PVP Impact and Implementation in Japan

Seminar on the benefit of the UPOV System of Plant Variety Protection for farmers and growers

Thursday 23 Feb. 2017

T.K Palace, Jaengwattana Road, Bangkok, Thailand Kenji NUMAGUCHI

Plant Variety Protection Office, Intellectual Property Division, Ministry of Agriculture, Forestry and Fisheries (MAFF) Japan

Contents

1. Significance of PVP System

- (1) Case: Rice variety "Tsuyahime" in Yamagata pref.
- (2) Case: Ashiro rindo (Ashiro Gentian)

2. Outline of Japanese PVP system

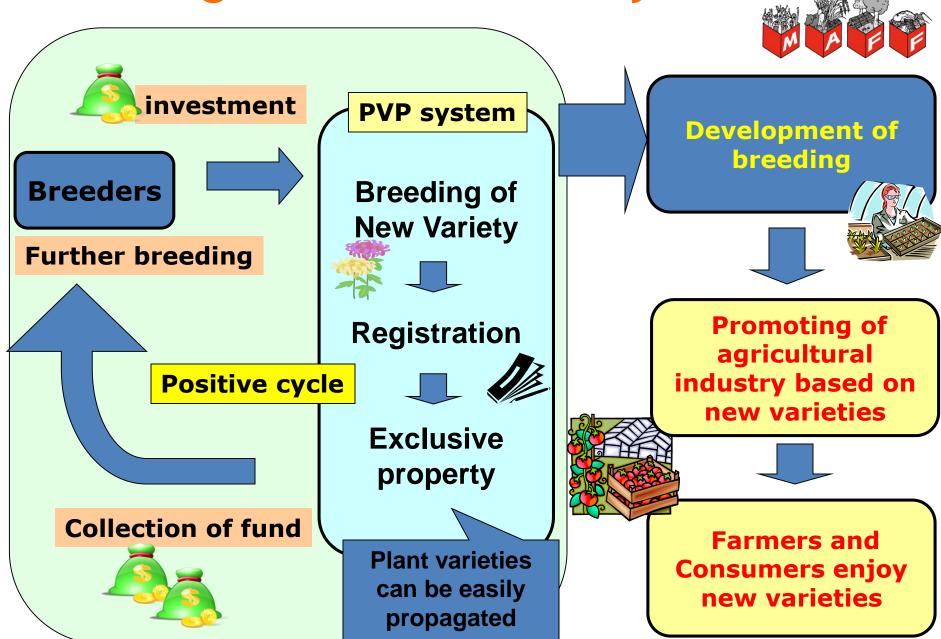
- (1) Framework
- (2) PBR statistics
- (3) New approach



Significance of PVP System



Significance of PVP System



Case of PBR utilization for branding

1. Rice variety "Tsuyahime" Yamagata pref.

Ashiro rindo,
 Hachimantai city Iwate pref.



Development of "Tsuyahime" in Yamagata pref.

- <Obstacles>
- Struggling in Agricultural growth in Yamagata
- > Low recognition as Rice production area
- ➤ Leading variety "Haenuki" is used as average rice



- <Targets>
- Develop to representative Rice variety with Brand value in Yamagata
- Promote to agricultural growth and activation in Yamagata

Rice variety "Tsuyahime" development process

1998~	Crossing, Sellection			
2007	Implementation to organize planning			
	branding strategy			
2008	Establishment head office for branding			
	Appeal to the public for the denomination			
2009	Appling for PBR			
2010	Start planting, Sale			
	Package design registered as Trademark			
2011	PBR Granted			



つや姫 Tsuya-hime Tuya hime mean glossy princess

"Tsuyahime" guideline for production : Different from previous varieties developed in Yamagata

- Restricted planting area for optimum growing
- Restricted cropping to Organic and Special
 Organic: No use agrichemicals and chemical fertilizer
 Special: low agrichemicals and chemical fertilizer
- Restricted grower certified by Branding organization.
 Own more than 3ha paddy field
- Restricted shipment rule Grain quality 1st grade or 2nd grade Protein content less than 6.4%
- Forwarding permission to grow out of Yamagata pref. Requirement for permission: adoption as the recommended variety in the prefecture.

"Tsuyahime" Sales promotion and advertising campaign

- Introduced by TV program, CM and Radio
- Introduced by newspaper and magazine,
- > PR events
- Tasting campaign in front of stores
- Top sales by the governor of Yamagata pref.



❻つや姫

⑩店頭価格比較

"Tsuyahime": Present situation and Future challenge

- Keeping higher price as Koshihikari producted in Niigata
- Public recognition was raised Cropping Area (ha) $2,500(2010) \rightarrow 8,807(2016)$ Certified Farmers $2,520(2010) \rightarrow 5,320(2016)$ Distributed amount(t) $2,267(2010) \rightarrow 35,949(2016)$
- Evaluation level as the high grade brand rice, still not so high
- ✓ To enhance recognition and keep price, Continuous branding approach is necessary

pref.Top 20 Rice Cultivars (1,505,000 ha (2015))

There are 17 registered varieties in top 20 cultivars of rice.

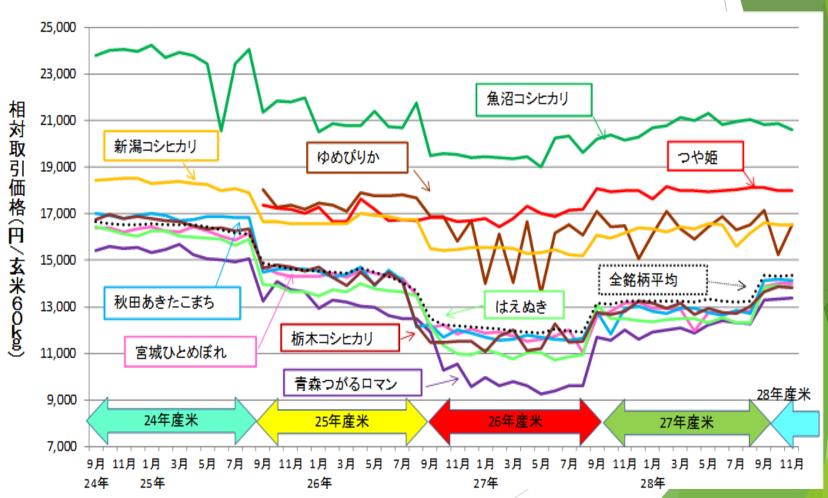
© registered

O invalid registered

w unregistered but include registered back cross variety

33 3 dilivara (1,333,333 ria (2313))					
	PBR	Denomination	Breeder	Date of registoration	Share(%)
1	×	Koshihikari	National Institute	-	36.1
2	0	Hitomebore	Miyagi Pref.	1992/2/29	9.7
3	0	Hinohikari	Miyazaki Pref.	1990/8/4	9
4	-	Akitakomachi	Akita Pref.	-	7.2
5	0	Nanatsuboshi	Hokkaido Pref.	2004/11/8	3.4
6	0	Haenuki	Yamagata Pref.	1993/1/18	2.8
7	0	Kinuhikari	National Institute	1989/9/19	2.7
8	0	Masshigura	Aomori Pref.	2009/7/31	1.9
9	0	Asahino yume	Aichi Pref.	2000/3/30	1.6
10	0	Koshiibuki	Niigata Pref.	2003/8/19	1.5
11	0	Yumepirika	Hokkaido Pref.	2011/3/15	1.4
12	0	Kinumusume	National Institute	2008/3/17	1.1
13	0	Tsugaruroman	Aomori Pref.	2000/9/5	1
14	0	Yumetsukushi	Fukuoka Pref.	1995/3/23	1
15	0	Kirara 397	Hokkaido Pref.	1990/4/3	0.9
16	0	Aichinokaori	Aichi Pref.	1988/12/13	0.9
17	0	Tsuyahime	Yamagata Pref.	2011/8/9	0.8
18	0	Sainokagayaki	Saitama Pref.	2005/2/7	0.6
19	*	Hatsushimo	Gifu Pref.	-	0.6
20	0	Chiba 28 go (Fusakogane)	Chiba Pref.	2007/3/2	0.6
				total	84.8

Market price "Tsuyahime"
"Tsuyahime" had been kept highly price in decline
period other varieties



2. Ashiro Rindo (Asiro Gentian)

Developing branding for Ashiro Rindo

- <Obstacles >
- Cool weather in mountain area
- Migrant work during winter
- Competition between production areas



- <Targets>
- Representative Rindo cropping area in Japan
- Promoting Agriculture and Rural area developing by new Rindo varieties

Case: Ashiro Rindo (Ashiro gentian)

"Vitalization of local agriculture using PVP"

1970s

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

Soil & cool climate

good for Rindo



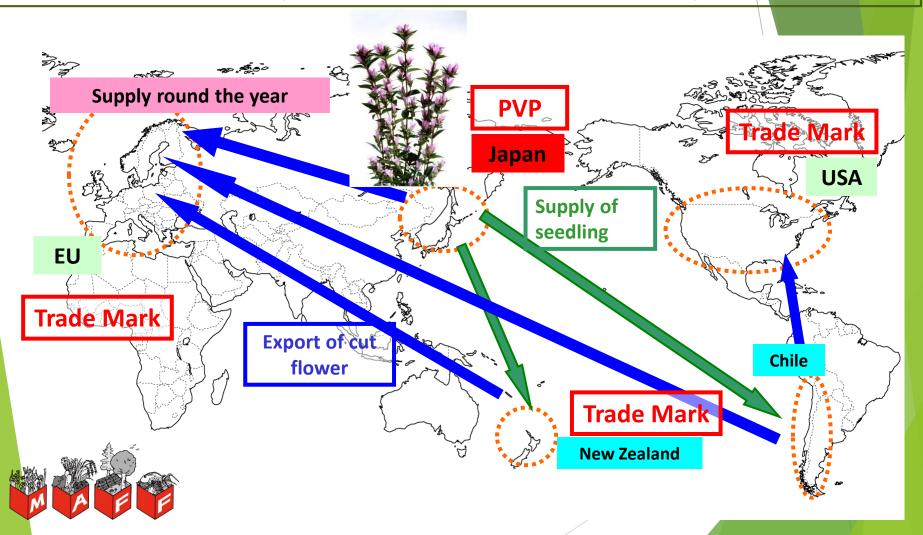
Lovely Ashiro



Ashiro Rindo (Ashiro gentian)

Cut flowers produced in NZ and Chile, exported to EU and USA

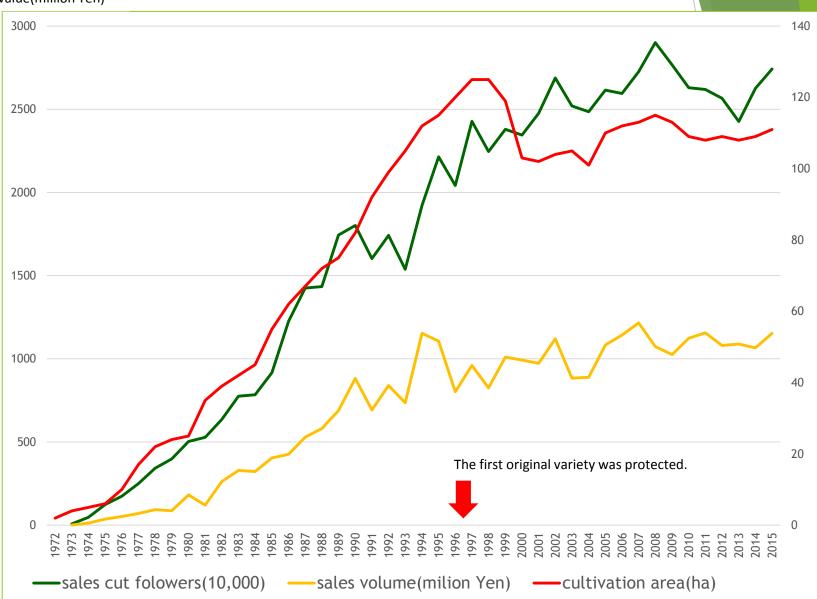
⇒ supply of Ashiro brands round the year



Trend of production of Ashiro Rindo

cut flower(10000)

sales value(million Yen)



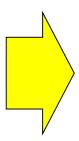
2. Outline of Japanese PVP system(1) Framework

THE PLANT VARIETY PROTECTION AND SEED ACT

(Article 1)

Plant Variety Protection (Registration of Plant Variety)

To Promote the Breeding of Plant Varieties



Development of Agriculture, Forestry and Fisheries

Indication of Designated Seeds

To Promote the Rational Distribution of Seeds/Seedlings



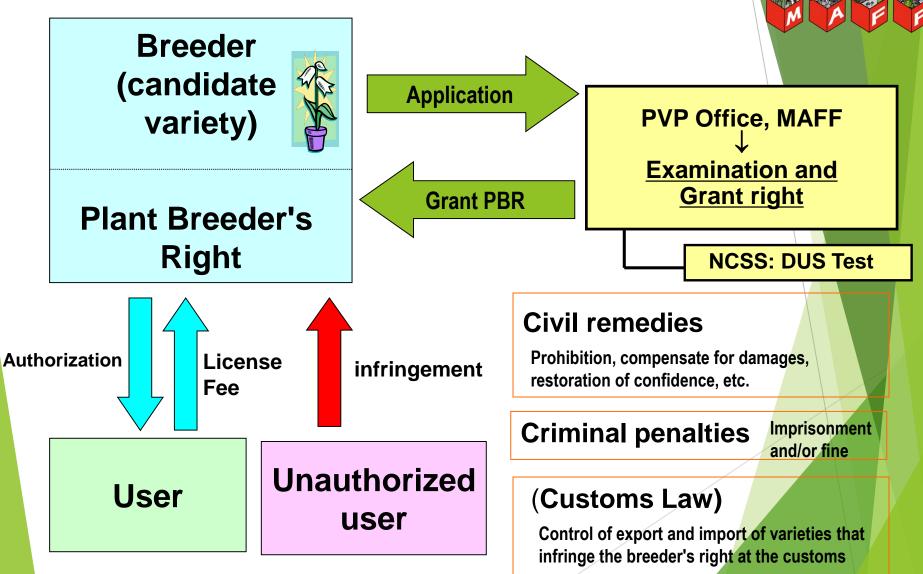
Purpose of PVP System

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

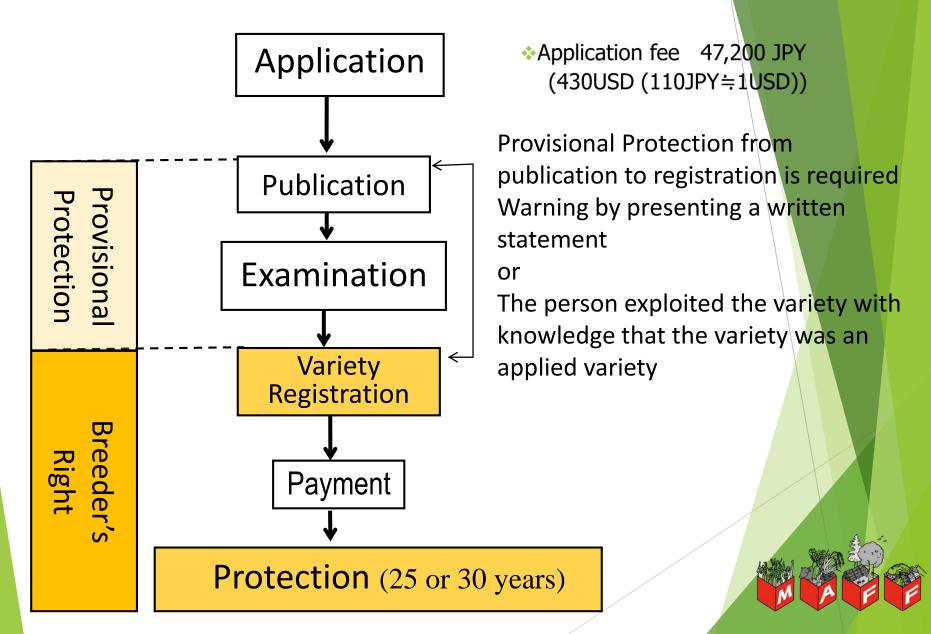
NCSS-NARO

Center for Seeds and Seedlings (Incorporated Administrative Agency)

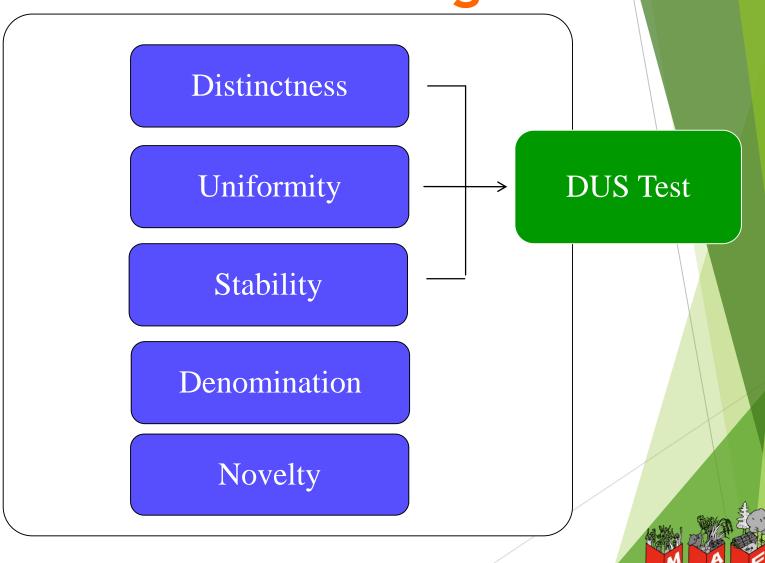
HQs, 11 stations, 1 sub-station

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

Procedure & Provisional Protection



Conditions for registration



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



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.....

History of PVP System in Japan

Law

Organization

1947 Agricultural Seeds and Seedlings Law

the early stage of PVP

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

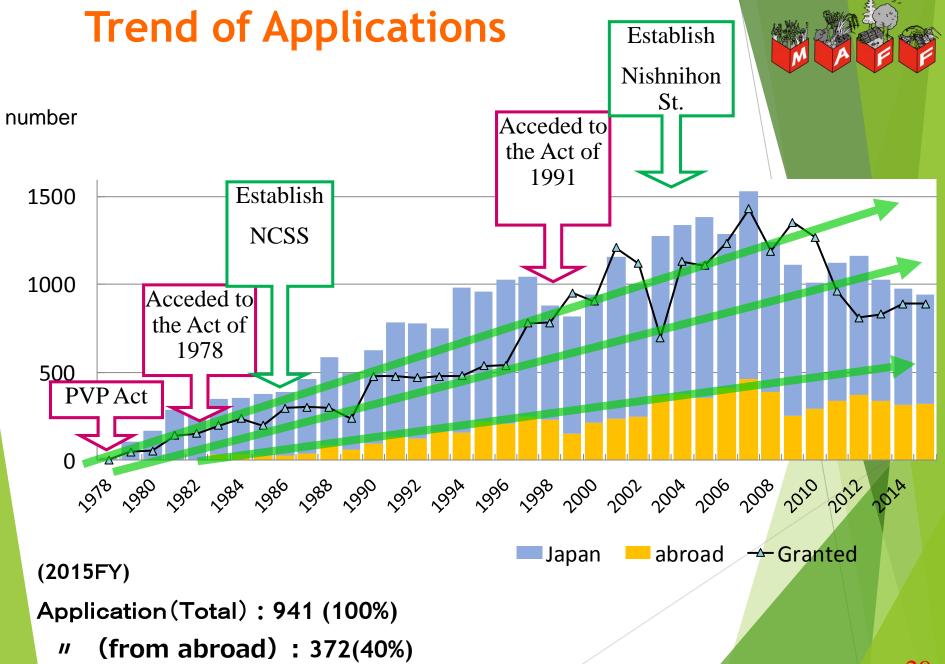
Ratify the UPOV 1991 Act

2003 NCSS Nishinihon Station

2003, 2005, 2007 Amendment of the Act

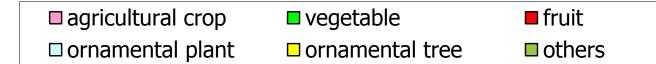
2008 Intellectual Property Div.

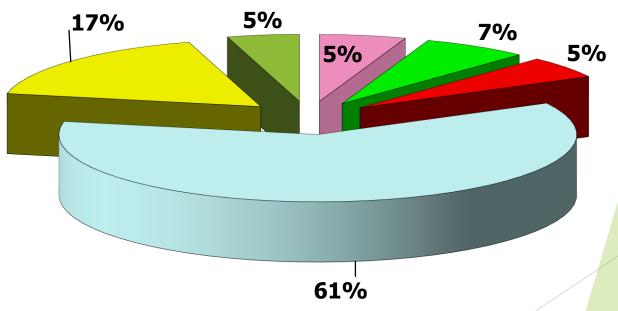
2. Outline of Japanese PVP system(2) PBR Statistics



Granted PBRs by Crop

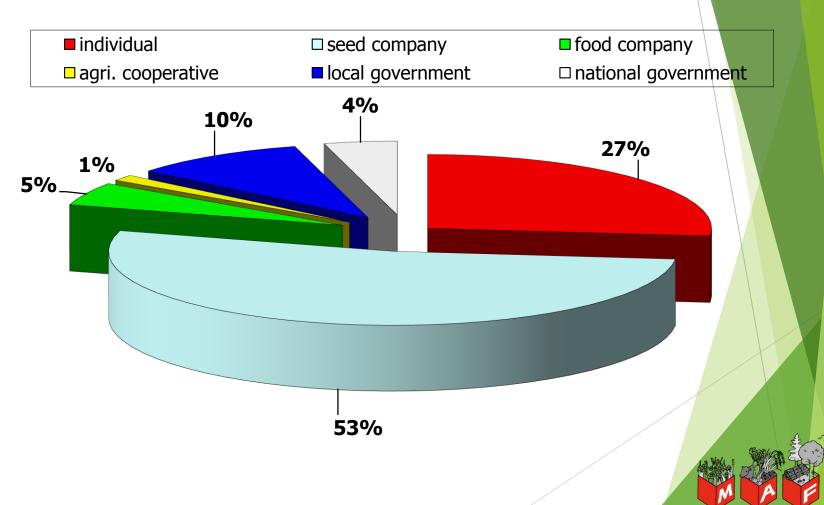
Total Number: 25,166 (~Mar. 31, 2016)





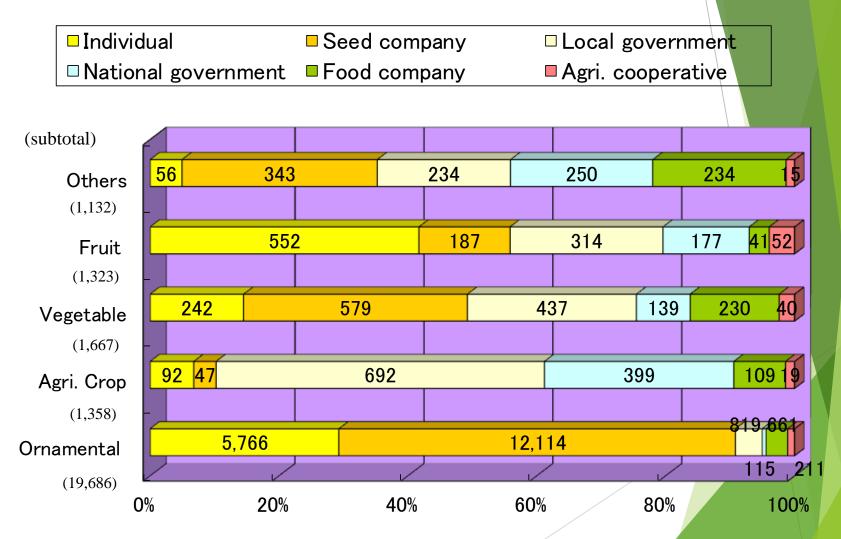
Granted PBRs by Type of Breeder

Total Number: 25,166 (~Mar. 31, 2016)



Granted PBRs by Crop and Type of Breeder

Total Number: 25,166 (~Mar. 31, 2016)



2. Outline of Japanese PVP system(3) New approach

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 last 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.

Japanese PVP Office web-site Top page in English

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



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)

<u>Links</u>

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

