

# Enhancing the Effectiveness of the PVP System in the Next 10 Years



**Junya ENDO**

Director

Intellectual Property Division,  
Ministry of Agriculture, Forestry and Fisheries  
(MAFF), Japan



# Outline

1. Review of the PVP System in Japan
2. Impacts of Operating the PVP System in Japan
3. Future Strategy for Enhancing the Effectiveness of the UPOV system in the next 10 years



# 1. Review of the PVP System in Japan



# History of PVP System in Japan

## The UPOV Convention

**1961 Adopted**  
(Entry into force in 1968)

**1972 Amendment**

**1978 Amendment**  
(Entry into force in 1981)

**1991 Amendment**  
(Entry into force in 1998)

## JAPAN

**1978 “Plant Variety Protection and Seed Act”**

**1982 Accession to the UPOV Convention  
(Act of 1978 )**

**1998 Full-Amendment on “Plant Variety  
Protection and Seed Act” (“The Act”)  
Accession to the UPOV Act of 1991**

**2003 Amendment on “The Act”**  
-Expansion of coverage of penal provisions to harvested material

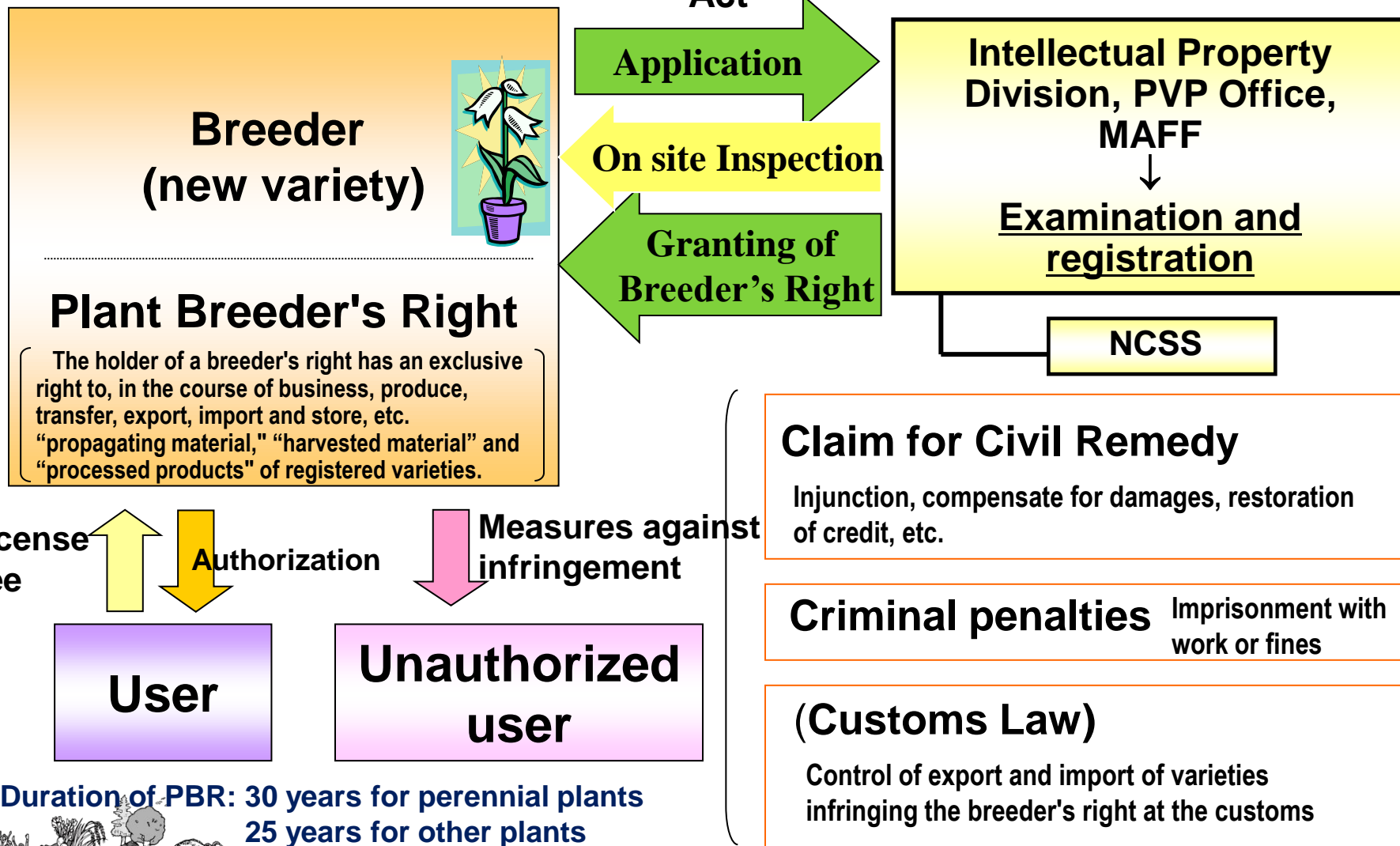
**2005 Amendment on “The Act”**  
-Expansion of the effect of PBR to products made directly  
from harvested material

**2007 Amendment on “The Act”**  
-Improved procedure for civil remedy and strengthening of  
penal provisions etc.



# Outline of the PVP System in Japan

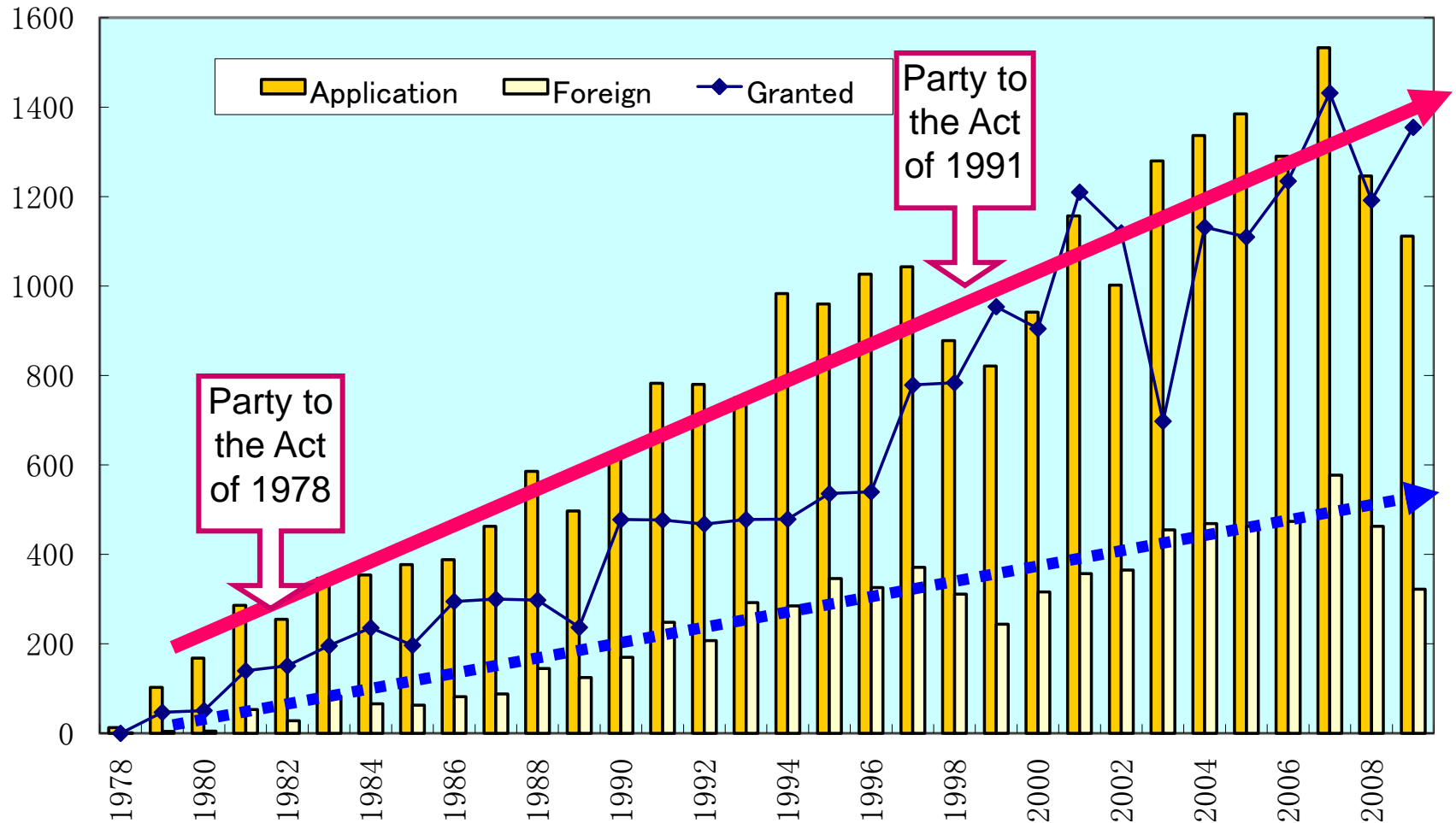
- Variety Registration and the Granting and Protection of Plant Breeder's Right under the Plant Variety Protection and Seed Act -



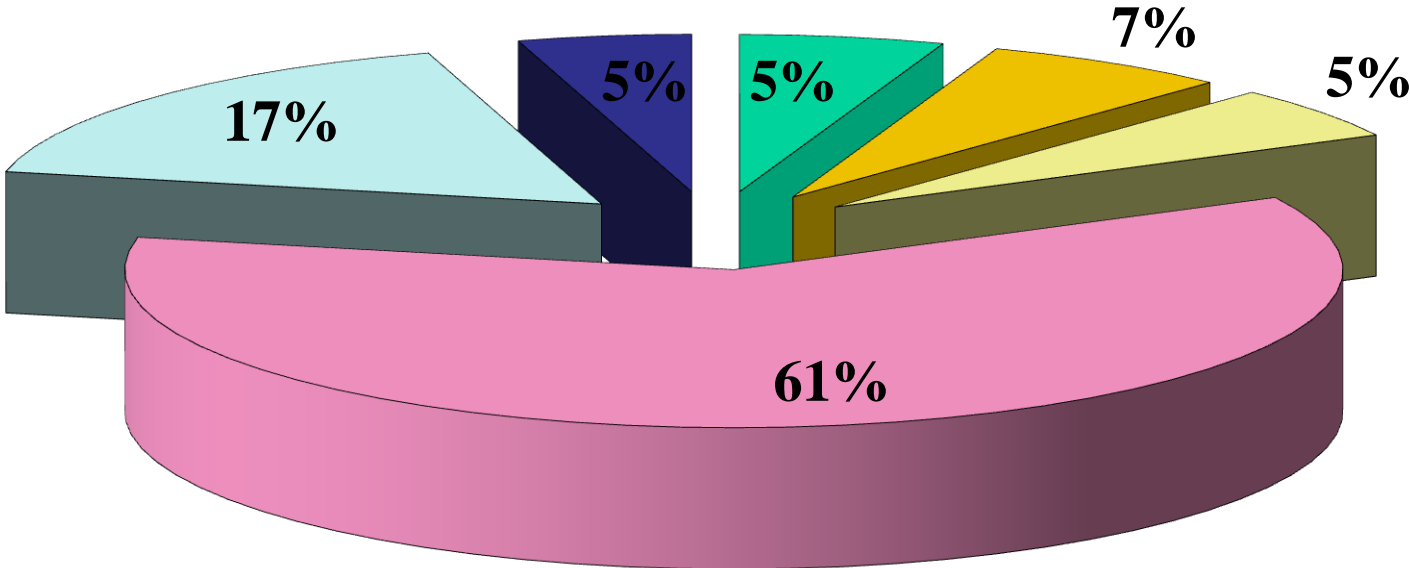


# Applications and Grant of PBRs

number



# Protected Varieties by Types of Crops



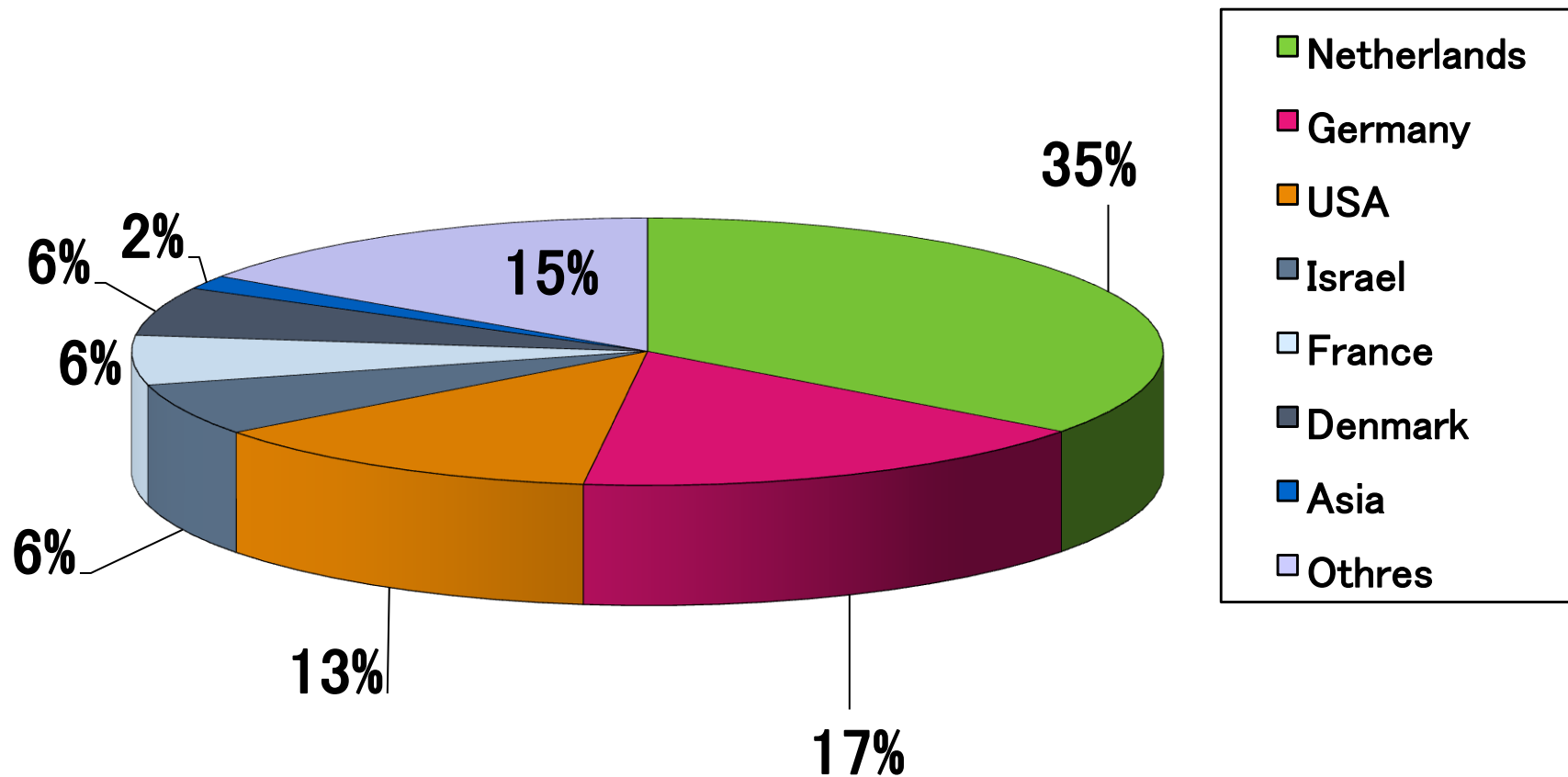
■ Food crops   ■ Vegetable   ■ Fruit crops   ■ Flower   ■ Ornamental tree   ■ others

(FY 1978-2010, Total Number: 20,779)

Symposium on Plant Variety Protection, 13 – 15 July, 2011, Seoul Korea



# Foreign-bred Protected Varieties by Country

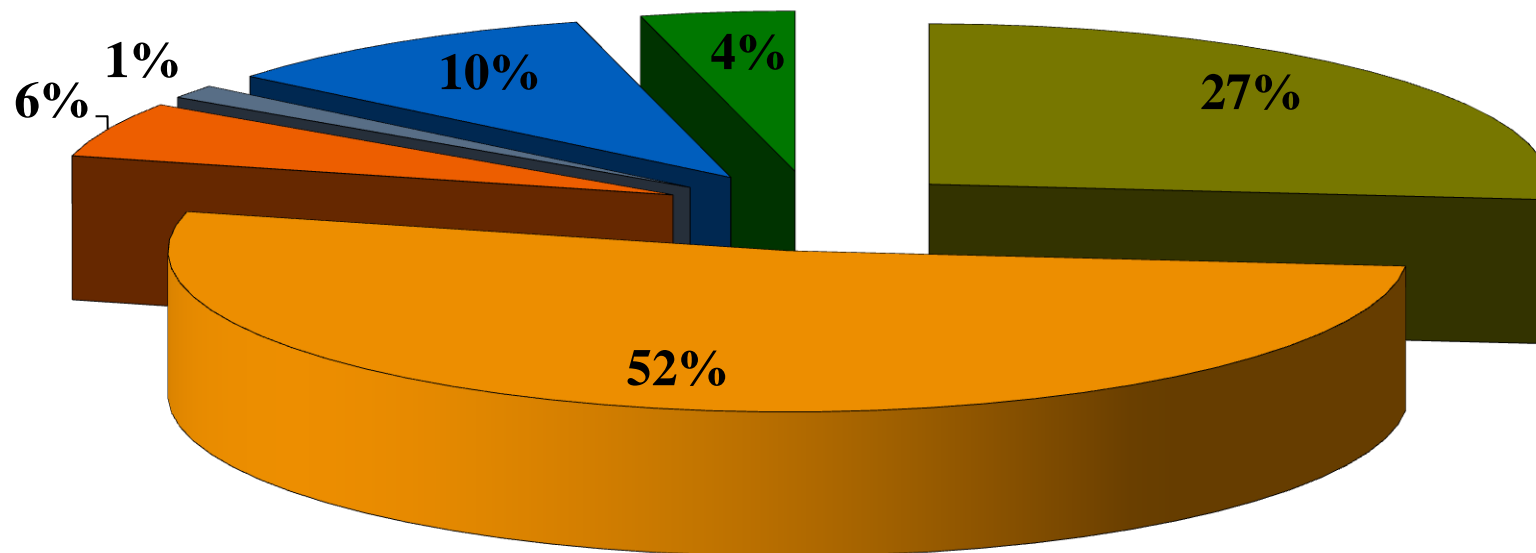


(FY 1978-2009, Total Number: 7,806)





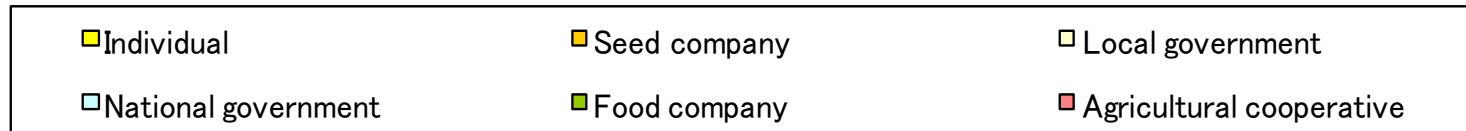
# Protected Varieties by Breeder's Status



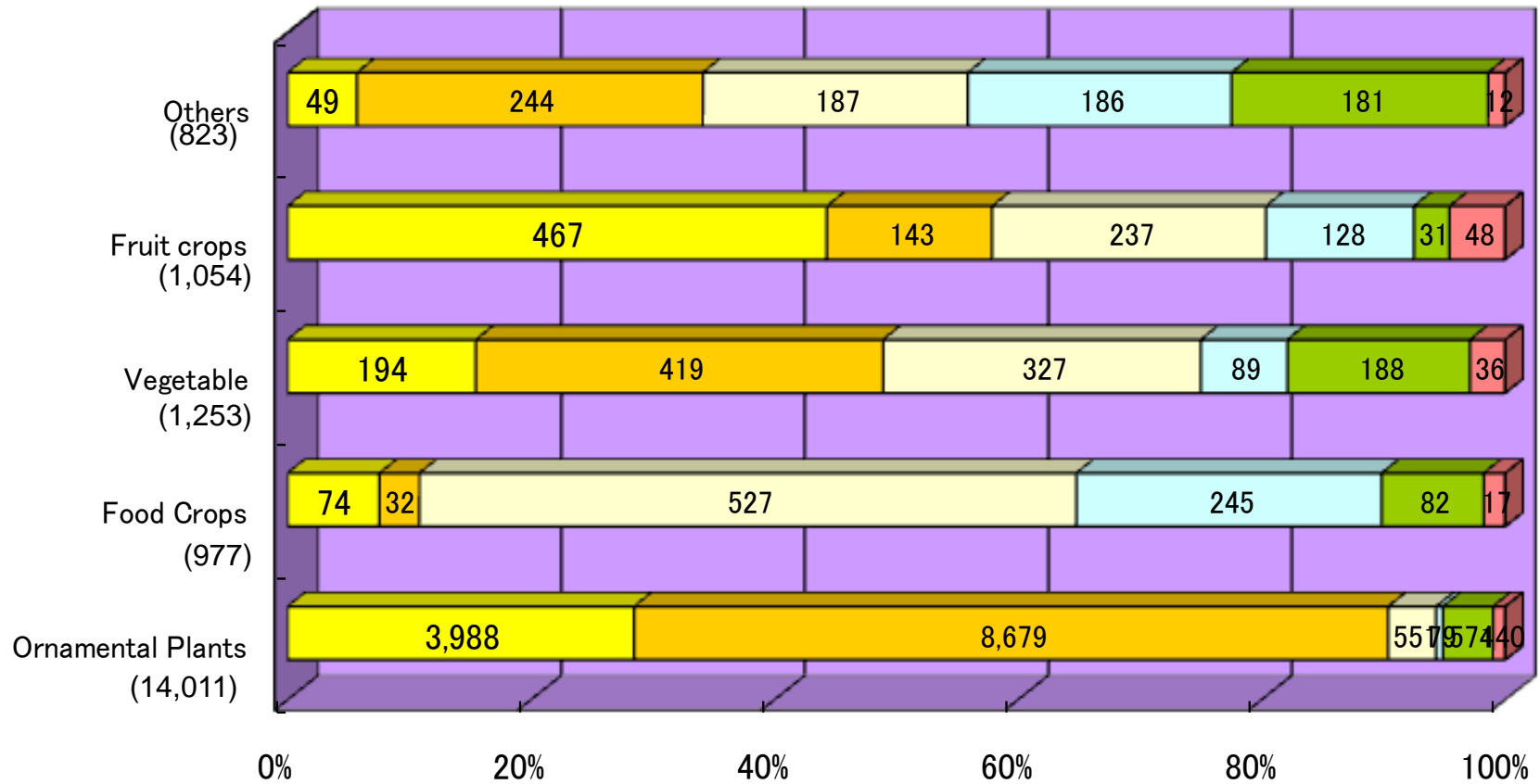
(FY 1978-2010, Total Number: 20,779)



# Protected Varieties by Breeders' Status × Crop Type



(subtotal)



# Organizational Arrangement for PVP in Japan

## ■ MAFF (Ministry of Agriculture, Forestry and Fisheries)

### □ Intellectual Property Division

- Administration of IP & PVP
- Promotion of Seed Industry
- Supervision of NCSS, etc.

### □ PVP Office

- Establish Test Guidelines
- Examine DUS, Novelty, Denomination
- Examiners (23)

## ■ National Center for Seeds and Seedlings (NCSS): Incorporated Administrative Agency

### □ HQ and 10 stations, 1 sub-station

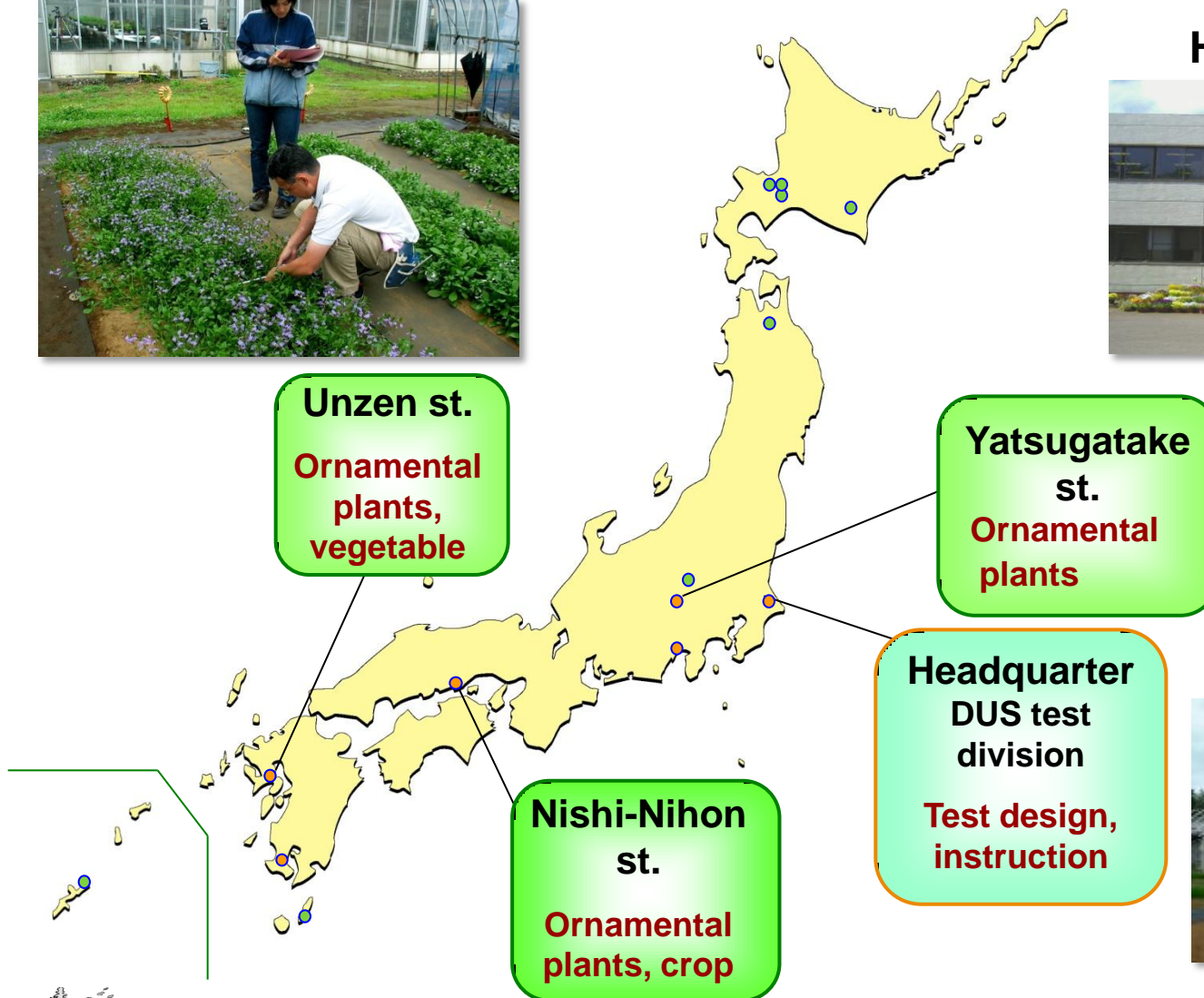
- DUS Test (60 staff)
- Production of Foundation Seeds
- Seed Inspection, etc.



# Location of NCSS Stations



Headquarter



# Website of PVP Office in Japan

## 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](#)

**MAFF**  
Ministry of Agriculture, Forestry and Fisheries

### 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.



#### pics

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

-->[How to use PICS](#)

### Link

- [Links](#)

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1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo, 100-8950, JAPAN

[http://www.hinsyu.maff.go.jp/en/en\\_top.html](http://www.hinsyu.maff.go.jp/en/en_top.html)





## 2. Impacts of Operating the PVP System in Japan





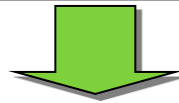
# New Varieties as a Building-block for Development of Agriculture

- **Comparative disadvantages surrounding Japanese agriculture**
  - Small holdings in narrow and steep mountainous area
  - Aging farming communities
  - High costs for farming inputs, facilities and labor
- **Global tendency toward free trade is adding an additional pressure on Japanese agriculture**

Basic strategy for development of agriculture

Supplying agricultural products meeting consumers' demands by;

- use of unique varieties
- application of advanced agricultural practices



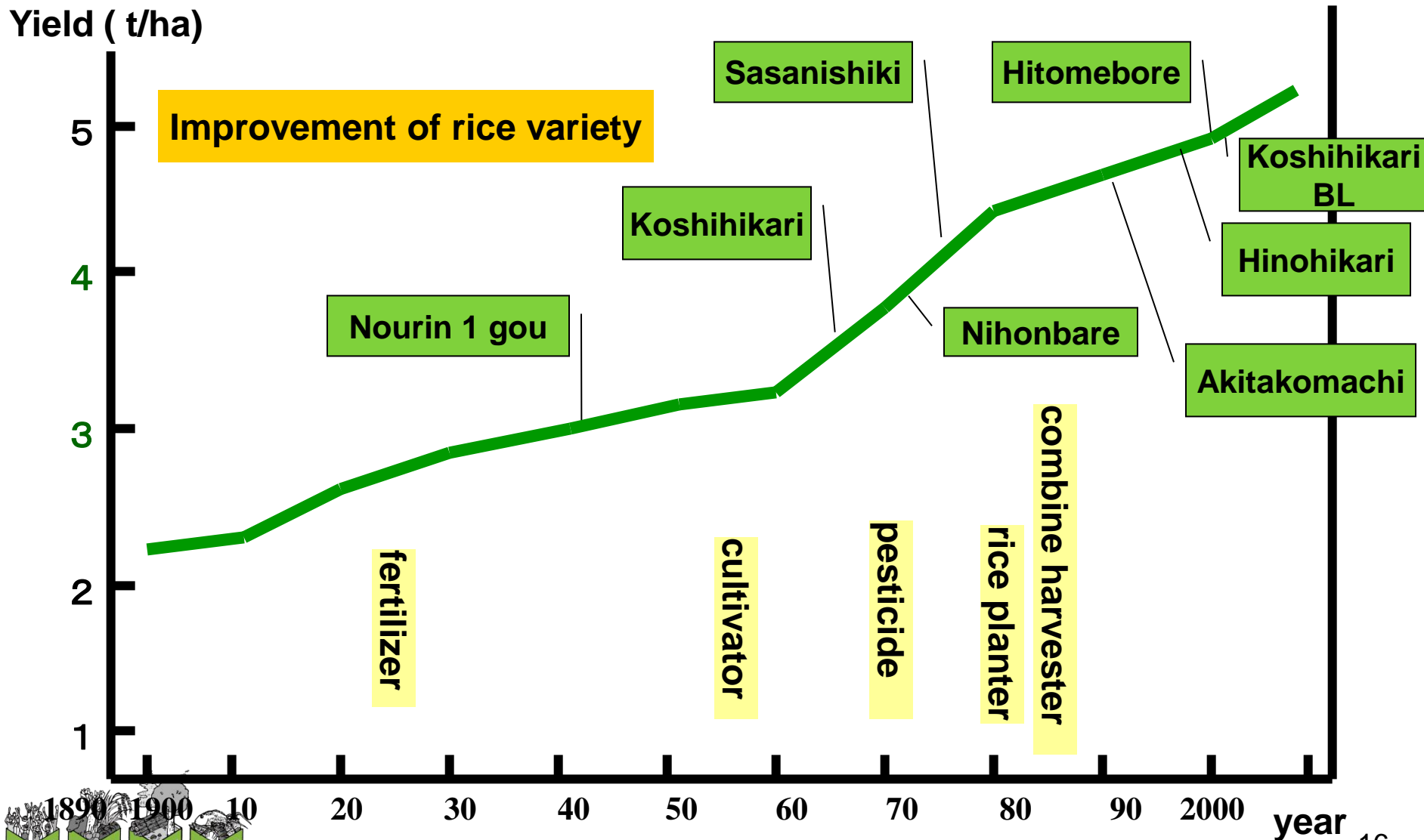
PVP system facilitates breeders' incentive for developing innovative varieties



# Impact of New Varieties

## - historical increase in rice yield -

Yield ( t/ha)



# Top 10 Varieties of Rice

1	※	<b>Koshihikari</b>
2	○	<b>Hitomebore</b>
3	○	<b>Hinohikari</b>
4		<b>Akitakomachi</b>
5	○	<b>Kinuhikari</b>
6	◎	<b>Nanatsuboshi</b>
7	○	<b>Haenuki</b>
8	○	<b>Kirara397</b>
9	◎	<b>Tsugaruroman</b>
10	◎	<b>Masshigura</b>

- 「◎」 registered (=protected) variety as of Jun, 2011  
 「○」 ex-registered variety (rights already expired)  
 「※」 the brand “KOSHIHIKARI” includes both registered and non-registered varieties; old variety “Koshihikari” is not registered, while new varieties of “Koshihikari BLs” are registered (all the BLs are bred with a parent with resistance to different races of rice blast disease, back-crossed with Koshihikari)



# Ashiro Rindo (Gentiana L.)

## (Successful Case of Breeding-oriented Development of Farming Community) (1)

- “Ashiro,” the small mountainous area in northern Japan, has engaged actively in breeding of Gentian to compete with other area.
- License for production of these varieties is given only to farmers of Ashiro in order to maintain high quality and to protect the “Ashiro” brand.



Lovely Ashiro



Ashiro no natsu

“Ashiro”  
mountainous area  
of about 6,000



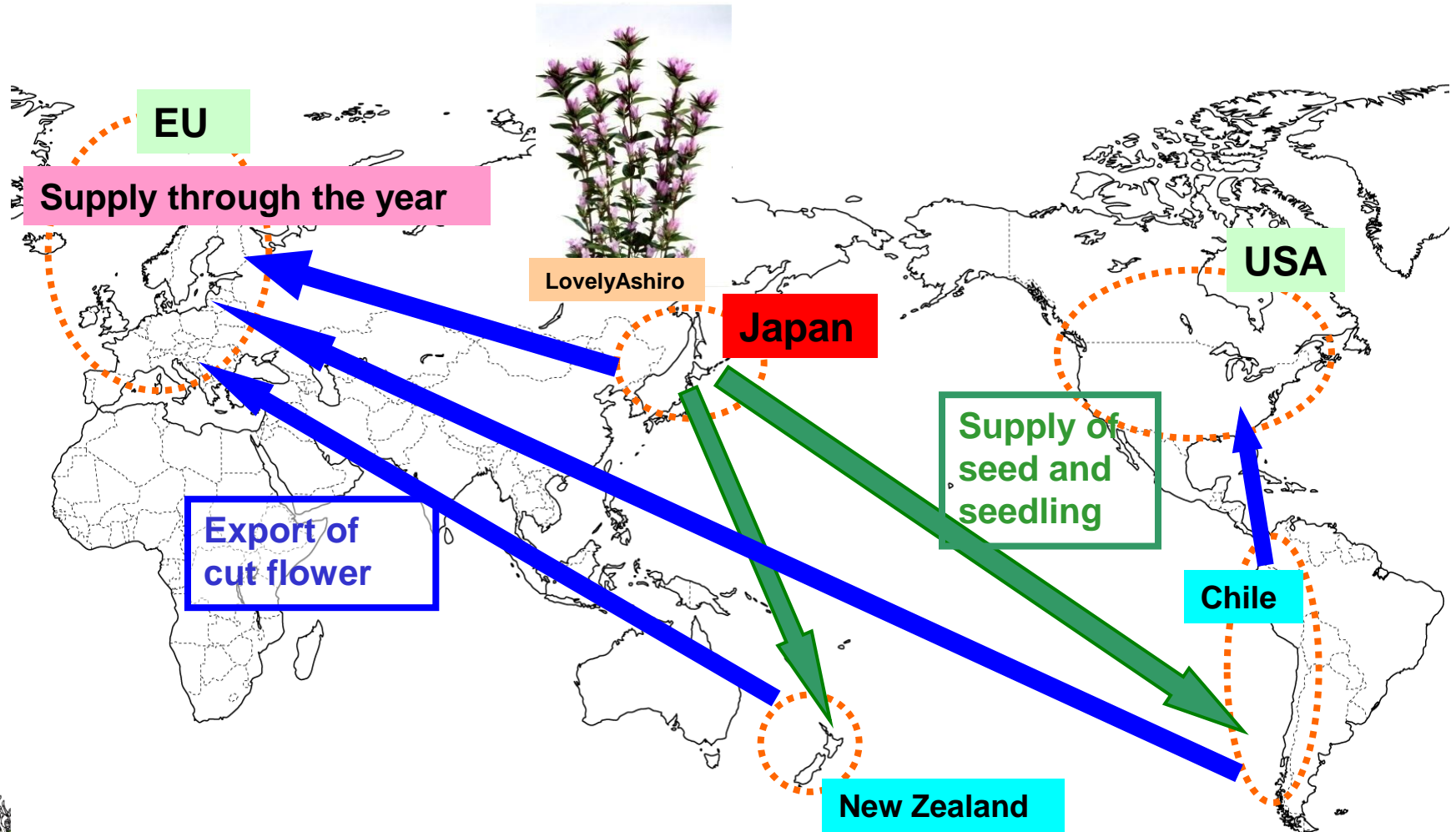
- Ashiro is also successfully exporting cut flowers to EU market throughout the year with “Ashiro” brand. by granting license for production to growers in New Zealand and Chile where seasons are reverse.
- Needless to say, PBR on the series of “Ashiro” gentians in each country is essential to protect their varieties.
- Now, “Ashiro” is trying to expand, with Chilean production of cut flowers, their market to the US.



# Ashiro Rindo (Gentiana L.)

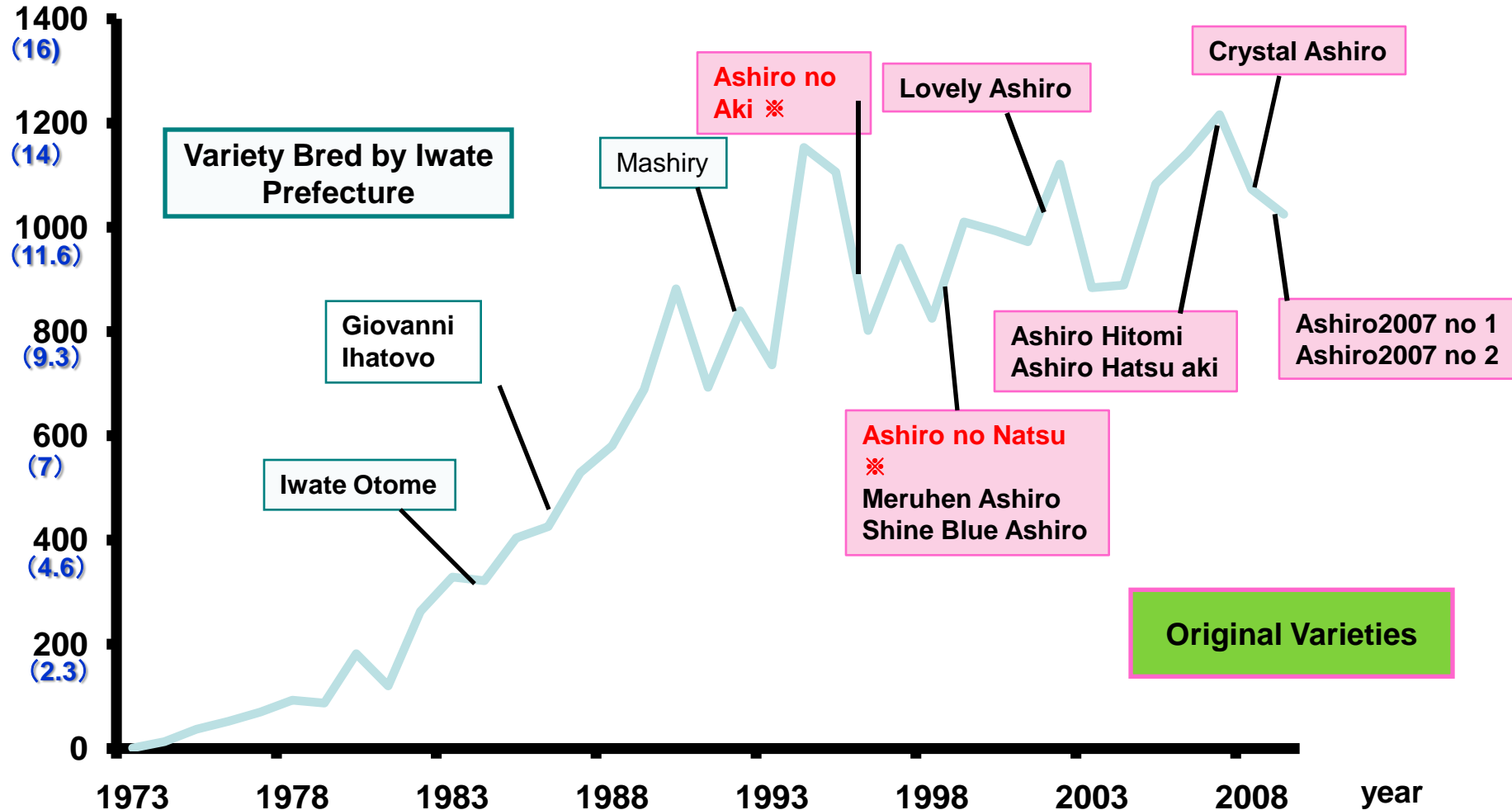
(Successful Case of Breeding-oriented Development of Farming Community) (2)

Cut flowers produced in NZ and Chile are exported to EU and US markets to achieve year-round supply of Ashiro brands



# Domestic Sales of Ashiro Rindo

(Million Yen)  
(million dollars)



※ Ashiro no Natsu and Ashiro no Aki currently have a share of 30% in Japanese Rindo cut flower market (2005)





## Zespri Gold

- New variety of kiwi fruit, bred by a NZ company.
- PBR holder is a NZ private company
- Authorization of production and sale of Zespri Gold given to Japanese farmers



## Production of Zespri Gold in Ehime Prefecture

	2005	2008
<b>Zespri Gold</b> ( in Ehime Prefecture )	Production : 258 tons Sales : more than 1.4 M USD Share in the prefecture: 3.1% (Weight) Unit price : <b><u>5 dollar/kg</u></b>	Production : 1,300 tons Sales : more than <b>6.8M USD</b> Share in the prefecture: <b>14% (weight), 20%( sales)</b> Unit price : <b><u>5 dollar /kg</u></b>
<b>Kiwi Fruit in Total</b> ( in Ehime Prefecture )	Production: 8,300 tons Sales: 28 M USD Unit price: <b>3.4 dollars /kg</b>	Production: 9,600 tons Sales: <b>34 M USD</b> Unit price : <b>3.5 dollars /kg</b>



# Development of New Varieties of Fruit Crops

- Main varieties of fruits had not been changed for many years.
- In recent years, development of new fruit varieties have been increasing gradually and shift in cultivated varieties has been taking place.

## - Apple

△ (increased) "shinanosweet", "shinanogold", "akibae"

▼ (decreased) "Fuji", "tsugaru", "Ourin"

## - Mandarin Orange

△ "ishiji", "hinoakari" "Ootsu-4gou"

▼ "MiyakawaWase", "OkitsuWase", "Aoshimaunshyu"

## - Pear

△ "akiduki"

▼ "kousui", "housui" "20seiki"

※ underlined varieties : protected varieties



# 3. Future Strategy for Enhancing the PVP system



# Future Strategy

## 1. Acceleration of Examination

- Shorten the period of examination

**2.6 years (at present) => 2.3 years (in 2014)**

## 2. Enhancement of measures to infringement

- **Improvement the system of G-men**
- **Development and enhancement of the analysis of DNA variety identification**

## 3. Active promotion of the EAPVP Forum

## 4. Promotion of Cooperation in Examination



# Thank you for your attention!

