



**Executive Summary**  
**of**  
**Plant variety protection law in Asia and Pacific region**  
**Prepared by APSA Standing committee of intellectual**  
**property right and biodiversity**

APSA recognizes the importance of genetic innovation so that farmers can benefit from technological advances and have a wide choice of varieties to overcome the many challenges they face. Plant Variety Protection (PVP), also known as Plant Breeders Rights, plays a key role by enabling breeders to obtain a return on their investment in research and development and thus maintain the flow of new varieties into the seed trade.

In June 2019 the APSA Standing Committee on Intellectual Property Rights and Biodiversity initiated a review of PVP laws in the region in order to understand the current status and how well these laws are being implemented. An independent consultant was hired for this purpose and the study was carried between August and October. The preliminary findings were presented at the Asian Seed Congress held in Kuala Lumpur in November 2019 and feedback received has been assimilated into the final report, which is summarized here.

A total of 16 countries/territories were surveyed and all have a plant variety protection law of some kind. Among these, six are members of the International Union for the Protection of New Varieties of Plants (UPOV), namely Australia, China, Japan, Republic of Korea, New Zealand and Vietnam while the other ten, comprising Bangladesh, Cambodia, Chinese Taipei, India, Indonesia, Malaysia, Myanmar, Pakistan, Philippines and Thailand are not members of UPOV.

The survey was conducted by means of a questionnaire sent to the national Plant Variety Protection Office (PVPO) to collect information about the operation of the PVP system. However, Bangladesh, Cambodia, Myanmar and Pakistan are at an early stage of PVP implementation and did not have sufficient experience to respond. A separate questionnaire was sent to the national seed association, or other contact in the private sector, to obtain the views of those who use the PVP system. Comments were also received from some companies that have experience of submitting applications for protection in different countries of the region.



The results show a wide variation in the use of the PVP system between different countries, China being the largest user, followed by Japan, Korea, India and Indonesia. In general countries that are members of UPOV have a significant number of applications from foreign breeders, while in non-UPOV members the proportion of foreign applications is much lower. Malaysia is a notable exception, receiving a large number of foreign applications.

The survey revealed marked differences in the crops that are protected. China, India, Indonesia, Philippines and Thailand all focus on the staple cereal crops, especially rice, while in Japan, Korea, and Malaysia it is flower crops and ornamentals that dominate the protected list. Australia, New Zealand and Vietnam have a more diverse profile of protected crops. The only countries with a strong representation of vegetable crops are Indonesia, Korea and Philippines.

Almost all countries use the UPOV technical guidelines when carrying out tests for distinctness, uniformity and stability (DUS) and they require the breeder to submit a detailed questionnaire as part of the application. However there is much variation in the extent to which DUS test reports from other countries are used, even among UPOV members, who would be expected to avail of this service.

The conduct of DUS tests varies widely between countries. In some, this technical work is done mostly by the PVPO itself or is delegated to another official agency, while in others the test material is grown by the breeder following a protocol prepared by the PVPO and the plots are subject to official inspection. In practice, most countries use a range of testing options depending on the crop.

National authorities have very different charging policies for their PVP system. Some expect the cost to be borne largely by the applicant through a fee structure for each stage of the process, whereas others make only a small charge and regard variety protection as a service to support the work of plant breeders.

F1 hybrids are frequently submitted for protection and in some countries inbred lines also. This would imply that the biological protection provided by an F1 hybrid is not considered sufficiently robust and it is therefore worthwhile to protect the parent lines. However,



putting these lines into the testing system may raise concerns about their security.

In almost all countries, it is the responsibility of the breeder to follow up on infringements of rights and that is a challenge, especially for smaller, specialized companies. Consequently, the lack of enforcement was cited as the main reason why companies do not use the PVP system. A particular concern in the vegetable seed sector is the very rapid turnover of varieties as a result of intensive and highly competitive breeding. Companies want to bring their varieties to the market as quickly as possible in order to exploit any marginal advantage. Larger companies and those breeding agricultural crops may be more inclined to use PVP because they can devote more resources to enforcement.

The survey revealed a wide range of PVP experience across the region and there is scope to share this for the benefit of testing authorities, breeders and seed companies. The report makes the following specific recommendations:

- In accordance with APSA's Position Paper on Intellectual Property Rights, countries in the region are strongly recommended to align their PVP laws with the UPOV 1991 Convention, which provides the best system for breeders to protect their varieties.
- Strengthening enforcement mechanisms and involving a range of stakeholders in this process will make breeders more confident to use PVP laws, both domestically and in other countries.
- National seed associations should promote a Code of Conduct among their members and be proactive in reducing malpractice in the trade.
- Promoting harmonization in testing procedures and sharing information between countries will make PVP more attractive to breeders. The UPOV 'PRISMA' system should facilitate this if it is widely adopted.
- Policy makers and other institutions should promote a better understanding of PVP with the agricultural community and society at large so that the benefits of plant breeding innovations are recognized and supported.