The Intellectual Property Rights for new plant varieties: A Malaysian Perspective

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Abstract

It is an obligation for a signatory country of a Trade Related Aspects of Intellectual Property (TRIPS) Agreement to provide intellectual property rights protection for new varieties of plants. Malaysia, for that purpose, has fulfilled its international obligation by enacting the Protection of New Plant Varieties Act 2004. The Act provides recognition and protection of contribution made by the farmers, local communities and indigenous people towards the creation of new plant varieties. This paper is aimed to give an overview of the Malaysian Protection of New Plant Varieties Act 2004.

PREAMBLE

Plant variety rights or also known as plant breeders’ rights are intellectual property rights granted to the breeder of a new plant variety. This plant varieties law protects the interest of the breeders in controlling the propagation material\(^2\) and harvested material\(^3\) of a new plant variety which enables the breeders to receive payment of royalties for certain period of time\(^4\).

The introduction of a plant variety law in Malaysia is very important as it could play a role in the transformation of Malaysian Agriculture. The Minister of Agriculture and Agro-Based Industry was of a view that:

“With the implementation of the Act, plant breeders in the country would be encouraged to produce more superior varieties, while local farming communities could have greater access to more superior varieties from abroad”

Malaysian breeders have been actively involved in developing plants such as palm, rubber, cocoa and rice. The new breeds have played a role in the development of agriculture sectors which indirectly contributes to the Malaysia economy. This new right basically aims to:

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\(^2\) This includes seed, cuttings, divisions and tissue culture.

\(^3\) This includes cut flowers, fruit and foliage.

\(^4\) Farmers are expected to pay certain royalties to the breeder included in the purchase price of the seed. They are also prevented from selling the seeds that they produce without the approval from the breeder.
i. provide income for the breeder in order to recuperate the investment made\(^5\) in the making of such breeds, particularly in the cost of research and development.

ii. encourage the breeders to develop new varieties of plants in order to provide sustainable progress in agriculture, horticulture and forestry.

iii. encourage breeders from other jurisdictions to export their breeds into Malaysia. Therefore, Malaysian farmers are able to use those varieties for commercial purposes.

In Malaysia, the rights of breeders of plant varieties are provided in the Protection of New Plant Varieties Act 2004 (PNPVA 2004).\(^6\) The purpose of this article is to give an overview of the protection of plant varieties in Malaysia.

**International Protection for Plant Varieties**

The main provisions of Malaysian PNPVA 2004 were based largely on the International Union for the Protection of New Varieties of Plants or UPOV with reference to the Convention of Biological Diversity\(^7\).

UPOV has its name from French words of Union internationale pour la protection des obtentions végétales\(^8\). The UPOV Convention was signed in Paris in 1961. The purpose of this convention is to ensure that the members of the union acknowledge the achievements of breeders of new varieties of plants, by granting them an intellectual property right which is based on a clear defined principle\(^9\). To achieve that purpose, the UPOV Convention has set out a minimum scope of protection and required the members to adopt this standard into their domestic laws. Through this mechanism the plant breeders are protected not only in its own country but also in the territories of other members. It also provides an incentive to foreign breeders to invest in plant breeding and the release of the new varieties on its own country.

Although the Convention on Biological Diversity was not directly concerned with plant varieties rights, it demonstrates a new approach to the way biological resources are used. This Convention is based on three objectives, one of which is:

> “fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding”.\(^{10}\)

In precise, Article 8(j) provides that to encourage the equitable sharing of the benefits arising from the utilization of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for conservation and sustainable use of biological diversity.

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\(^5\) In terms of skill, labour, material resources, money and time.

\(^6\) Act634.

\(^7\) Reference is also made to existing intellectual property rights in countries like JAPAN, Australia, India and Thailand.


\(^9\) Under the UPOV Convention, in order to be eligible for protection, varieties have to be- (i) distinct from existing, commonly known varieties, (ii) sufficiently uniform, (iii) stable and, (iv) new in the sense that it must not have been commercialized prior to certain dates established by reference to the data of the application for protection. Ibid.

\(^10\) Article 1 of the Convention on Biological Diversity.
The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) requires member states of the World Trade Organization to provide either patent or to enact a new *sui generis* (the right of its own) protection for plant varieties, or combination of the two. The issue is addressed in Article 27(3)(b) of the Agreement which states that:

“...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...”

By virtue of this Article, Malaysia as the TRIPs signatory country has chosen to enact a law of plant varieties based on the *sui generis* system as provided in the UPOV Convention. This law emphasizes on the issues relating to the rights of farmers and aborigines particularly on the traditional plant varieties.

**The Malaysian Protection of New Plant Varieties Act 2004**

The Bill for Protection of New Plant Varieties Act 2004 was initially introduced in the Malaysian Parliament on September 2003. It was passed on 25th. June 2004, but was only enforced recently on 1st. January 2007.

Prior to PNPVA 2004, there was no formal protection on the rights of breeders, however an informal registration of new fruits varieties has been available for certification purposes. Although patent law is there to protect registered patented invention, unfortunately plant varieties have been excluded from this protection. This is expressly stated in section 13(2)(b) of the Patent Act 1983:

“...the following shall not be patentable: (b) plant or animal varieties or essentially biological processes for the production of plants or animals, other than man-made living microorganism, microbiological processes and products of such micro-organism processes.”

It is accepted that plant varieties are not patentable but it does not extend to the inventions involving plants.

The issue of lack of protection seems to be remedied by the PNPVA as it allows a breeder of plant variety to apply for grant of protection of plant variety. Perhaps, the only uncertain issue relating to this is whether or not the genetically modified plant varieties can be both registrable under patent and plant variety systems.

**THE ADMINISTRATION OF PLANT VARIETIES**

**Plant Varieties Offices**

The Plant Varieties Office functions as a national center of registration of Plant Varieties in Malaysia. The purpose of the registration is not only to keep records of existing varieties but also to ensure the conservation of the national biological diversity resources.

**Plant Varieties Board**

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12 Ibid, at 878.
The Plant Varieties Board is comprised of members from relevant governmental institutions, which vested with broad supervisory functions. Amongst the functions are to consider, to approve or to reject applications for registration of new plant varieties and grant of breeder’s right as well as to keep and maintain not only the registered plant varieties but also other varieties that are not registered in the Register of New Plant Varieties.

If the Board is satisfied that the applicant has complied with requirements of registrability, the Board shall register the new plant variety and grant the breeder’s right to the applicant. It is also the responsibility of the Board to issue to the applicant a certificate of registration and to record the denomination of the new plant variety in the Register as well as to publish it in the Gazzette.

The Process of Application for Registration

In order to get the plant varieties registered under the Act, there are certain conditions that must be satisfied. Section 12 of the Act requires the following details for that purpose:

(a) the name, address, nationality and other particulars of the applicant;
(b) the method by which the plant variety is developed;
(c) documents and information relating to the characteristics of the plant variety which distinguish the plant variety from other plant varieties;

13 The Board shall consist of the following members: (a) the Director General of the Department of Agriculture, Peninsular Malaysia who shall be the Chairman; (b) the Director General of the Malaysian Agricultural Research and Development Institute; (c) the Director General of the Malaysian Rubber Board; (d) the Director General of the Malaysian Palm Oil Board; (e) the Director-General of the Malaysian Cocoa Board; (f) the Director-General of the Forest Research Institute of Malaysia; (g) the Director of Agriculture, Sabah; (h) the Director of Agriculture, Sarawak; (i) a representative from the Ministry of Agriculture and Agro-based Industry; (j) a representative from the Ministry of Plantation Industries and Commodities; (k) a representative from the Ministry of Domestic Trade and Consumer Affairs; and (l) a representative from the Ministry of Science, Technology and Innovations.

14 As stated in section 4(1) of the Act, the functions of the Board are as follows:-
(a) to perform the duties and functions and exercise the powers as may be provided for in this Act;
(b) to set appropriate systems for the examination of new plant varieties;
(c) to consider and approve or reject applications for registration of new plant varieties and grant of breeder’s rights;
(d) to impose fees or administrative charges to be paid under this Act;
(e) to set terms and conditions pertaining to the samples of registered plant varieties deposited at centres approved by the Board under section 27;
(f) to impose any terms and conditions for the research and experimental use or export of any registered plant variety developed from local genetic resources or by indigenous people;
(g) to keep and maintain a record of other plant varieties which are not registered in the Register of New Plant Varieties;
(h) to administer and control the Plant Varieties Fund;
(i) to appoint any person, government department or organization to be an Examiner for the purposes of conducting a substantive examination under section 21;
(j) to revoke, surrender, assign or transmit any breeder’s right granted under this Act;
(k) to advise the Minister on all matters pertaining to this Act; and
(l) to do such other things as it considers fit to enable it to perform its functions effectively or that are incidental to the performance of its functions.

15 Section 2 defines "denomination" as the name or identification for a plant variety expressed in letters or a combination of letters and figures written in any language;

16 Section 28(2) states that the contents of the certificate of a breeder’s right shall be prima facie evidence of the facts stated therein and the duration of the protection granted.
(d) specification of plant variety denomination in accordance with section 16;  
(e) information relating to the source of the genetic material or the immediate parental lines of the plant variety;  
(f) prior written consent of the authority representing the local community or the indigenous people in cases where the plant variety is developed from traditional varieties;  
(g) documents relating to the compliance of any law regulating access to genetic or biological resources; and  
(h) documents relating to the compliance of any law regulating activities involving genetically modified organisms in cases where the development of the plant variety involves genetic modification.

The Process of Examination

The process of examination of plant varieties involves two steps. The first step is a preliminary examination of the application for registration. At this level, the Board will ensure that the application is not for prohibited plant varieties. In addition to that, the Board will also examine whether or not the applicant has complied with the conditions of the denomination of a plant variety. Section 16 states that:

“The denomination of a plant variety the registration of which by the Board is applied for —  
(a) shall be the generic designation of the plant variety;  
(b) must enable the plant variety to be identified;  
(c) shall not exclusively consist of numerals; and  
(d) shall be different from other plant variety denominations which identify an existing plant variety of the same plant species or a closely related species.”

The second step is a substantive examination which requires the applicant to fulfill the conditions of plant varieties registration. Those conditions are in fact the threshold of registrability of the plant variety. If the applicant does not comply with those conditions and fails to amend the application so as to comply with the requirements, the Board shall reject the application.

THE SCOPE OF PROTECTION

What is Plant Varieties?

The ‘plant’ is defined as living organism in the plant kingdom but excludes any micro-organism. Whereas, ‘varieties’ is defined by this Act as:

“… a plant grouping within a single botanical taxonomy of the lowest known rank —

(a) which can be defined by the expression of the characteristics resulting from a given genotype or a combination of genotypes; and

(b) which can be distinguished from any other plant grouping by the expression of at least one of such characteristics; and

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17 Prohibition for registration is stated in section 15. Look at the discussion on Non Registrable Varieties.
18 Section 21.
19 Refer to the discussion on “The Requirement of Registrability”.
20 Section 2 of the PNPVA 2004.
21 Ibid.
(c) which can be considered as a unit with regard to its suitability for being propagated unchanged, and includes propagating material and harvested material of the plant variety;...

Thus, a new plant variety is a plant (not including micro organism) which has fulfilled the conditions stated in the abovementioned definition.

The Requirements of Registrability

In order to be eligible for a certificate under the PNPVA, a plant variety must satisfy four requirements. First, it must be new, in the sense that propagating or harvested material has not been sold or otherwise disposed of for purposes of exploitation earlier than one year in Malaysia, or earlier than four years in any foreign jurisdiction (six years in the case of tree or vine). Second, the variety must be distinct, or in other words, it is clearly distinguishable from any other publicly known variety, the existence of which is a matter of common knowledge. Third, the variety must be uniform, in the sense that subject to the variation that may be expected from the particular features of its propagation, it is sufficiently uniform in its relevant characteristics. Finally, the variety must be stable, that is, the varieties' relevant characteristics remain unchanged after repeated propagation or, in the case of a particular cycle of propagation, at the end of each particular cycle.

However, for plant varieties of local community, indigenous people and farmer, they must only satisfy three requirements, i.e., new, distinct and identifiable. A plant variety is identifiable if it can be distinguished from any other plant grouping by the expression of one characteristic and that characteristic is identifiable within individual plants or within and across a group of plants and such characteristics can be identified by any person skilled in the relevant art. The justification behinds the waiver of requirements of "uniformity" and "stability" is shown in the objective of the Act as it aims at conferring express recognition and protection of contribution made by farmers, local communities and indigenous people towards the creation of new plant varieties.

Traditional Varieties

The PNPVA does not confine its application for registration only to commercial breeders, it is also open to indigenous people or local community to register their traditional variety. Indigenous people means "persons who fall within the definition of the "aborigine" or "native" as defined respectively in Clause (2) of Article 160 and Clause (6) of Article 161A of the Federal Constitution. This definition has covered indigenous people in both the West and East Malaysia.

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22 Section 14(1).
23 Section 14(3)(a).
24 Section 14(3)(b).
25 Section 14(3)(c).
26 Section 14(3)(d).
27 Section 14(3)(e).
28 "Aborigine" means an aborigine of the Malay Peninsula.
29 In this Article "native" means—(a) in relation to Sarawak, a person who is a citizen and either belongs to one of the races specified in Clause (7) as indigenous to the State or is of mixed blood deriving exclusively from those races; and(b) in relation to Sabah, a person who is a citizen, is the child or grandchild of a person of a race indigenous to Sabah, and was born (whether on or after Malaysia Day or not) either in Sabah or to a father domiciled in Sabah at the time of the birth.
On the other hand, “Local Community” refers to “a group of individuals who have settled together and continuously inherit production processes and culture or a group of individuals settled together in a village or area and under an eco-cultural system”. This category may cover a group of people other than indigenous community who lives together in certain areas and develop their own traditional plant varieties.

Farmers’ Varieties

Another category of breeder under the Act is farmer. “Farmer” means any person who:

(a) cultivates crops by cultivating the land himself;
(b) cultivates crops by directly supervising the cultivation of land through any other person; or
(c) conserves and preserves, severally or jointly, with any person any traditional variety of crops or adds value to the traditional variety through the selection and identification of their useful properties.

Although by allowing registration for farmers’ varieties may confer protection to farmers, this indirectly affects the small farmers economically. Thus, for that reason special privileges are provided by the Act to protect the interest of small farmers as stipulated in provisions relating to breeder’s right that are:

(i) any act of propagation by small farmers using the harvested material of the registered plant variety planted on their own holdings;
(ii) any exchange of reasonable amounts of propagating materials among small farmers; and
(ii) the sale of farm-saved seeds in situations where a small farmer cannot make use of the farm-saved seeds on his own holding due to natural disaster or emergency or any other factor beyond the control of the small farmer, if the amount sold is not more than what is required in his own holding.

Small farmer only confines to those whose farming operations do not exceed the size of holding as prescribed by the Minister.

Non Registrable Plant Varieties

There are two grounds for not approving the grant of breeder’s right that are:

(i) the plant variety affects public order or morality; or

(ii) where there is reasonable ground to believe that the cultivation, reproduction or any other use of that plant variety may produce a negative impact on the environment.

The Right-holder of Plant Varieties

Generally, the right of plant variety is vested on the breeder, i.e., a person who has bred or has discovered and developed any plant variety, who applies for registration for such variety. However, there are other categories of people who may apply for registration of the plant varieties that include the employer of the breeder, the successor in title of the breeder, a farmer or group of farmers, local community or indigenous people who have

30 Section 2.
31 Ibid.
32 Ibid.
33 Ibid.
carried out the functions of a breeder and any government or statutory body which has also carried out the functions of a breeder. 

**EXCLUSIVE RIGHTS**

**Breeder’s Rights and Infringement**

The rights of breeders have been provided in section 30 of the Act. The breeder shall have the right to carry out all or any of the following acts on a commercial basis:

(a) producing or reproducing;

(b) conditioning for the purpose of propagation;

(c) offering for sale;

(d) marketing, inclusive of selling;

(e) exporting;

(f) importing;

(g) stocking the material for the purposes mentioned in paragraphs (a) to (f).

Besides the right to control the above acts, the breeder’s right shall also extend to:

(a) any propagating material of the registered plant variety, harvested material of the registered plant variety and the entire or any part of a plant variety where the propagating material of that plant variety is obtained through unauthorized means from the registered plant variety;

(b) plant varieties which are essentially derived from the registered plant variety, if the registered plant variety is not essentially derived from another plant variety;

(c) plant varieties which are not clearly distinguishable from the registered plant variety; or

(d) the production of other plant varieties which require the repeated use of the registered plant variety.

As other intellectual property rights, under PNPVA the act of doing the exclusive rights of the right holder without authorization may amount to infringement of breeder’s right. 

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34 Section 13(1).
35 Section 30(3) For the purposes of paragraph 30(2)(a), "unauthorized" in relation to the propagating material means it is obtained without the consent or permission of the holder.
36 "essentially derived plant variety" means a plant variety which —
(a) is predominantly derived from the initial plant variety, or from a plant variety that is itself predominantly derived from the initial plant variety, while retaining the expression of the essential characteristics that result from the genotype or combination of genotypes of the initial plant variety;
(b) is clearly distinguishable from the initial plant variety; and
(c) except for the differences which result from the act of derivation, conforms to the initial plant variety in the expression of the essential characteristics that result from the genotype or combination of genotypes of the initial plant variety;
37 Section 47 of the Act provides that subject to the provisions of this Act, an infringement of a breeder’s right shall consist of the performance of any of the acts referred to in section 30 in Malaysia by a person other than the holder without the authorization of the holder in relation to the registered plant variety for which a breeder’s right has been granted to the holder.
Duration of Protection

The above breeder’s rights are granted for certain period of time\textsuperscript{38}. Generally, protection is available for 25 years from the filing date of an application for the registration of the plant variety and grant of breeder’s right. However, for traditional varieties and farmers’ varieties 15 years of protection is granted to the breeders. Basically, there is no further extension for the plant varieties’ rights except for certain circumstances such as if such extension is desirable on the ground of national needs and interests\textsuperscript{39} provided that it is made in writing to the Board before the expiry of the duration of the breeder’s right.\textsuperscript{40}

Exclusions

The exceptions to infringement of plant varieties’ right under this Act may be categorized as research exceptions and small farmer’s privileges. The former is needed to ensure a continuation of research on plants\textsuperscript{41} which includes:

(a) any act done privately on a non-commercial basis;
(b) any act done for an experimental purpose;
(c) any act done for the purpose of breeding other plant varieties and any act referred to in paragraphs 30(1)(a) to (g) in respect of such other plant varieties, except where such other plant varieties have been essentially derived from the registered plant variety;

On the other hand, the latter has been enacted to safeguard the interest of small farmers in Malaysia\textsuperscript{42}.

DEALINGS

Assignment or transmission of breeder’s right.

Like other intellectual property rights, the rights of plant varieties can be assigned to other parties. It is expressly stated in the PNPVA that a breeder’s right or an application for the registration of a plant variety may be assigned or transmitted\textsuperscript{43} with the approval of the Board to:

(a) the legal personal representative of the holder or the applicant for such registration and grant;
(b) any person entitled by operation of law to such assignment or transmission.

However, the Board may only approve the assignment or transmission of the breeder’s right if:

(a) it is in writing signed by or on behalf of the contracting parties; or
(b) the holder or the applicant for the registration of a new plant variety and grant of a breeder’s right dies or becomes incapacitated.

\begin{itemize}
\item \textsuperscript{38} Section 32.
\item \textsuperscript{39} Section 33(1).
\item \textsuperscript{40} Section 33(2).
\item \textsuperscript{41} Ida Madieha Abdul Ghani Azmi, “The Protection of Plant Varieties in Malaysia”, at 886.
\item \textsuperscript{42} Please refer to the discussion in the section of “Farmers Variety”.
\item \textsuperscript{43} (2) The application for the assignment or transmission of a breeder’s right shall be —(a) made in the manner to be specified by the Board in writing; and (b) accompanied with the prescribed fee.
\end{itemize}
Compulsory License

Under PNPVA, it is allowable for other breeders to seek for compulsory licensing on these two following grounds:

(a) any of the requirements of section 34 is not complied with and the needs of the farming community for the propagating material of the registered plant variety have not been met; or
(b) an excessive proportion of the registered plant variety offered for sale is being imported.

Section 34 requires that the holder of breeder’s right must ensure the availability of the propagating material in reasonable quantities within three years from the date of application for registration of the new plant variety. In addition to that, such materials must be sold at reasonable price as may be determined by the Board.

Upon the granting of a compulsory license, it is the power of the Board to determine the scope of the compulsory license and the right to carry out any of the restricted acts\textsuperscript{44}. The board is also responsible in ascertaining the duration and term and conditions of the compulsory license\textsuperscript{45}.

CONCLUSION

The Protection of New Plant Varieties Act 2004 has been much anticipated by biotechnology and agro-biotechnology industries in Malaysia. This new law will enable breeders of new plant varieties who qualify for the protection to benefit from a range of economic rights over the registered variety hence encouraging development in the area. Since this Act is still at its infant stage, detailed workings and application of it could not be analyzed. However, it should be portrayed as a positive step towards the advancement of research in plant varieties. With all new laws, there will be grey areas which can only be clarified with detailed rules and guidelines.

\textsuperscript{44} Exclusive rights under section 30.
\textsuperscript{45} Section 37.