

Japanese Experiences of Plant Variety Protection Under the UPOV Convention

Seminar on Awareness
on the UPOV System of Plant Variety Protection
Nay Pyi Taw, Republic of the Union of Myanmar,
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1. Update of EAPVP Forum



the East Asia Plant Variety Protection Forum – History & Objective



- Endorsed at ASEAN+3 Ministers of Agriculture and Forestry (AMAF+3) Meeting in 2007.
- Regional cooperation activities to develop/ harmonize PVP system in each country.

EAPVP Forum



Framework to promote mutual cooperation for Members to develop and **implement PVP systems based on the UPOV system**, for the overall goal of achieving **food security and other benefits to the society**, through sustainable plant breeding activities.

EAPVP Forum Meeting – Host Country

1st Meeting: Tokyo, Japan, July 2008

2nd Meeting: Beijing, China, Apr. 2009

3rd Meeting: Seoul, Rep. of Korea, Apr. 2010

4th Meeting: Makassar, Indonesia, May 2011

5th Meeting: Bangkok, Thailand, May 2012

6th Meeting: Kuching, Malaysia, July 2013

7th Meeting: Vientiane, Lao PDR, Aug. 2014

8th Meeting: Seoul, Rep. of Korea, Sep. 2015

9th Meeting: Hanoi, Vietnam, Sep. 2016

10th Meeting: Myanmar, Sep. 2017



9th EAPVP Forum Meeting in Hanoi

Participants

- PVP authorities of EAPVP Forum members countries
- UPOV
- Observers (CPVO, GNIS, Naktuinbouw, USPTO, etc.)



September 6, 2016
Hanoi, Vietnam

Result

- Priorities and schedule for the 2016 to 2017 were adopted.
- The next Forum meeting was decided to be held in Myanmar.



The result of 9th EAPVPF meeting

– Priority for Cooperation Activities 2016–2017

1. Training organized by hosting country
2. Harmonization of test guidelines(TGs), testing methods and other tools for PVP examination with UPOV TGs.
3. Information sharing including through the EAPVP Forum Website.
4. Awareness raising for key persons in decision making (UPOV Seminar etc.)
5. Support for development of PVP law and other activities to assist accession to UPOV



Plan for 10th EAPVP Forum meeting in 2017

Date: September 2017

Venue: Myanmar

Participants:

- Officials of PVP authorities of EAPVP Forum member countries
- Guests from UPOV Office and UPOV members

Agenda: topics may include

- Objective/plan for 2017
- Stock- taking of current situation

Seminar on the enforcement of plant breeders' right under the UPOV Convention in Hanoi Sep, 7,8 2016

Participants

- PVP authorities of EAPVP Forum members
- UPOV, USPTO, CPVO, GNIS, South America, Africa, etc.
- Seed companies, Breeders' organizations

Key findings

- To obtain the full benefit of the UPOV PVP system, it is necessary to have effective enforcement measure
- It is primarily the responsibility of breeders to enforce their rights
- UPOV members are requires to provide for appropriate legal remedies for effective enforcement

UPOV High Level Study Tour in Japan 2016

➤ **Date & Sites**

July 25-28, Tokyo, Kanagawa, Yamagata in Japan

➤ **Participants**

High level officials of Cambodia, Lao-PDR, Malaysia, Myanmar, Thailand, Vietnam

➤ **Objective**

- To demonstrate the use of the UPOV system of PVP to add value for farmers and consumers, including the use of branding strategies.

➤ **Result**

- Raising awareness of the importance of PVP
- Understanding the concrete benefits of PVP through branding strategies



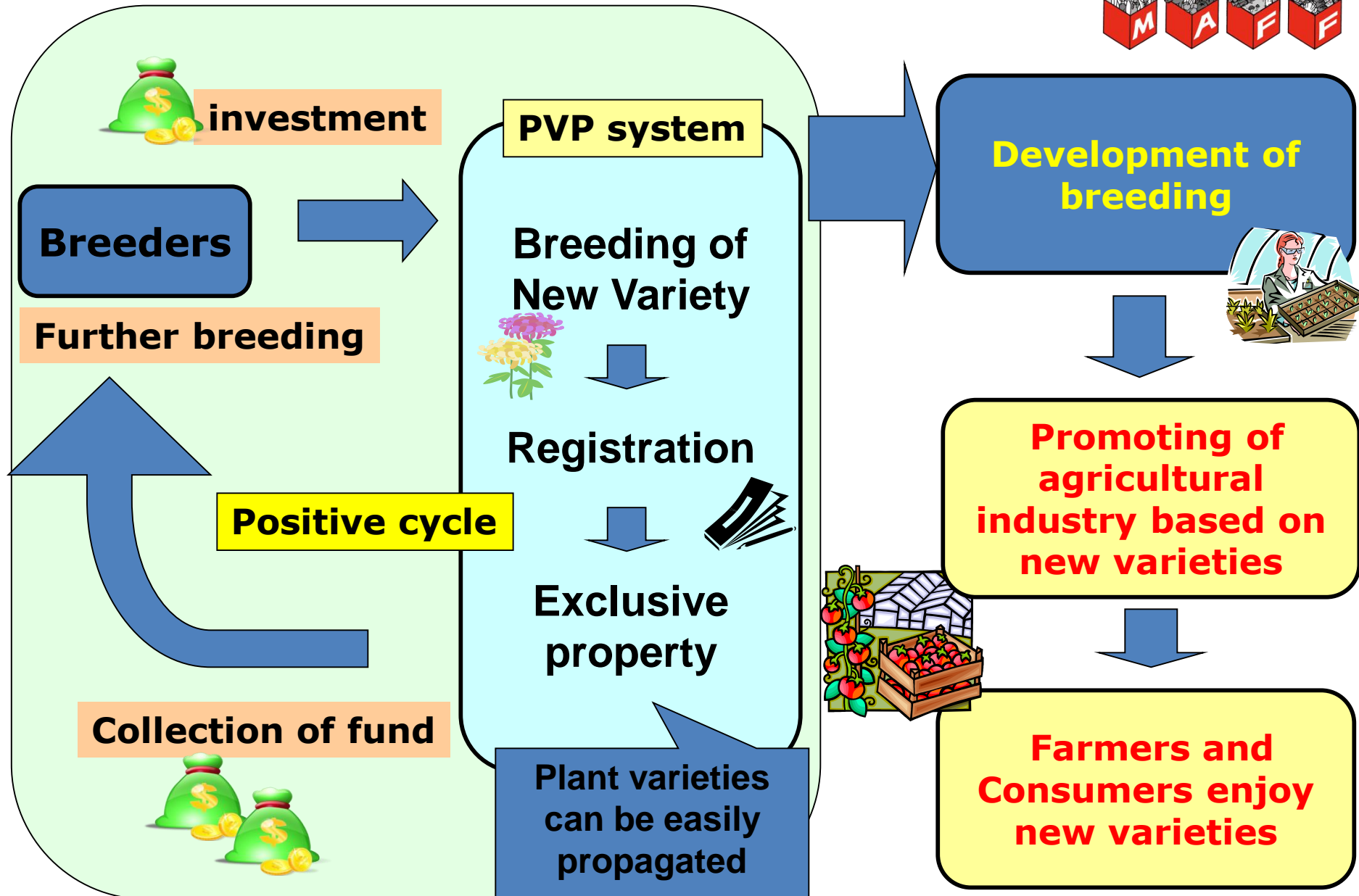
UPOV High Level Study Tour in Japan 2016



Significance of PVP System



Significance of PVP System



A Good Example: Tsuyahime (rice)

Breeding a new rice variety “Tsuyahime” by Yamagata Prefecture

- Combined organization of concerned parties planned strategies for branding. Supplying high quality, good taste and safe food to consumers, hotels and restaurants
- Yamagata Prefecture took a different way to spread the variety from previous registered varieties by public sector. Yamagata allowed utilization of Tsuyahime to farmers who were higher than certain level and to only appropriate area in its territory. And Yamagata allowed another prefectures with some conditions in order to gain the amount of distribution.
- promoting sales with utilization of TV, newspaper and events etc. annually. Governor leaded sales campaign at retail market in order to raise level of recognition of Tsuyahime.
- Other prefectures apply this model case for their own new rice varieties.



Market price is higher than others



Package design

A Good Example: Ashiro Rindo (Ashiro gentian)

“Vitalization of local agriculture using PVP”

1970s

- Production of Rindo had started.
- Cut flowers were sold in market.

“Asiro”
mountainous area



Soil & cool climate



good for Rindo

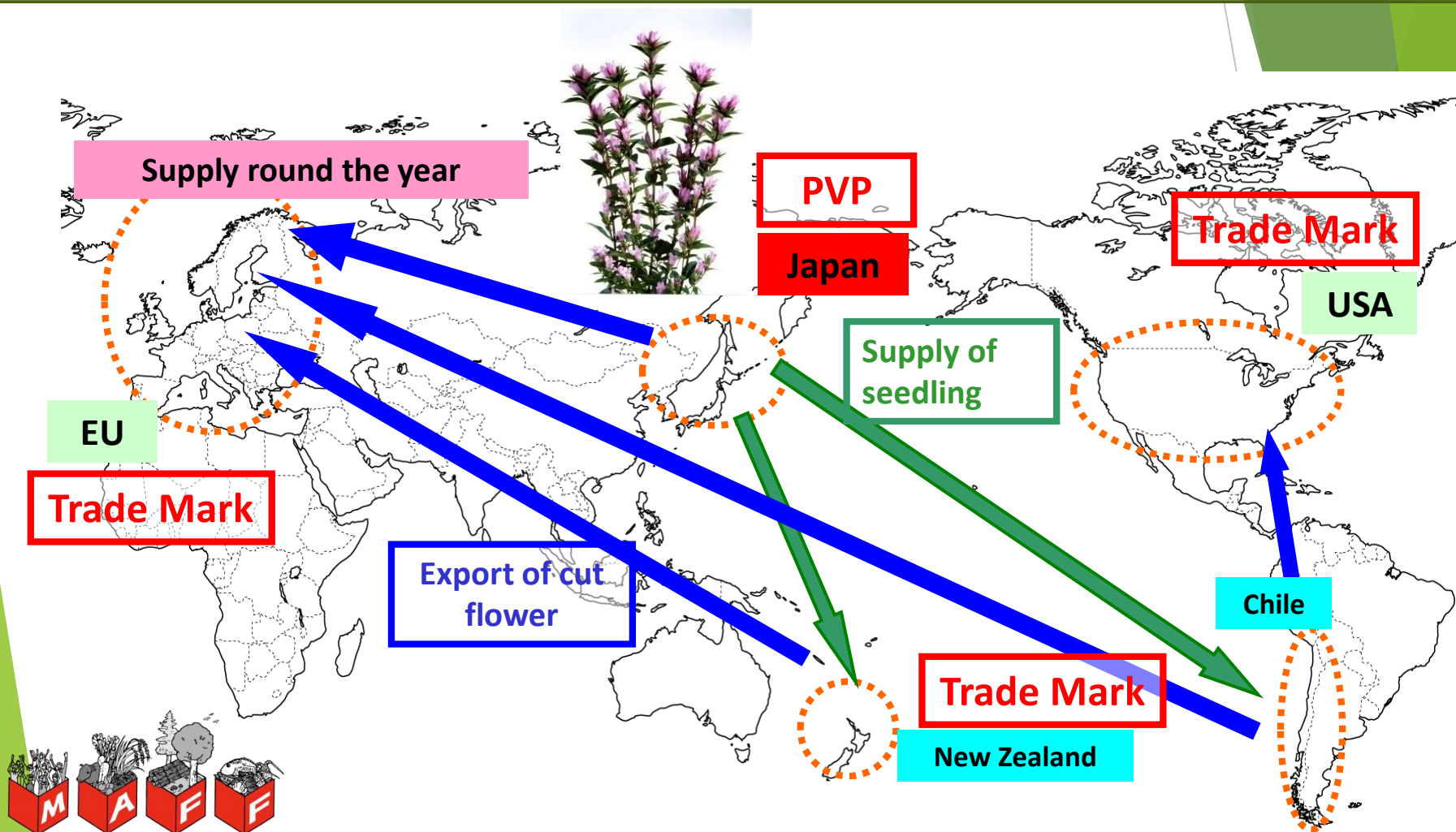


Lovely Ashiro



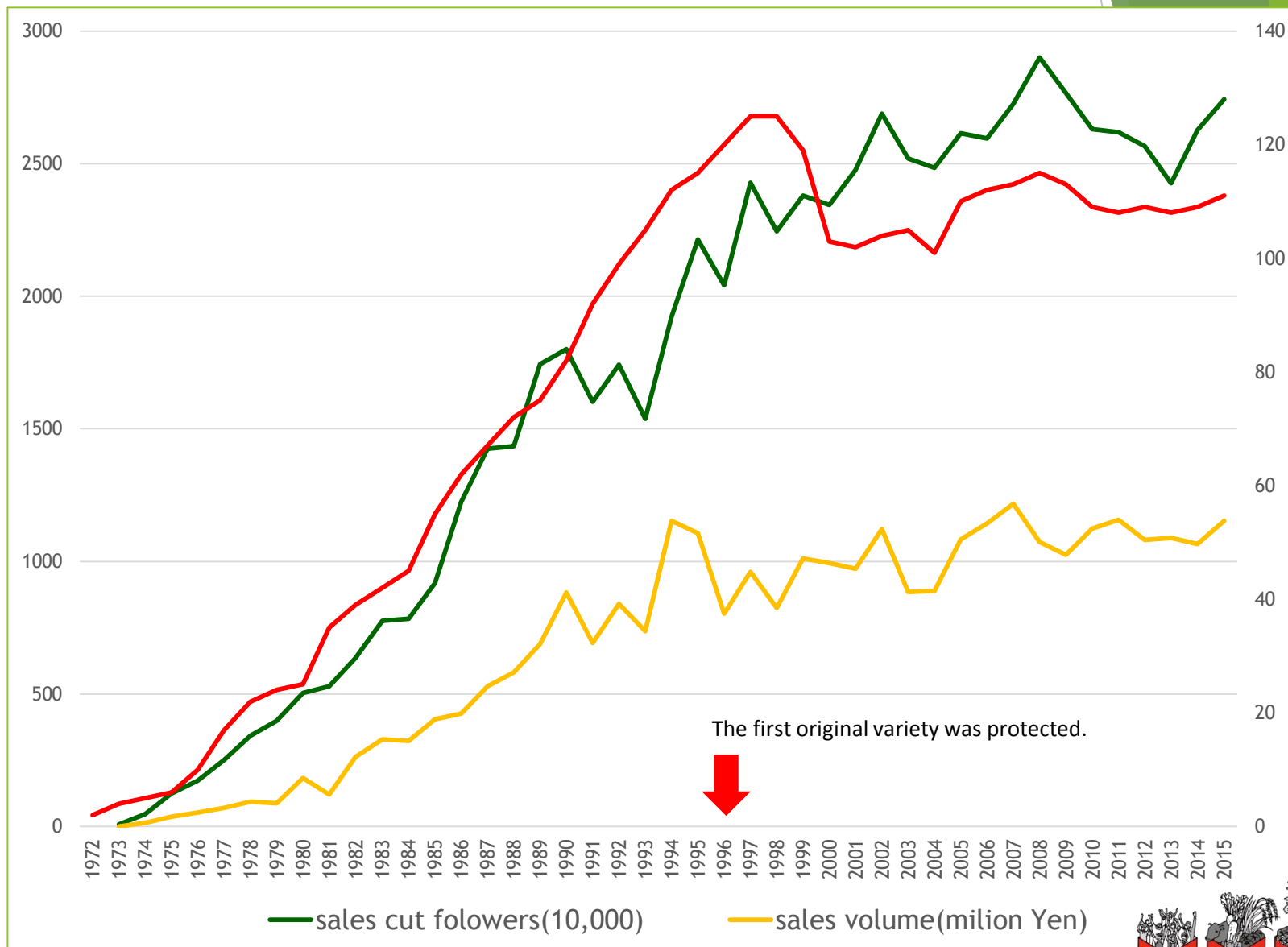
Ashiro Rindo (Ashiro gentian)

Cut flowers produced in NZ and Chile, exported to EU and USA
⇒ *supply of Ashiro brands round the year*



Trend of production of Ashiro Rindo

cut flower(10000)
sales value(million Yen)



2. Outline of Japanese PVP system

(1) Framework



THE PLANT VARIETY PROTECTION AND SEED ACT

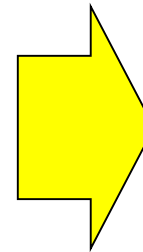
(Article 1)

Plant Variety Protection (Registration of Plant Variety)

To Promote the Breeding of Plant Varieties

Indication of Designated Seeds

To Promote the Rational Distribution of
Seeds/Seedlings



Development of
Agriculture, Forestry
and Fisheries



Purpose of PVP System

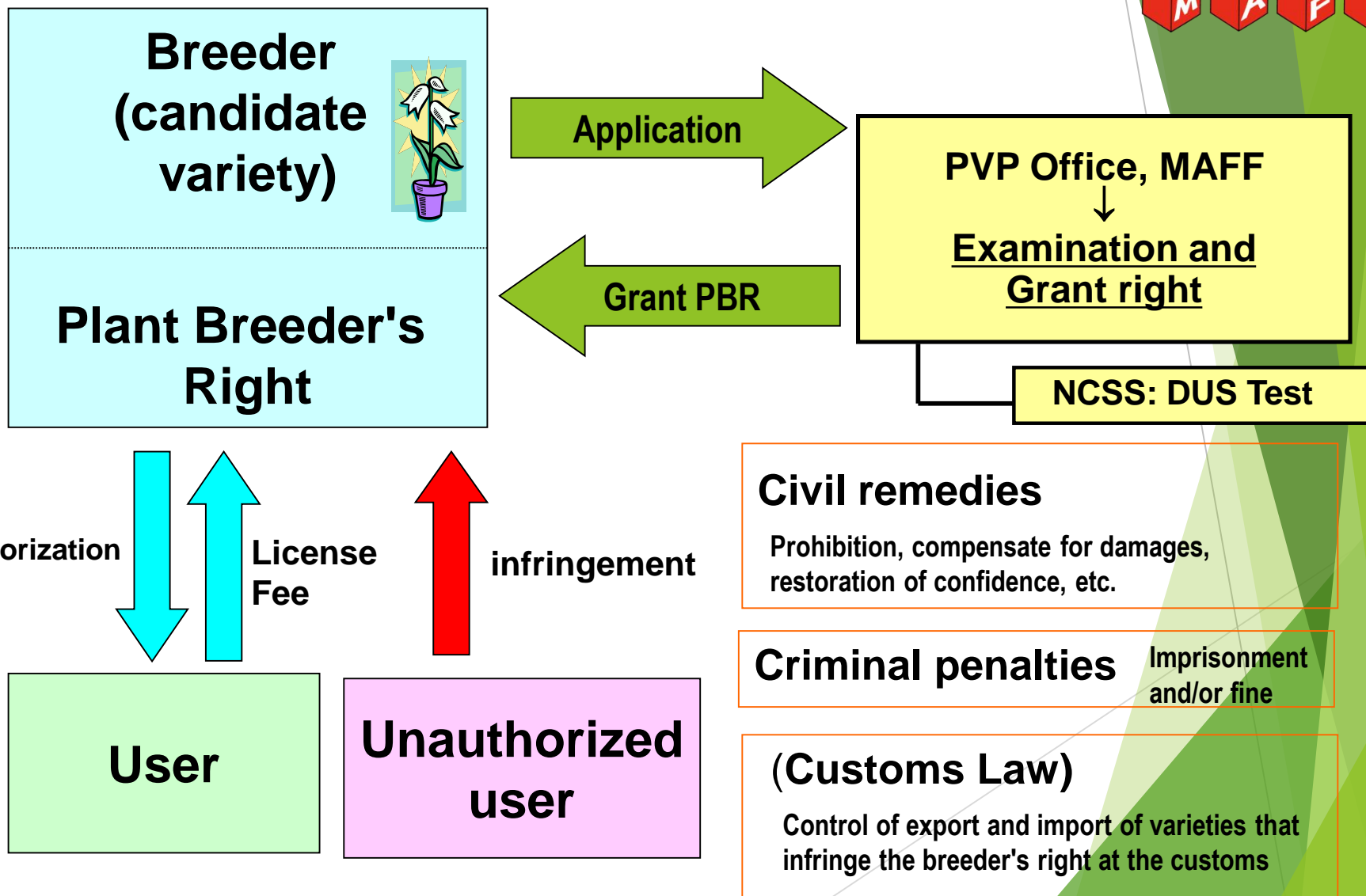
Plant Variety Protection and Seed Act (Act No 83, 1998)

Article 1 (Purpose)

The purpose of this Act is to promote breeding of plant varieties... by providing for a system relating to registration of plant varieties for the protection of new plant varieties ... to **contribute to the development of agriculture, forestry and fisheries.**



Outline of the PVP System in Japan



Organization for PVP

MAFF

PVP Office

- Filing and granting right
- Development of Technical Protocols
- Examination

NCSS-NARO

Center for Seeds and Seedlings
(Incorporated Administrative Agency)

HQs, 11 stations, 1 sub-station

- **DUS Test**
- Production of Foundation seeds (potato, Sugarcane)
- Seed Inspection
- PVP G-men
- Gene Bank

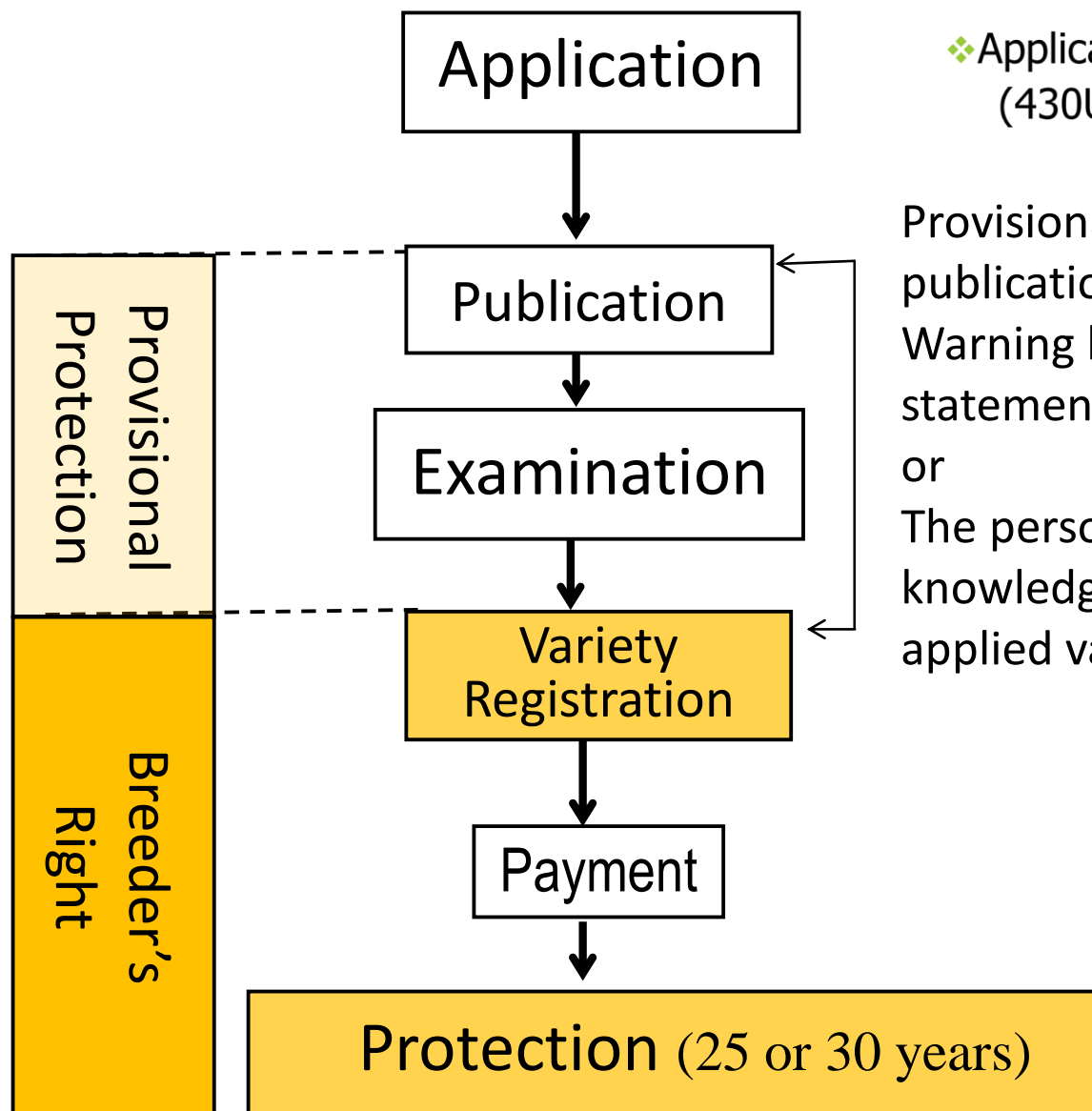


Outline of Japanese PVP system

(2) Procedures for Examination



Procedure & Provisional Protection

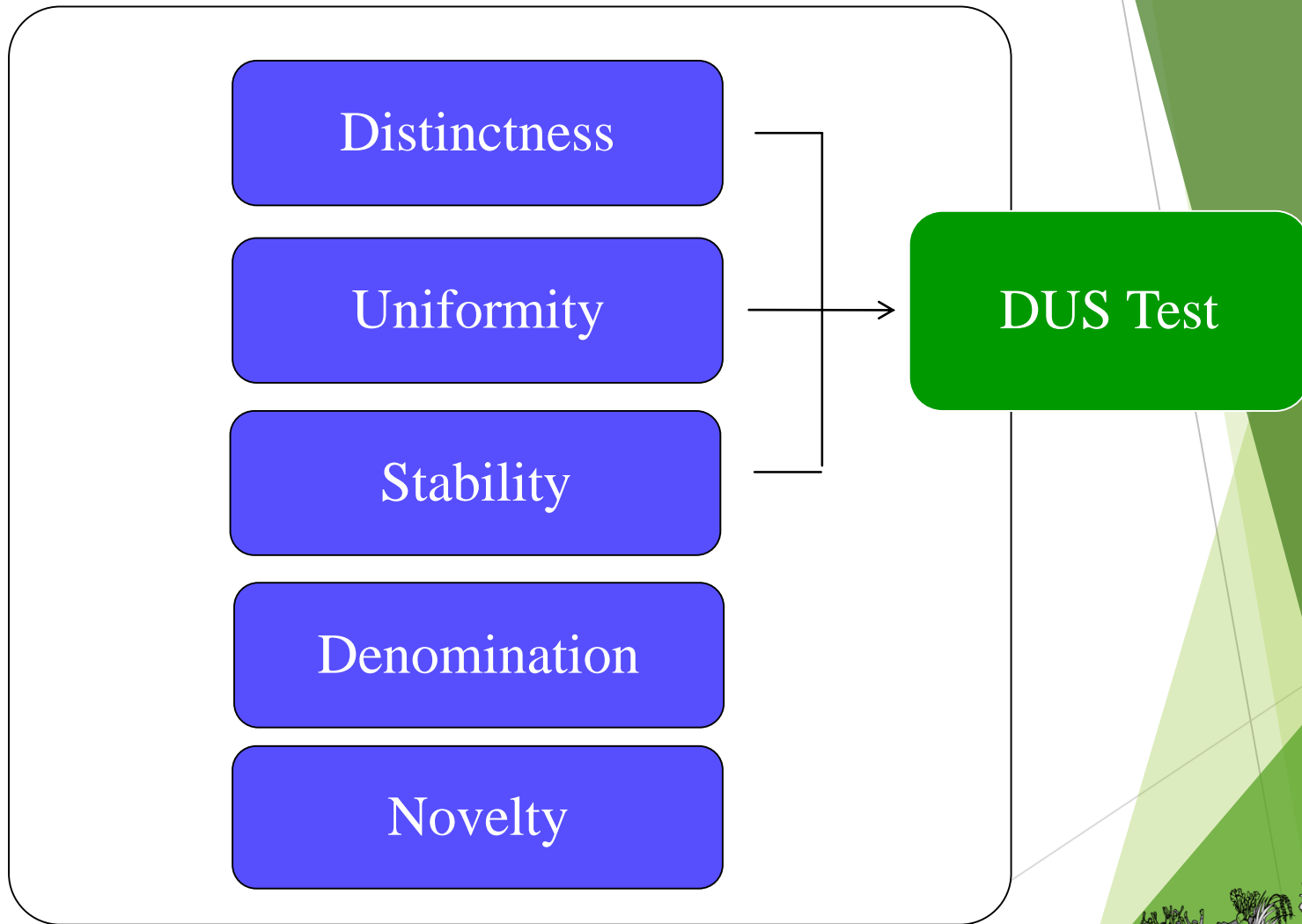


❖ Application fee 47,200 JPY
(430USD (110JPY÷1USD))

Provisional Protection from publication to registration is required
Warning by presenting a written statement
or
The person exploited the variety with knowledge that the variety was an applied variety



Conditions for registration



DUS Test under the UPOV Convention

The wording in the 1991 Act indicates that an authority may, for example, use one or more of the following arrangements:

- (a) the authority conducts growing trials, or other tests, itself
- (b) the authority arranges for another party / other parties to conduct the growing trials or other tests

In such an arrangement, another party could include, for example, another authority, an independent institute or the breeder.

- (c) the authority takes into account the results of growing tests or other trials which have already been carried out



UPOV DL305, Module 13: Cooperation in DUS testing

UPOV 1991 Act, Article 12

Examination of the Application

Any decision to grant a breeder's right shall require an examination for compliance with the conditions under Article 5 to Article 9.

In the course of the examination, the authority may
grow the variety or carry out other necessary tests,
cause the growing of the variety or the carrying out of other
necessary tests,
or take into account the results of growing tests or other trials
which have already been carried out.

For the purposes of examination, the authority may require the breeder to furnish all the necessary information, documents or material.





Examination in Japan

► Procedure

- ✓ Formality examination
- ✓ Planning for DUS Test - decision on the test method

- Growing Test (NCSS)
- Breeder Testing (On-site Inspection)
- Documentary Examination (including International Cooperation)

- ✓ Examination on Denomination
- ✓ Examination on Novelty



Outline of Japanese PVP system

(3) DUS Test Methods



DUS test method (1)



Growing Test (NCSS)

- Conducted by NCSS.
Mainly ornamental plants (Chrysanthemum, Carnation, Rose etc.) and vegetables.
- Same condition for all application varieties.
- (In Japan) Currently around 70% of DUS test.



DUS test method (2)

Breeder testing (On-site Inspection)

- Applicant or agent conducts trial on their own field according to instructions of PVP authority, and examiners visit the field for assessment of variety.
- Saves labour of PVP authority, but difficult to maintain same condition.
- (in Japan) Ratio of DUS methods reduced. Today, used for crops which cannot be conducted at NCSS.



DUS test method (3)

Documentary Examination (including International Cooperation)

- Growing test/ on-site inspection may be omitted when appropriate examination report in other UPOV member country is available (international cooperation in examination), or applicant submits detailed report.
- Major method in some countries.



Summary of DUS test methods in Japan

Today, PVP System in Japan

- Receives about 1,000 applications annually (1,018 in 2014 was 5th largest in UPOV)
- Around 70 % of applications are examined by growing test
- About 700-800 tests (500 at Nishinihon station) conducted annually



We are proud of this “advanced” system.
But, there is a long history.....



Outline of Japanese PVP system

(4) History



History of PVP System in Japan

Law

Organization

1947 Agricultural Seeds and
Seedlings Law

the early stage of PVP

1978 The PVP and Seed Act

1979 Seeds and Seedlings Div.

1982 Ratify the UPOV 1978 Act

1986 The National Center for
Seeds and Seedlings(NCSS)

1998 Amendment of the Act

Ratify the UPOV 1991 Act

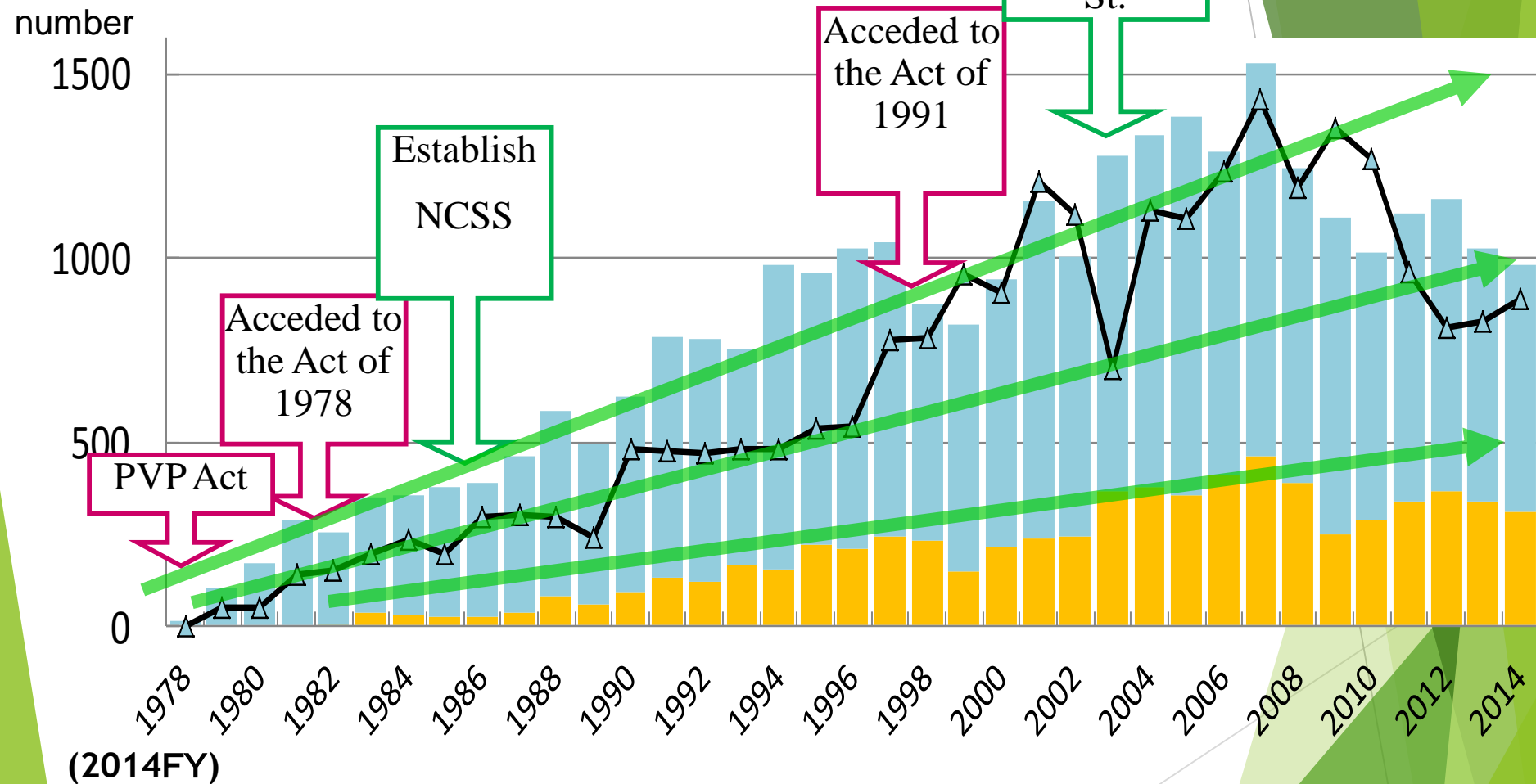
2003 NCSS Nishinohon Station

2003, 2005, 2007 Amendment of the Act

2008 Intellectual Property Div.



Trend of Applications



Application (Total) : 979 (100%)

Japan

abroad

Granted

// (from abroad) : 406(41%)

Introduction of Growing Test

1978 PVP and Seed Act

1979 Start growing tests at 3 seed inspection laboratories of Seeds and Seedlings Div.* of MAFF and Prefectural Experimental Stations

* IP Division of today

1979 First variety registration based on result of growing test (vegetable)

➤ about 40 tests/year

➤ Conducted by Seed Inspectors who had experiences to assess varieties

1986 **Establishment of NCSS**

2003 Establishment of Nishinihon station in NCSS
(main station for DUS test at NCSS)



Seed Inspection Laboratory of Seeds and Seedlings Div.

(Apr. 1 1986)

Number of staff: 18

Kurume Lab.

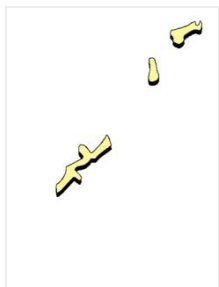
(5 staff)

Tsukuba Lab.

(8 staff)

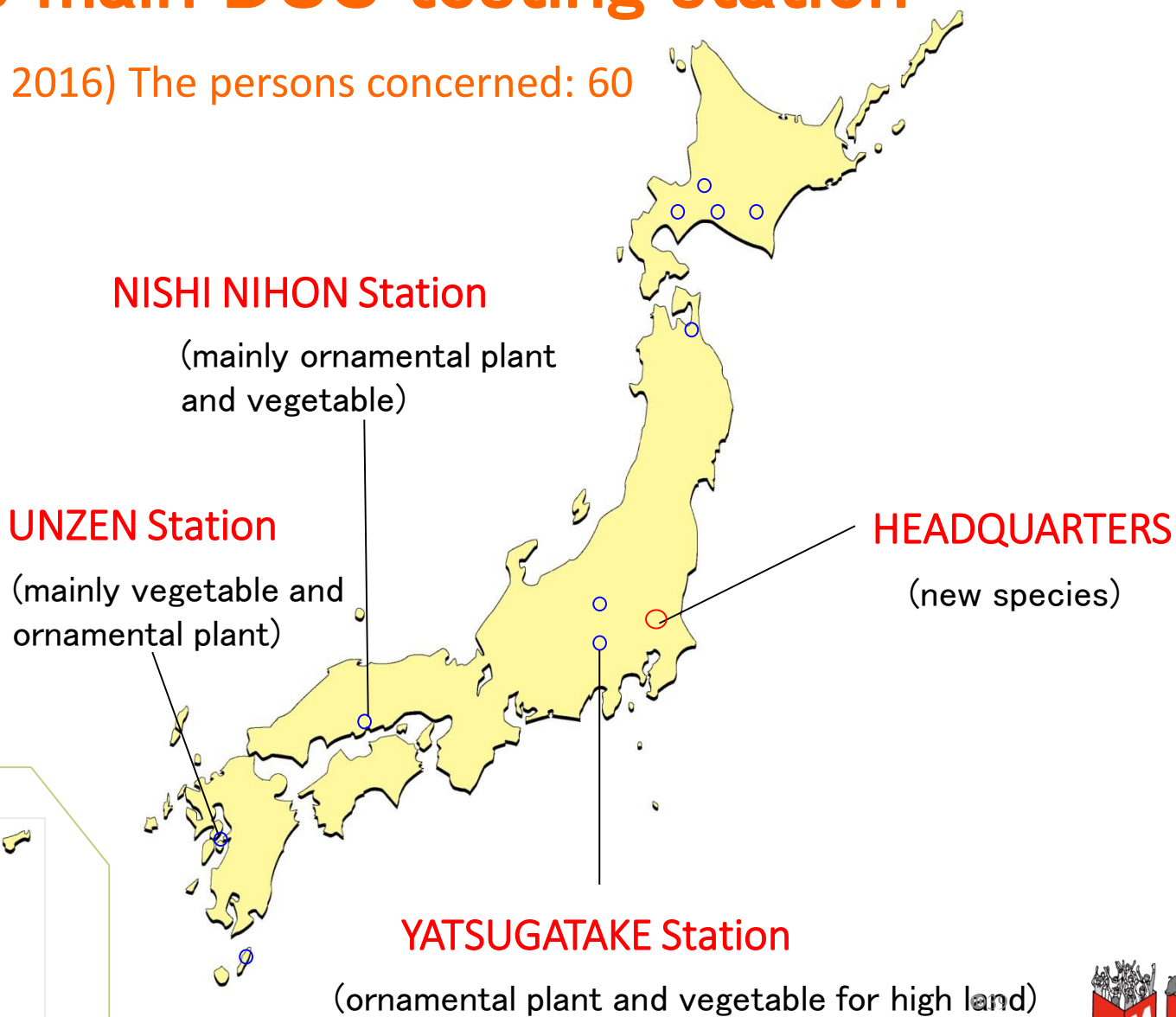
Osaka Lab.

(5 staff)



The main DUS testing station

(Apr. 1 2016) The persons concerned: 60



Summary of Japanese History of PVP

- Japanese PVP system has developed little by little over 35 years, in response to increasing number of applications.
- At the early stage, PVP system could be implemented by using **existing** facility and human resources. (Seed inspection Lab. and Prefectural experimental station)
- New Member Country may learn from other member countries' experiences.



Training for PVP System



JICA Training Course in 2016

Title	Purpose	Contents	Duration	Target
Plant Variety Protection and Quality Control System of Seeds to Facilitate Distribution of High Quality Seeds	<p>To promote understanding of the importance of quality control of seeds and give relevant practical training.</p> <p>Establishment of control system of high quality seeds conforming to international system promotes distribution and utilization of new varieties which are bred based on the national plant variety protection (PVP) system, which leads to improvement of agricultural production.</p>	<ol style="list-style-type: none"> 1. Writing inception reports, visiting related institutions and companies 2. Lectures and field trips about inspection of seeds (seed testing) 3. Practical training about seed testing 4. Lectures and field trips about PVP system harmonized internationally 5. Practical training about growing test 6. Complementary training in Viet Nam 	2016.6.12-9.29	<p>Persons under national and local authorities or related organizations in charge of PVP system or quality control of seeds such as seed testing and seed certification system.</p> <p>[Target countries] (13 countries) Argentina, Bangladesh, Bhutan, Cambodia, Kirghiz, Lao PDR, Mauritius, Moldova, Myanmar, Sri Lanka, Timor-Leste, Viet Nam, Zambia</p>



In-country Training Course at NCSS

Training Steps	Skills to be mastered	Contents	Target
1. First step (newly hired staffs)	Fundamental skills about DUS testing	<ul style="list-style-type: none"> Training course for newly hired staffs 	Newly hired staffs (6 persons)
2. Second step (the beginner class)	Practical skills about DUS testing	<ul style="list-style-type: none"> OJT + Basic training for new persons in charge <ul style="list-style-type: none"> UPOV distance learning courses Training for persons in charge of growing test 	Persons in charge of growing test (5 persons)
3. Third step (the intermediate class)	Comprehensive skills about DUS testing	<ul style="list-style-type: none"> Training about making test guidelines 	Responsible persons in charge of growing test (4 persons)
4. Fourth step (the advanced class)	Instructive skills about growing test	<ul style="list-style-type: none"> Qualification examination of responsible persons in charge of growing test Proficiency examination for responsible persons in charge of growing test 	



International cooperation activities in PVP



International cooperation activities in PVP

- Training course in Japan
- JICA Training and Project
- Workshop for cooperation in harmonization of test guidelines (TGs) and DUS test
- Awareness seminar with regard to PVP
- Dispatch experts



Japanese new approach of international cooperation in the examination

Japanese PVP office offers UPOV member states the examination report at no charge by exchanging the Memorandum of Cooperation (MOC) since this year.

- For Japanese breeders, they can expect PBR registration with shorter period and lower cost
- For Members, they can save cost of DUS growing test.



Conclusion





Concluding Message to Colleagues

1. If there is a good law on PVP, a country can start PVP system **lightly equipped** (measure, paper, pencil and camera)
2. Gradually grow as demand grows.
3. Japan and other UPOV member countries are happy to support in terms of implementation.

We wish that

**Japan would play its role
in UPOV together with East
Asian countries**

Japanese PVP Office web-site

Top page in English



http://www.hinsyu.maff.go.jp/en/en_top.html

Plant Variety Protection

PVP Office at MAFF, JAPAN

[The Plant Variety Protection and Seed Act](#)

[The Plant Variety Protection System in Japan](#)

[The outline of Plant Variety Protection System](#)

[Test Guidelines](#)

[Searching Plant Variety](#) (DATABASE)

[PICS](#) (DATABASE)

[Links](#)

ABOUT PVP

- [The Plant Variety Protection and Seed Act](#)
- [The Plant Variety Protection System in Japan](#)
- [The outline of Plant Variety Protection System](#)
- [Test Guidelines](#)

DATABASE



– Searching Plant Variety –

Any user can search for varieties which were published or granted under the Japan's PVP.



This system allows the user to easily obtain information on plant varieties from the color of the fl

→[How to use PICS](#)

Thank you for your attention

