Kuo-chi Lee, Brief Introduction of the Guidelines on Export of Plant Seedlings for Diplomatic Purposes 外交所需植物品種之種苗輸出管理要點簡介, available at <http://www.coa.gov.tw/view.php?catid=12034> (available only in Chinese) (last visited on Mar. 17, 2012).

<sup>58</sup> *Id.*



propagation, or later exporting the propagating materials and harvested products back to Taiwan. Currently there are no official statistics tracking whether the exported plant materials are contained within domestic planting or not. No records are provided regarding the selling of harvested products to the supplying country, the circulation of illegal propagating materials or harvested products, nor the products derived directly from the harvested materials in the global market.

China, with its booming economy and massive arable land, attracts diverse plants regardless of their origin. The harvested products are re-exported to the world market regardless of whether IP rights are being infringed.<sup>59</sup> This situation poses considerable threats to neighboring countries such as Japan and Taiwan and has impacted their domestic economies.<sup>60</sup> In response, Japan has been reinforcing the protection of plant variety rights by tightening its laws, while, in sharp contrast, Taiwan is opting to relax its current regulations.

## 4. Suggestions

A single ministry cannot set up an effective PVP border measure system as the issues involve technical identification, judicial execution, and administrative detention. Nor can a single country because once the infringed goods are outside of its jurisdiction, international logistic channels enable the infringement to spread all over the world market. In order to effectively minimizing IP infringements, work must be done both at the domestic and the international level.

### A. At the Domestic Level

First, in order manage IP infringement on a world-wide scale, the WTO TRIPs Agreement specifically addressed the importance of border measures<sup>61</sup> in Articles 51-60, which cover various border measure issues, such as authority, application, suspension, right of information and inspection, security assurance, *ex officio* action, and remedies. Article 51 seems to focus mainly on trademark and copyright issues.<sup>62</sup> Although the

<sup>59</sup> For infringement situation in Japan, see *supra* note 34. For Taiwanese situation, see Ming-min Wu, *KMT and the Communist Party dodges to make Agriculture in Taiwan a bubble by means of cross-strait reciprocity*, available at <http://web.nchu.edu.tw/~mmwu/cp/91-101.pdf> (available only in Chinese) (last visited on Apr. 23, 2012).

<sup>60</sup> See *supra* note 1.

<sup>61</sup> TRIPs Agreement arts. 51-60 (Section 4: Special Requirements Related to Border Measures).

<sup>62</sup> *Id.* art. 51. It (Suspension of Release by Customs Authorities) reads: "Members shall, in conformity with the

TRIPs Agreement only sets the minimal standards for member States to abide by, as laid down at Article 1,<sup>63</sup> a customary yet stricter regulation is not always in violation of obligation to the Agreement. As to whether plant variety rights are acknowledged by Article 27.3 (b) of the TRIPs Agreement as the *sui generis* and therefore subject to the border measure rules is beyond the question.<sup>64</sup> Therefore, with reference to the Japanese experience, attempts to advance the current PVP system in Taiwan will require firstly the promotion of awareness of plant intellectual property right protection. Government policy announcements, educational conferences, training workshops, media disclosure, and school education are all possible means to deliver the PVP knowledge to the general public.

Second, to broaden the scope of plants eligible for the PVP system, the Council of Agriculture should be liberal with any recommendations made by breeders concerning candidate plants for protection in pursuance to Article 7 of the Enforcement Rules.<sup>65</sup>

Third, existing law must be substantially amended. The Taiwanese government should follow the precedents of trademark and copyright laws and incorporate specific provisions for border measures into the Plant Varieties and Plant Seedlings Law so that provisions can be made to implement and enforce these rights.

Fourth, although the issue of criminal sanctions has been discussed for many years, under the current regime, it is under the radar. However, there are now no constructive alternatives. It is prudent to take into consideration the differences between living organisms and industrial products in order to have a sensible debate on the feasibility of

provisions set out below, adopt procedures to enable a right holder, who has valid grounds for suspecting that the importation of counterfeit trademark or pirated copyright goods may take place, to lodge an application in writing with competent authorities, administrative or judicial, for the suspension by the customs authorities of the release into free circulation of such goods. Members may enable such an application to be made in respect of goods which involve other infringements of intellectual property rights, provided that the requirements of this Section are met. Members may also provide for corresponding procedures concerning the suspension by the customs authorities of the release of infringing goods destined for exportation from their territories.”

<sup>63</sup> *Id.* art. 1. It reads: “Members may, but shall not be obliged to implement in their law more extensive protection than is required by this Agreement.”

<sup>64</sup> *Id.* art. 27.3(b). It reads: “Members may also exclude from patentability: (b) plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof.”

<sup>65</sup> The Enforcement Rules for the Plant Variety and Plant Seed Act art. 7. It reads: “With regard to plant varieties not announced in accordance with Article 4 of this Act, concerned party may clearly state the following items and recommend a public announcement to the central competent authority:

1. name and residence of the recommender. The name, office location or place of business, and name and contact telephone of the legal representative or manager if the recommender is a juristic person or organization;
2. the plant species/genus and its scientific name;
3. the reasons for the recommended public announcement;
4. a trait table for the main cultivated varieties of that species/genus;
5. propagation methods;
6. cultivation methods;
7. seal or signature of the recommending person; and
8. date of submission.

criminal penalty. The Japanese system has already demonstrated the positive consequence of the incorporation of criminal punishment into the Plant Varieties and Plant Seedlings Act. Such a system in Taiwan would help make binding rules on border measures to empower customs officials with coercive power to investigate and seize likely infringed plant materials. As evidenced by the counterfeit and copyright investigation teams,<sup>66</sup> criminal provisions help the government agencies cooperate most efficiently to tackle plant variety protection issues.<sup>67</sup>

Fifth, the notes in the Guidelines on Export of Plant Seedlings for Diplomatic Purposes need to be reviewed critically, taking into account sensible consideration of the infringements caused indirectly by way of third countries.<sup>68</sup> Moreover, the value of providing plant varieties for diplomatic purposes must be weighed against the possible long-term consequences that such actions may lead to IP infringement.

Finally, Taiwan could learn from Japan and set up a PVP G-men system to provide plant variety protection consultation and help in infringement investigations. This would not only relieve the burden of proof on the right holder, but would also advance the clinical DUS testing skills. The government should seriously consider further study on the feasibility of such a system.

## B. At the International Level

In 2010, Taiwan signed a cooperation agreement with China related to the IPR protection. It has become crucial to adopt a high level of protection because of Taiwan's cross-Strait agricultural trade and poor administrative efficiency of China.<sup>69</sup> The Japanese experience has shown that the government has not only improved the whole national system either by regulatory reform or policy guidance, but it has also influenced the ASEAN+3 member States in establishing the East Asia Plant Variety

<sup>66</sup> See Statistics of Crackdown on IP Infringement by Police Authorities under the National Police Administration (2009), available at [http://www.tipo.gov.tw/en/AllInOne\\_Show.aspx?path=2569&guid=9bc5143c-2303-4164-b17f-8c06724600a&lang=en-us](http://www.tipo.gov.tw/en/AllInOne_Show.aspx?path=2569&guid=9bc5143c-2303-4164-b17f-8c06724600a&lang=en-us) (last visited on Apr. 24, 2012).

<sup>67</sup> Trademark Act art. 97. It reads: "Any person who knowingly sells or, due to an intention to sell, possesses, displays, exports, or imports the goods supplied by another person referred to in the preceding two articles, shall be imprisoned not more than one year, or detained, and/or fined not more than NT\$50,000; the same shall apply if said act is done by electronic media or on the Internet. See also Copyright Act Chapter VII (Penal Provisions), available at <http://law.moj.gov.tw/Eng/LawClass/LawAll.aspx?PCode=J0070017> (last visited on Apr. 23, 2012).

<sup>68</sup> See Guidelines on Export of Plant Seedlings for Diplomatic Purposes, available at <http://law.coa.gov.tw/glrnewsout/LawContentDetails.aspx?id=FL040742&KeyWordHL=&StyleType=1> (available only in Chinese) (last visited on Apr. 23, 2012).

<sup>69</sup> *IP agreement-exemption is different between China and Taiwan, there is no Taiwanese variety under Chinese protection*, THE LIBERTY TIMES, available at <http://www.libertytimes.com.tw/2011/new/jun/28/today-fo2.htm> (last visited on Apr. 23, 2012).

Protection Forum.<sup>70</sup> This Forum was set up in November 2007 to facilitate the creation of new varieties of plants and international trade, to motivate the utilization of the intellectual property rights, to develop diversified businesses for producing seeds and seedlings, and to further develop agriculture, forestry, fisheries and food industries in the East Asian region.<sup>71</sup> There are altogether 13 members, which include Brunei Darussalam, Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, The Philippines, Republic of Korea, Singapore, Thailand and Vietnam. It is unfortunate that Taiwan has neither been invited to the Forum, nor has it ever participated in any of its activities. Although Taiwan has always been under the cross-strait political standoff, it has joined the APEC and the WTO in 1991 and 2002, respectively. Moreover, the World Vegetable Center (formerly known as Asian Vegetable Research and Development Center: “AVRDC”) has been headquartered in Taiwan for forty years and maintains the world’s largest yet diverse collection of vegetable germplasm,<sup>72</sup> containing more than 59,294 accessions collected from 155 countries.<sup>73</sup> Therefore, it is the duty of the current administration to implement plant variety protection urgently. Sending representatives to attend conference and forums, seeking opportunity for substantial cooperation, *ex situ* training, exchange of technical knowledge and sharing of professional skills would be feasible strategies to improve the present situation.

## 5. Conclusion

This paper has analyzed the legislative history of plant variety right protection systems in Japan and Taiwan, including their major differences in terms of substantive law and border measure enforcement. The Japanese government has reinforced the Plant Variety Protection and Seed Act by means of increasing the duration and scope of the protection level. It has also associated enforcement laws and links to other relevant laws, notably the Customs Law of Japan, which have been consolidated and forged with amendments

<sup>70</sup> *Supra* note 3, at 40.

<sup>71</sup> For details, see Eapvp-Forum, available at [http://www.eapvp-forum.org/library/presentation/pdf/20100512\\_01/d1\\_02\\_04.pdf](http://www.eapvp-forum.org/library/presentation/pdf/20100512_01/d1_02_04.pdf) (last visited on Mar. 17, 2012).

<sup>72</sup> See Food and Agriculture Organization of the United Nations (“FAO”)’s Commission on Genetic Resources for Food and Agriculture, 2009 Draft Second Report on the State of the World’s Plant Genetic Resources for Food and Agriculture, at 60, available at <ftp://ftp.fao.org/docrep/fao/meeting/017/ak528e.pdf> (last visited on Apr. 24, 2012). See also AVRDC-World Vegetable Center, available at <http://www.avrdc.org/index.php?id=13> (last visited on Apr. 23, 2012).

<sup>73</sup> *Id.*

regarding border measures in order to promote effective new plant variety protection. In contrast, the current situation concerning border measures in Taiwan seems, by and large, to follow the general provisions in the Foreign Trade Act of Taiwan. Although there are relevant provisions on border measures in the Plant Seed and Seedling Act, the enforcement mechanism falls short. Because in-depth knowledge about plant intellectual property rights protection is underdeveloped, Taiwan has a long way to go in order to catch up with the international trend. Much of this can be attributed to inefficient administration and passive international engagement.

Taiwan was a colony of Japan for 50 years. Under the Japanese rule, the colonizing regime introduced new technology, which laid the foundation for advanced agriculture in the island because Japan had wanted to use Taiwan to supply food for the Japanese monarchy. A century has now passed, and though from a similar foundation and encountering similar challenges from China, Japan and Taiwan have evolved in very different directions. Japan has opted to tighten domestic control and engage on the international scene to enhance plant variety protection. Compared to Japan, the Taiwan's development is somewhat stagnant. For the current regime, the cross-Strait negotiation seems to be a universal panacea. Whether attaching to the China for protection is a wise step forward is as yet unknown. However, China's plant variety infringement is not something Taiwan can bear alone. Countries in the region have to shoulder together in order to face those issues as international crime, plant health inspection and quarantine, environmental protection, regional prosperity, and global trade. Japan is ahead of other countries in the PVP system in the Asia Pacific rim, and has established the East Asia Plant Variety Protection Forum to bring together like-minded countries in the region. The success of setting up this forum demonstrates that members of the Forum perceive that these issues are better dealt with at the international level. In this regard, the Taiwanese government needs to expend great efforts in order both to improve domestic regulations, and to participate actively in related international activities.

