

Experiences of Ornamental trees and Fruit trees in PVP system of Japan

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1. History of PVP System in Japan

2. Trend of Application and Registration in Japan

3. Examination of DUS in Japan

4. Issues relating Examination period of DUS in Japan

5. Topics on PVP system in Japan

History of PVP System in Japan

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

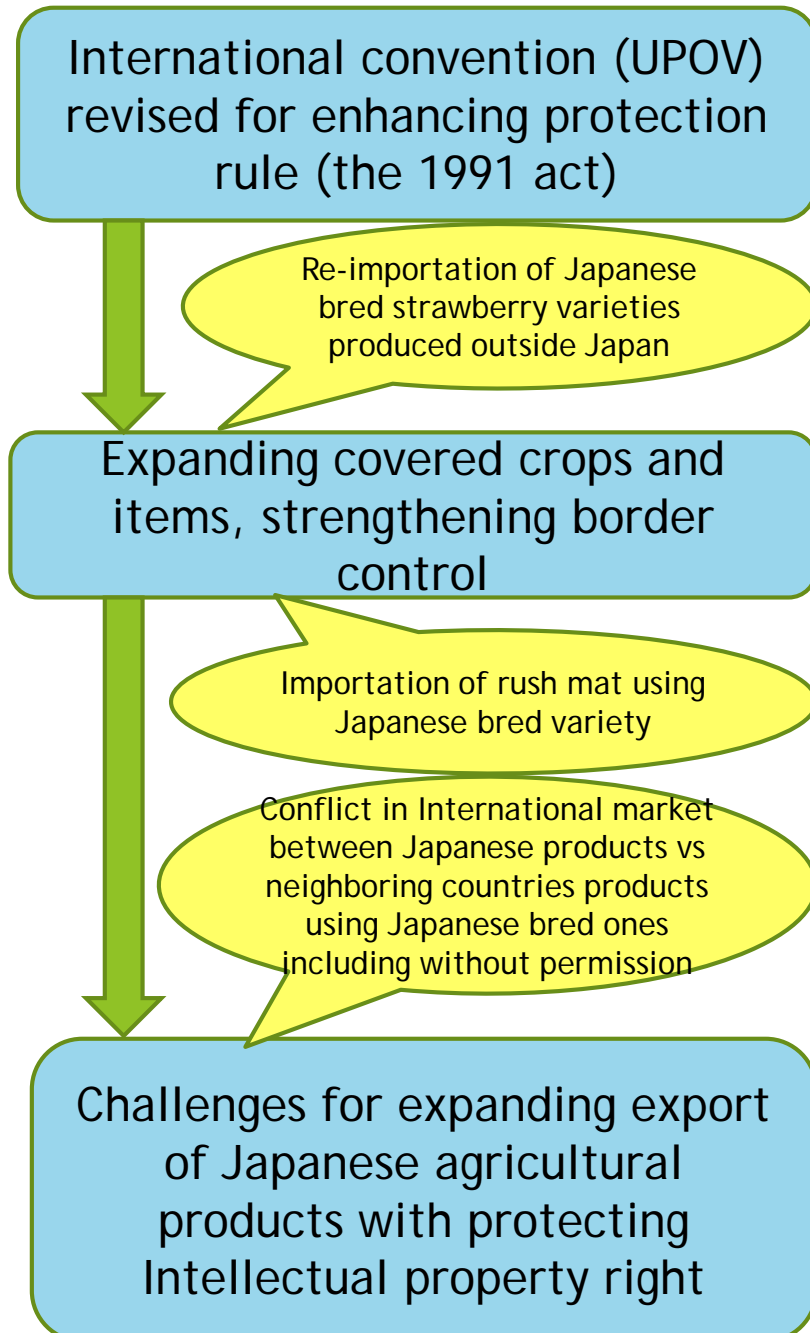
2008

Intellectual Property Div.

2016

NCSS had been merged to National Agricultural Research Organization(NARO), hereinafter called NARO(NCSS)

History of PVP System in Japan



1998

Entire amendment of the PVP and Seed act
→ **Definition of PBR as an Intellectual property right**

2003

- Establishment of Intellectual Property Strategy Headquarters
- **Amendment of the PVP and Seed act**
expanding coverage to harvested material
strengthening penalties
- Amendment of Customs Tariff Act
adding injunction on import
- Establishment of PVP G-men

2005

- **Amendment of the PVP and Seed act**
prolonging authorized period to 25 years (30years of woody plant)
expanding coverage to processed products for several crops

2007

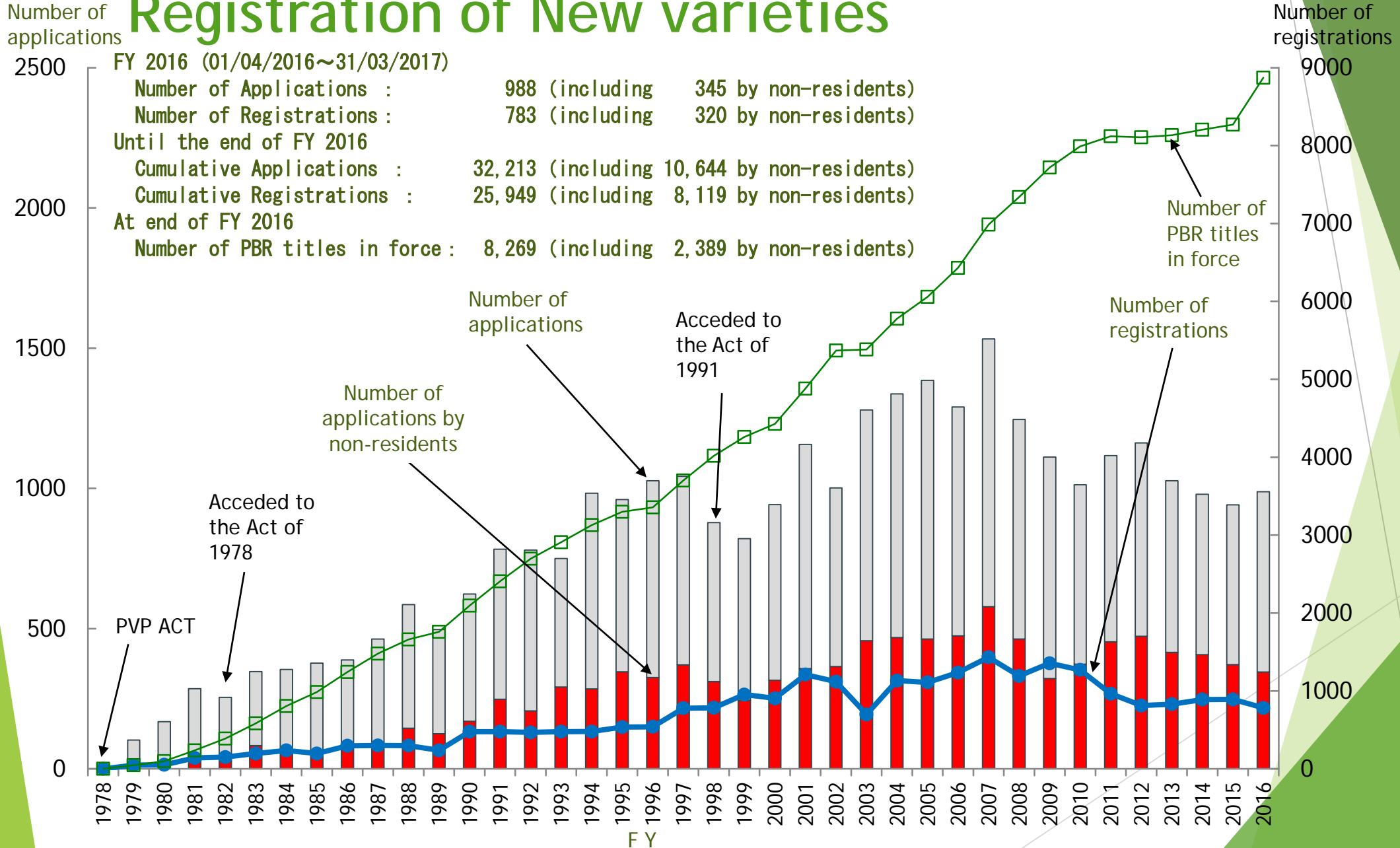
- **Amendment of the PVP and Seed act**
strengthening penalties

2016

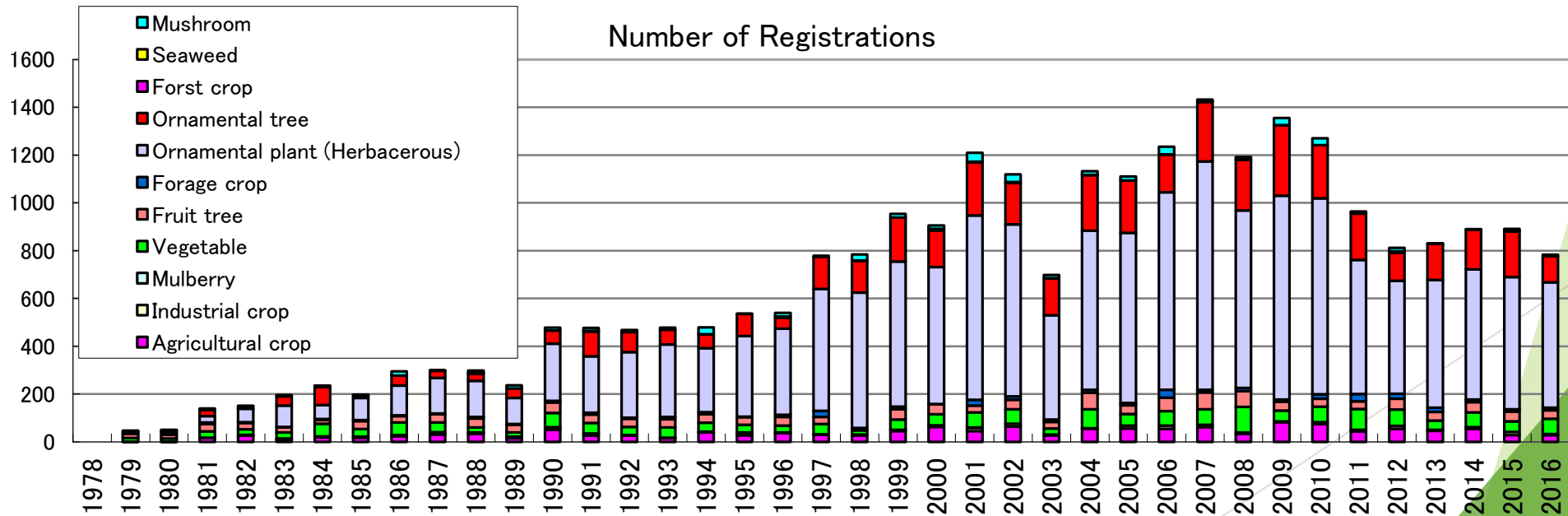
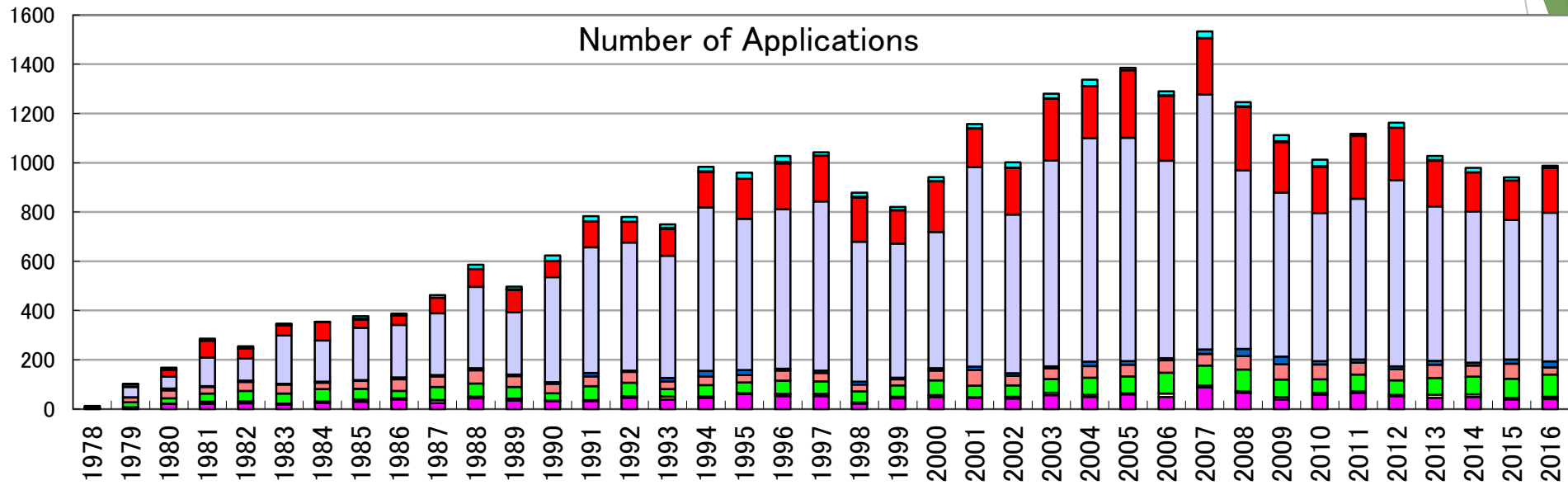
- **Formulation of the Strategy for strengthening export ability of Agricultural, forestry and fisheries products**
- ✓ recognizing importance of acquisition of intellectual property right in foreign country and support for solving conflict on IPR in order to protect "genuine products"

Trend of Application and Registration in Japan

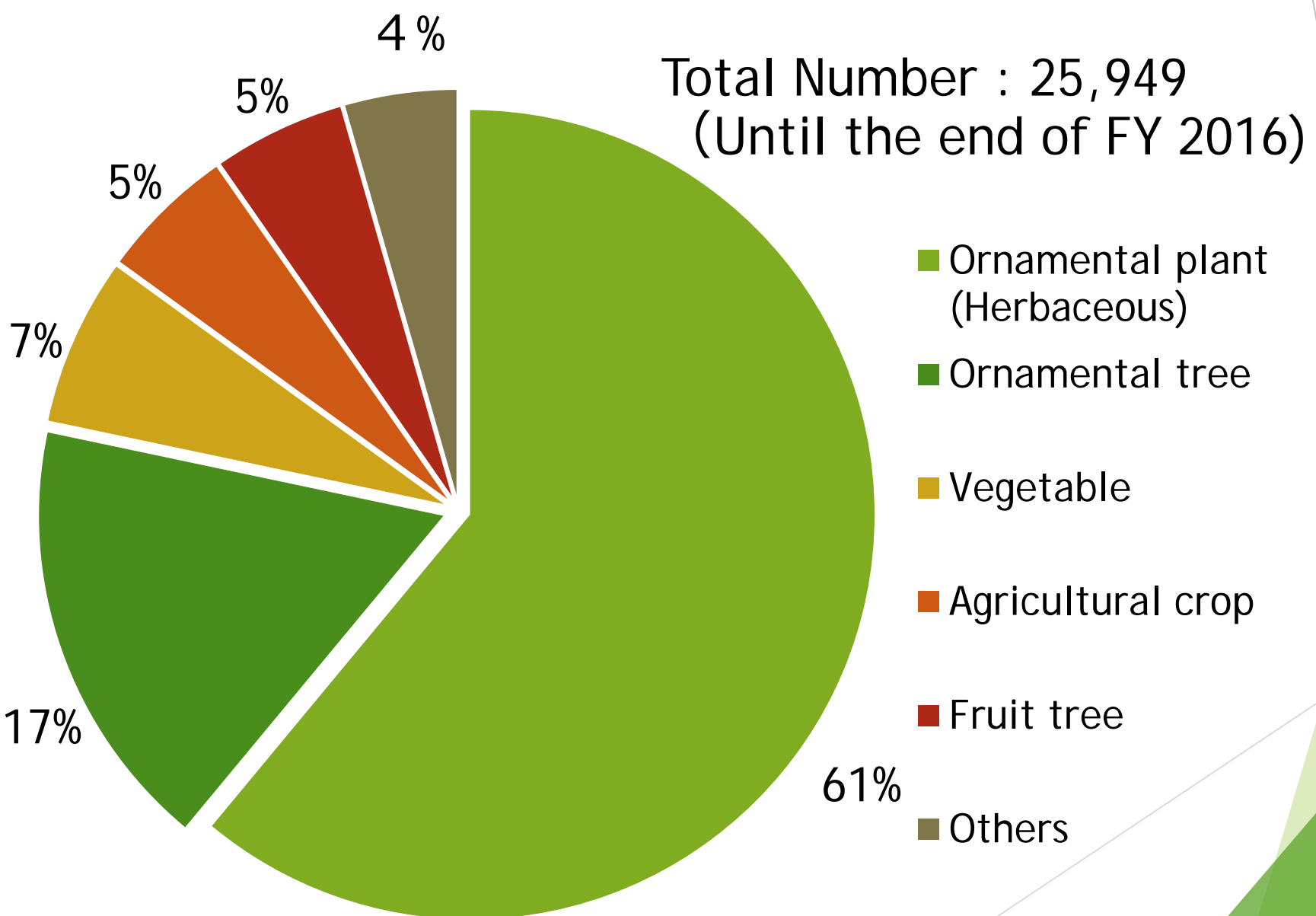
Current Situation on Application and Registration of New varieties



Number of Applications and Registrations by crop

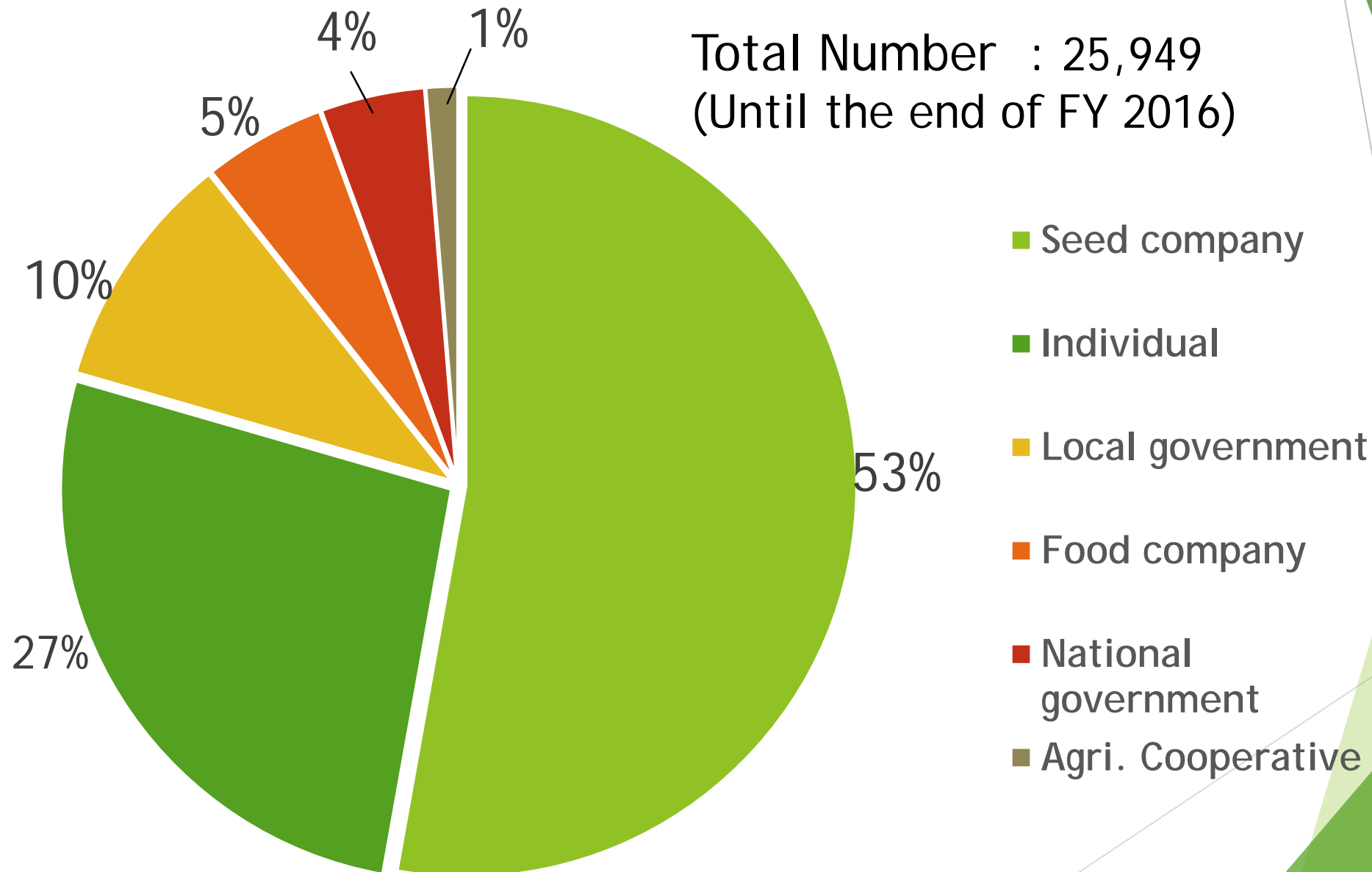


Granted PBRs by Crop



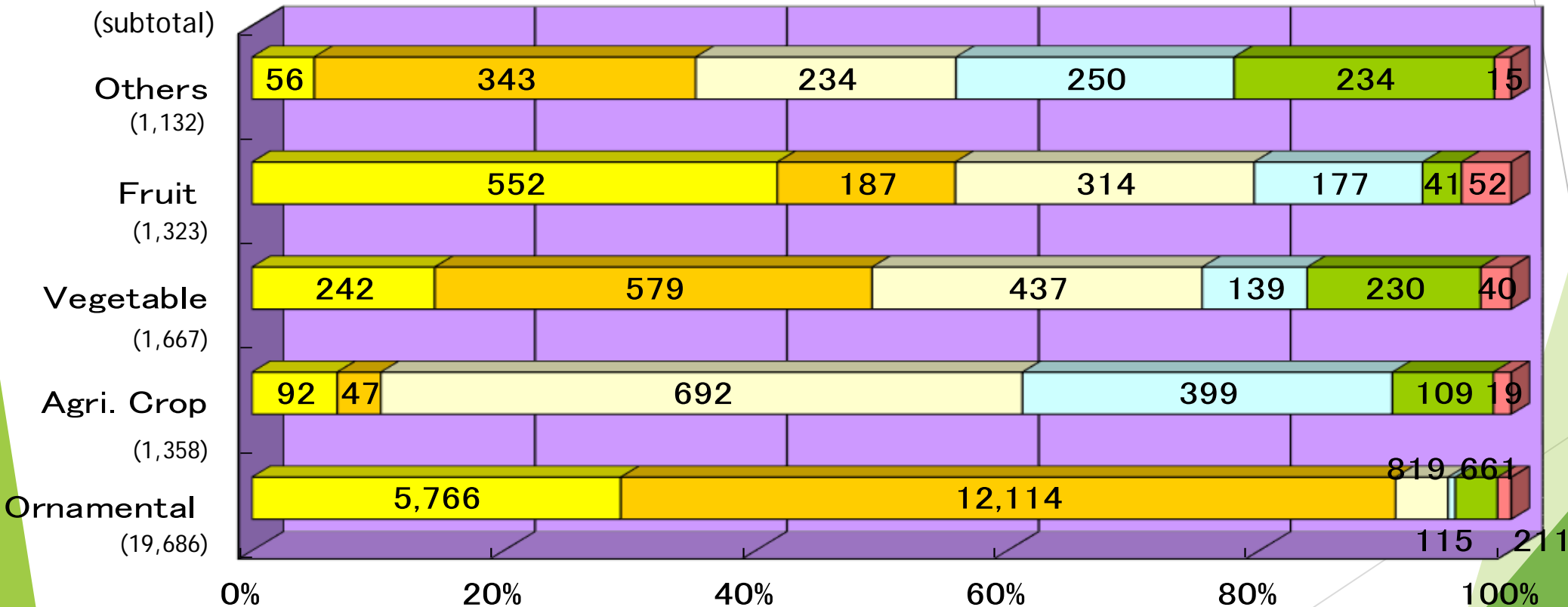
Granted PBRs by Type of Breeder

Total Number : 25,949
(Until the end of FY 2016)

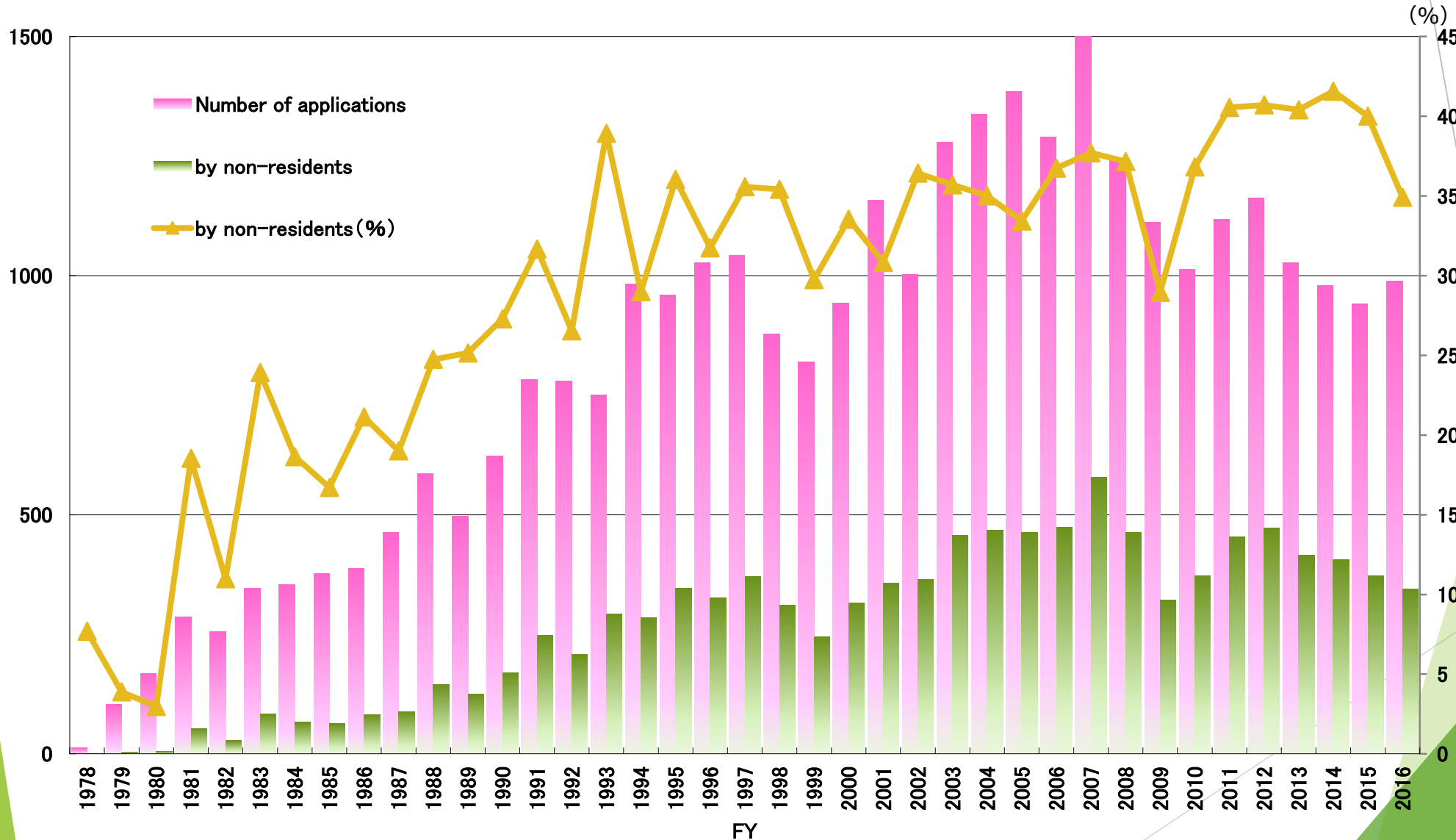


Granted PBRs by Crop and Type of Breeder

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

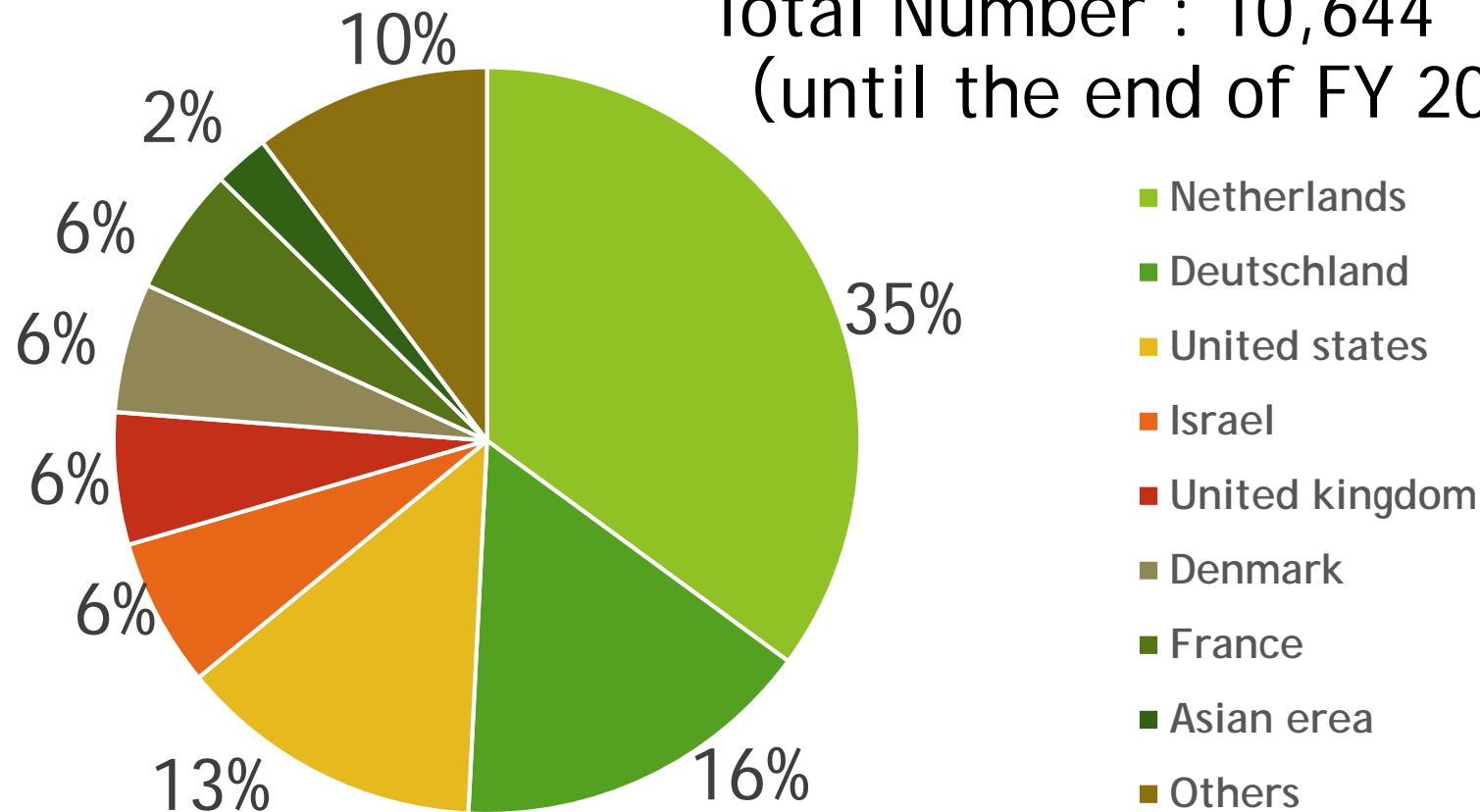


Application by non-residents



Application by non-residents

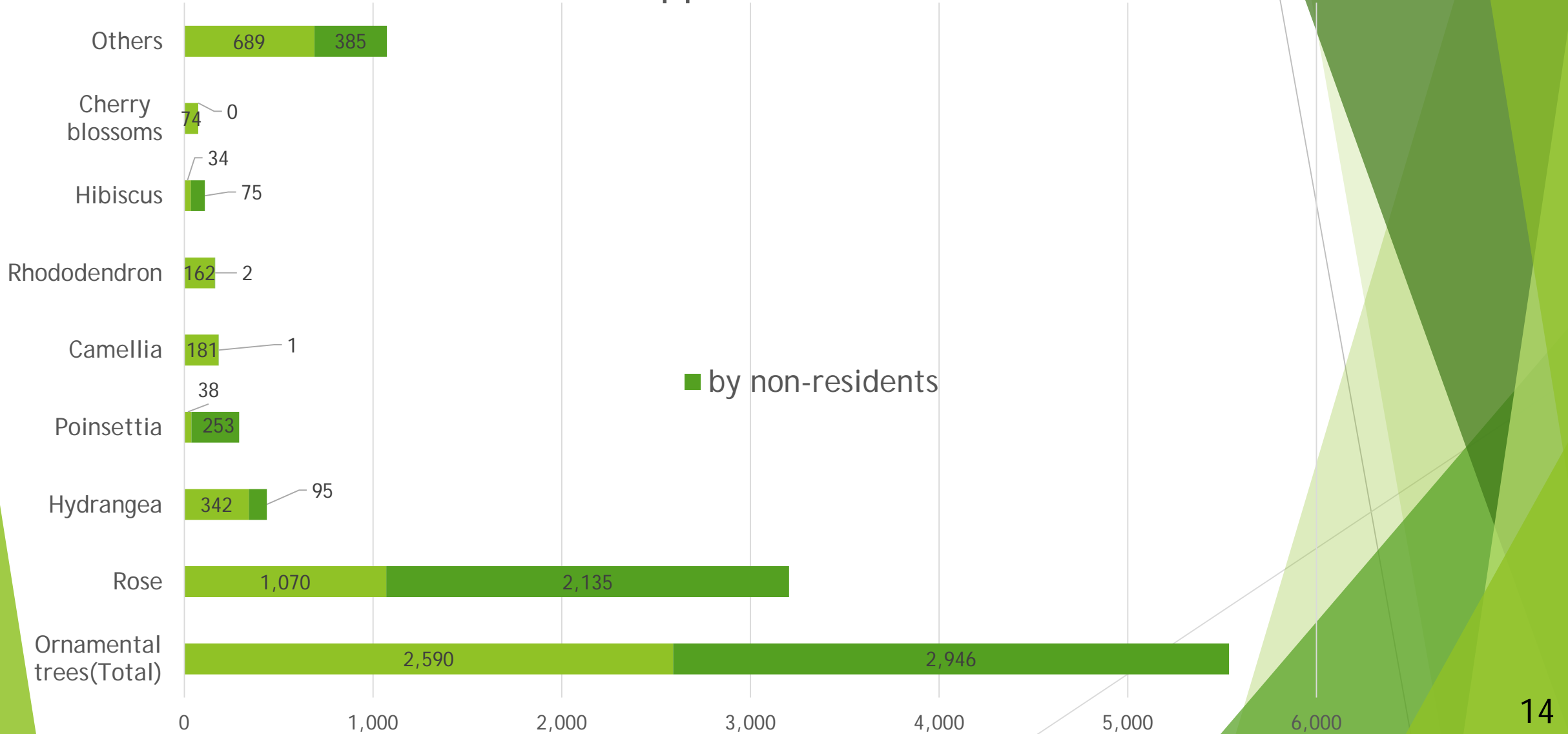
Total Number : 10,644
(until the end of FY 2016)



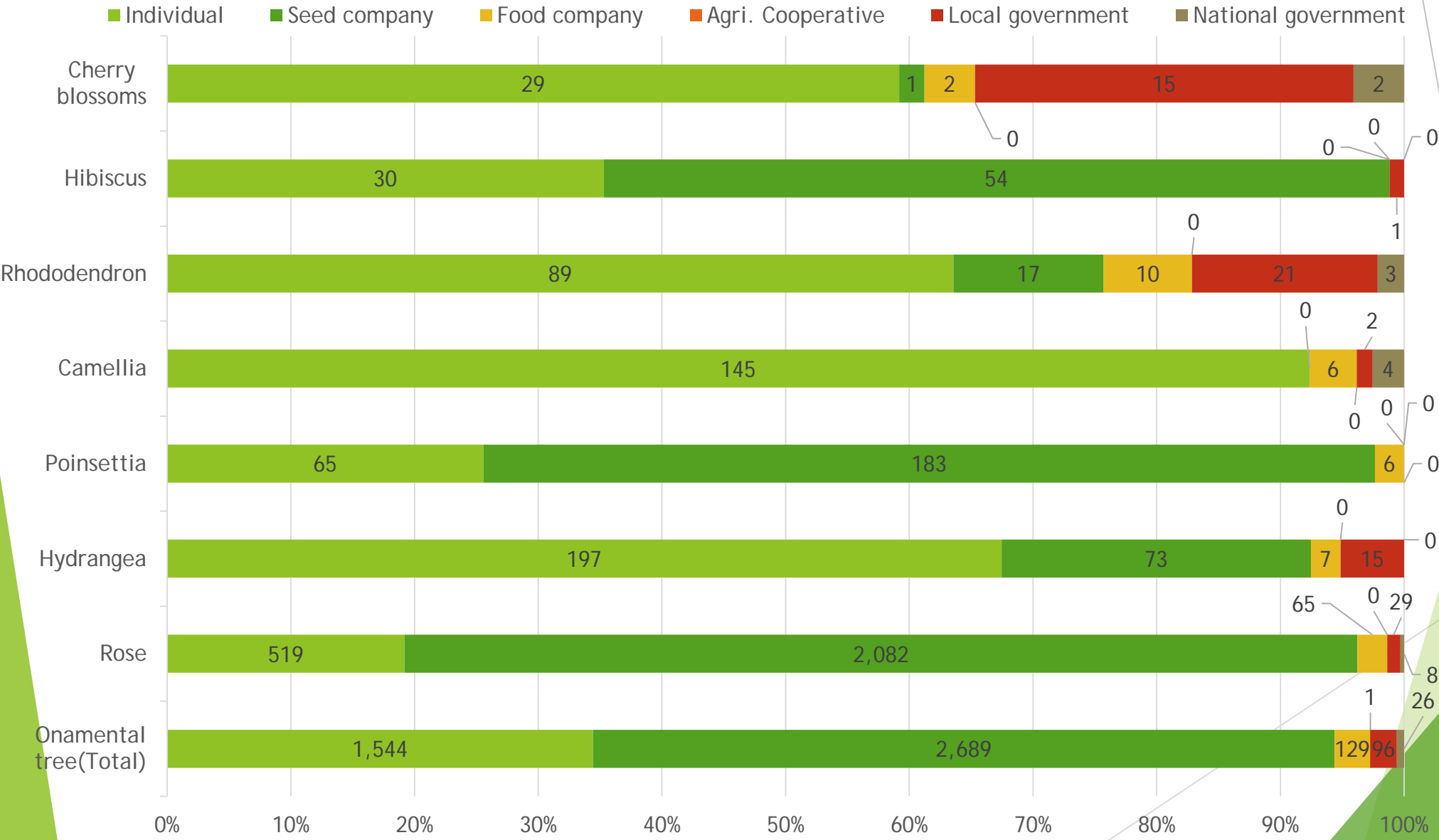
FY 2012		FY 2013		FY 2014		FY 2015		FY 2016	
①Netherlands	156	①Netherlands	144	①Netherlands	141	①Netherlands	129	①Netherlands	131
②United states	84	②Deutschland	59	②United states	67	②Deutschland	50	②United states	49
③Deutschland	82	③United states	50	③Deutschland	59	③United states	40	③Deutschland	32
Total	451	Total	414	Total	406	Total	372	Total	346

Applications for Major Ornamental trees

Number of applications

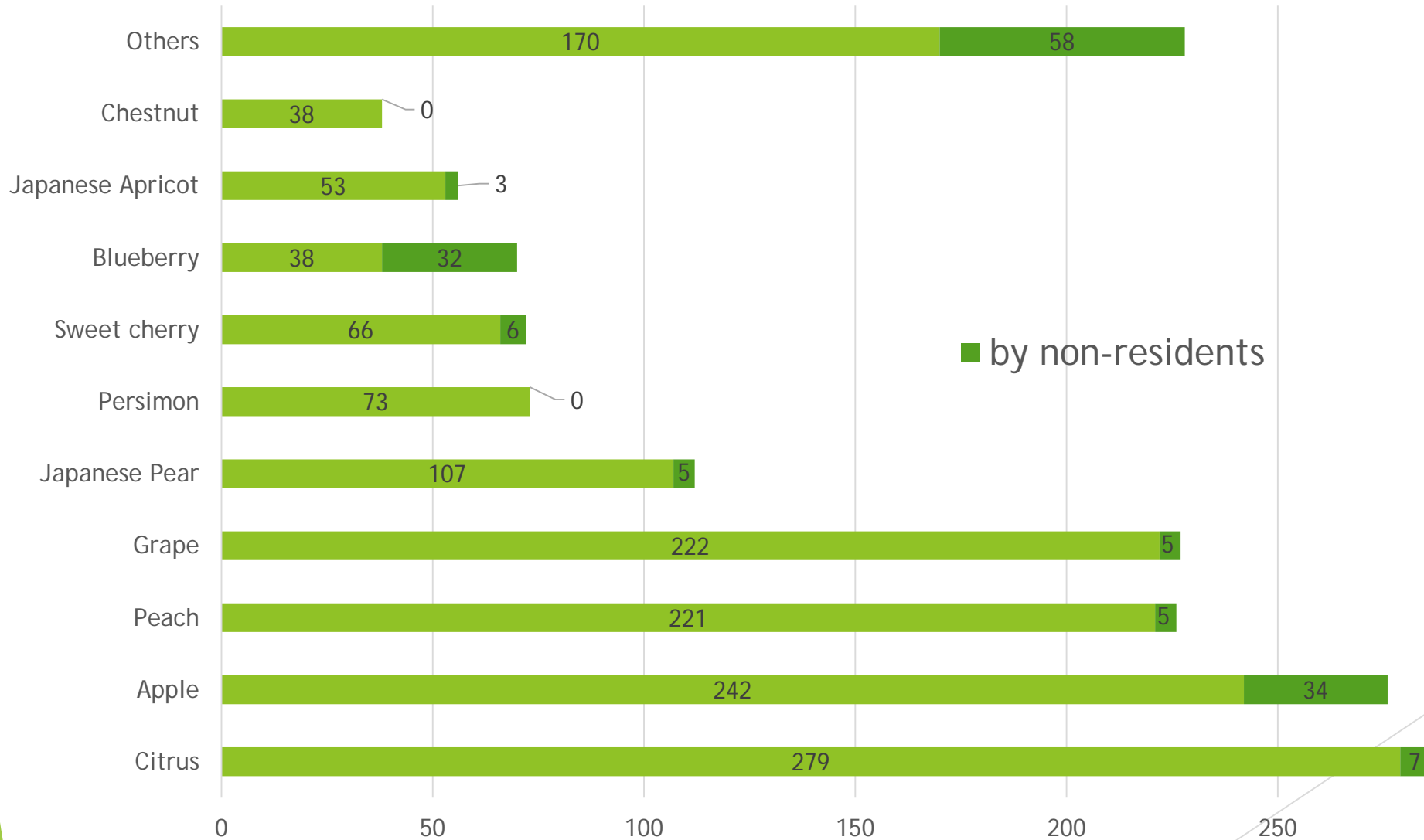


Granted PBRs of Major Ornamental trees by Type of Breeder

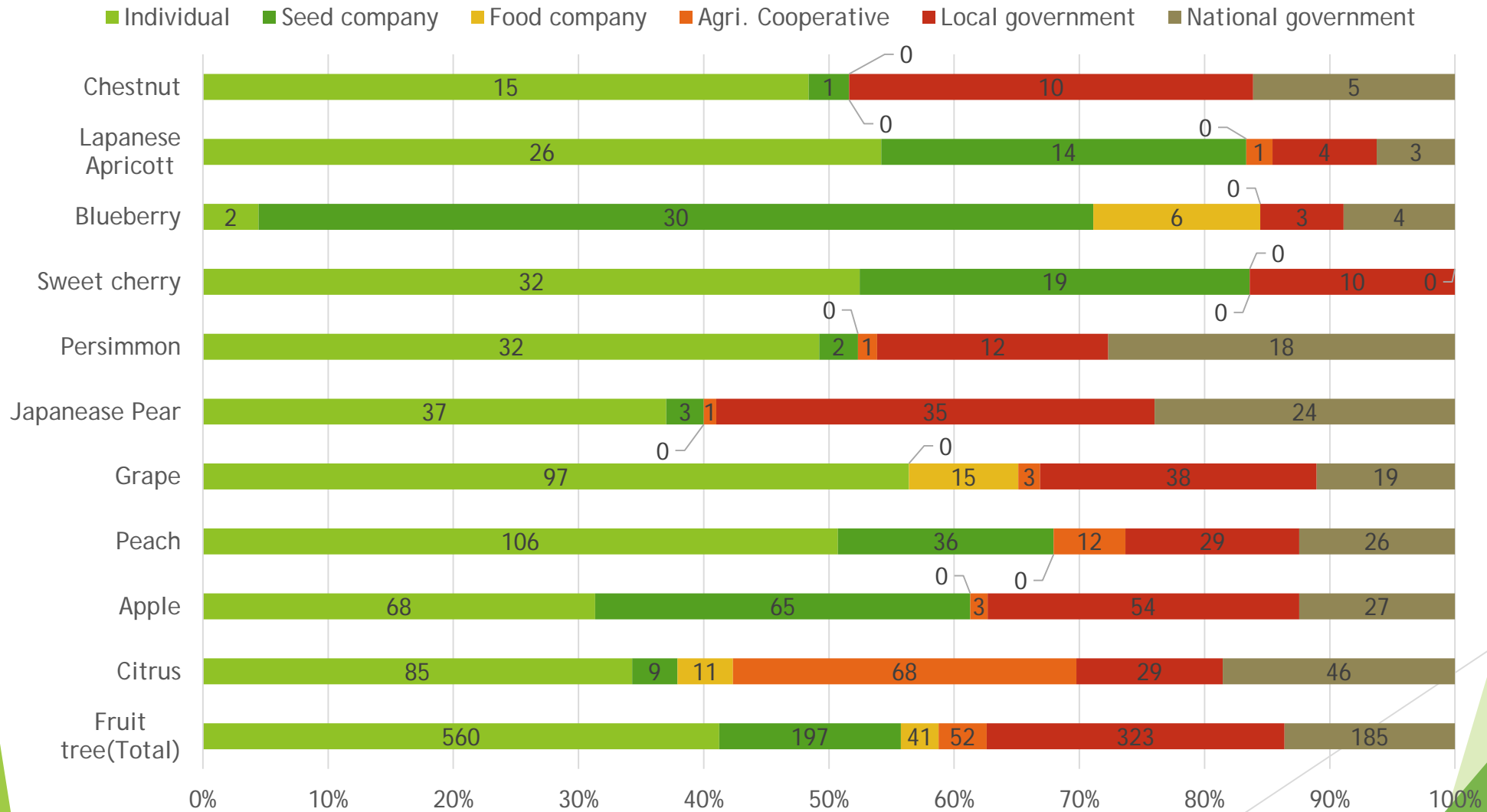


Applications for Major Fruit trees

Number of applications



Granted PBRs of Major Fruit trees by Type of Breeder



Examination of DUS in Japan

1. UPOV 1991 Act, Article 12
“Examination of the Application”

2. Three Methods of DUS test in Japan

3. Developing and Harmonizing National
TGs

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.”

Three Methods of DUS test in Japan

▶ Growing Test (at NARO(NCSS))

▶ On-site Inspection (Breeder Testing)

▶ Documentary Examination
(including International Cooperation)

For development of variety description,
the appropriate method will be selected
according to the candidate varieties,
basically by species.

Growing Test

- ▶ Examination through reports of growing test produced by NARO (NCSS)
- ▶ Cultivation of candidate variety submitted by applicants and reference varieties at NARO (NCSS)

On-site Inspection (Breeder Testing)

- ▶ Examination through Reports of On-site inspection by Examiner
- ▶ Cultivation of candidate variety and reference varieties by applicants on the site of the applicants

Documentary Examination (including International Cooperation)

▶ Growing test and On-site inspection may not be conducted, where examination of characteristics is possible through documents

▶ Such as examination reports produced in a member of UPOV based on examination cooperation, or detailed investigation reports made by the applicant

DUS test for Ornamental trees and Fruit trees in Japan

▶ Ornamental trees

Rose, Hydrangea, Rhododendron → Growing test

Rose: with a large number of candidate varieties

Hydrangea: shift of sepal color in condition of soil pH

Rhododendron: difficulties to assess characteristics of flower

others → On-site inspection

▶ Fruit trees

→ On-site inspection

Observation on plants of different generations at the same time

in order to eliminate the influence of aging and to assess stability

Developing and Harmonizing National TGs

- ▶ Japanese PVP Office has more than 600 National Test Guidelines (TGs).

- After ratifying 1991 UPOV Act in 1998, about 20 applications of new plant group in every years.
- Developing National TGs for new species.
- Harmonizing National TGs according to UPOV TGs.

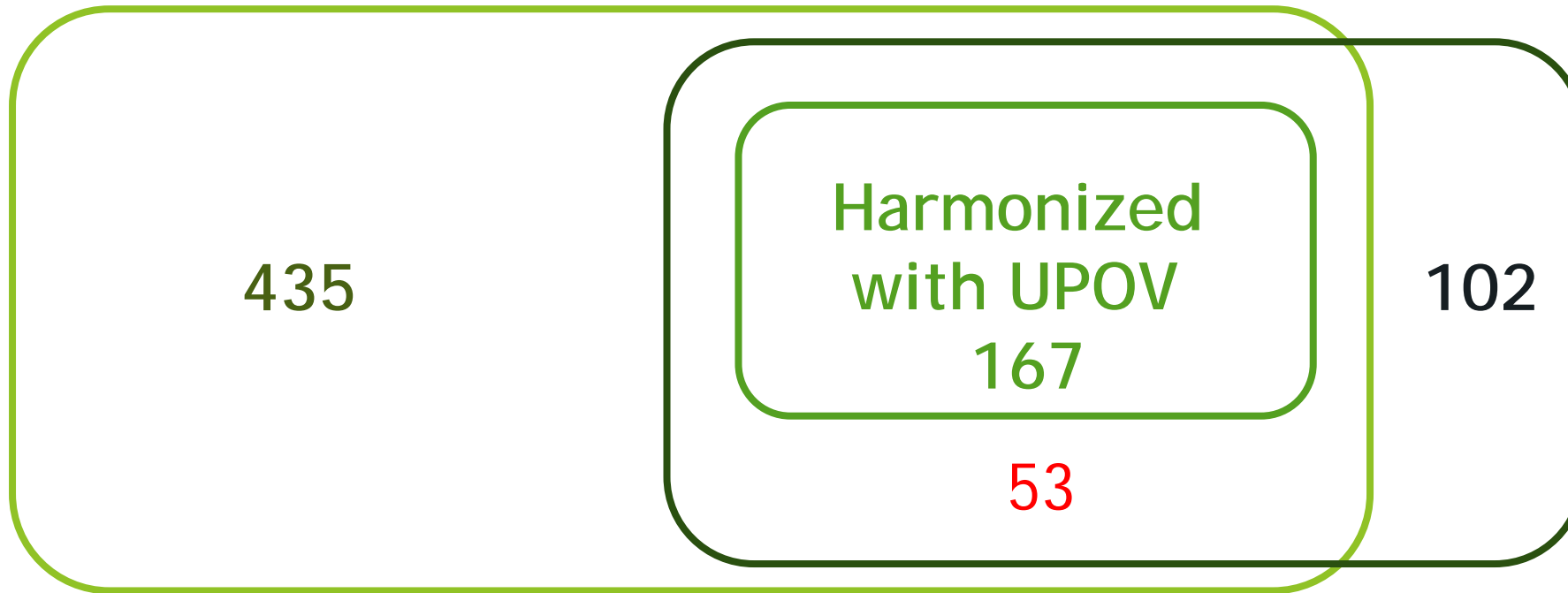
Japanese National TGs in English on website by Latin name order.

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

Developing and Harmonizing National TGs

JP National TGs
655

UPOV • TGs
322



➤ Harmonization of TGs has been conducted since 2007.

National test guidelines had developed for new genera and species (last 3 years)

▶ 2014 (18)

- ▶ *Acacia baileyana*, *Arabidopsis thaliana*, *Ardisia japonica*, *Brunnera Steven*, *Carex oshimensis*, *Cladosiphon okamuranus*, *Eremophila*, *Eucomis L'Her.*, *Festuca glauca*, *Ligustrum japonicum*, *Lysimachia congestiflora*, *Melaleuca bracteata*, *Ozothamnus diosmifolius*, *Pennisetum setaceum*, *Peperomia Ruiz et Pav.*, *Persicaria capitata*, *Sempervivum L.*, *Solanum Peruvianum*

▶ 2015 (21)

- ▶ *Albuca spirilis*, *Apios Americana*, *Carex trifida*, *Carcis*, *Chasmanthium latifolium*, *Erysimum*, *Escallonia laevis*, *Euphorbia amygdaloides* and *E. characias*, *Jacaranda*, *Leucothoe fontanesiana*, *Lysimachia clethroides* and *L. barystachys*, *Magnolia xsoulangeana*, *Mesembryanthemum crystallinum*, *Musa acuminata* and *M. xparadisiaca*, *Myosotis*, *Polyscias fruticosa*, *Prostanthera*, *Sambucus nigra*, *Stemona japonica*, *Uncinia rubra*, *Viburnum opulus*

▶ 2016 (11)

- ▶ *Allium ampeloprasum L.*, *Allium karataviense Regel*, *Allium victorialis L. subsp. platyphyllum Hulten*, *Chelone L.*, *Hebe Comm. ex Juss.*, *Hemizygia (Benth.) Briq.*, *Iberis L.*, *Lophomyrtus Burret*, *Pittosporum tenuifolium Gaertn.*, *Thuja occidentalis L.*, *Vaccinium vitis-idaea L.*

National test guidelines had harmonized with UPOV TGs (last 3 years)

▶ 2014 (2)

▶ *Citrullus lanatus*, *Setaria italica*

▶ 2015 (4)

▶ *Agapanthus L'Her.*, *Fortunella Swingle*, *Ipomoea batatas*, *Mandevilla Lindl.*

▶ 2016 (4)

▶ *Coix lacryma-jobi L. var. ma-yuen*, *Cosmos Cav.*, *Dianthus L.*, *Vigna angularis*

Issues relating Examination period of DUS in Japan

Extension of the term and cost for developing national TGs on newly applied species

Quarantine of seeds and seedlings

Extension of the term and cost for developing national TGs of New genera and species

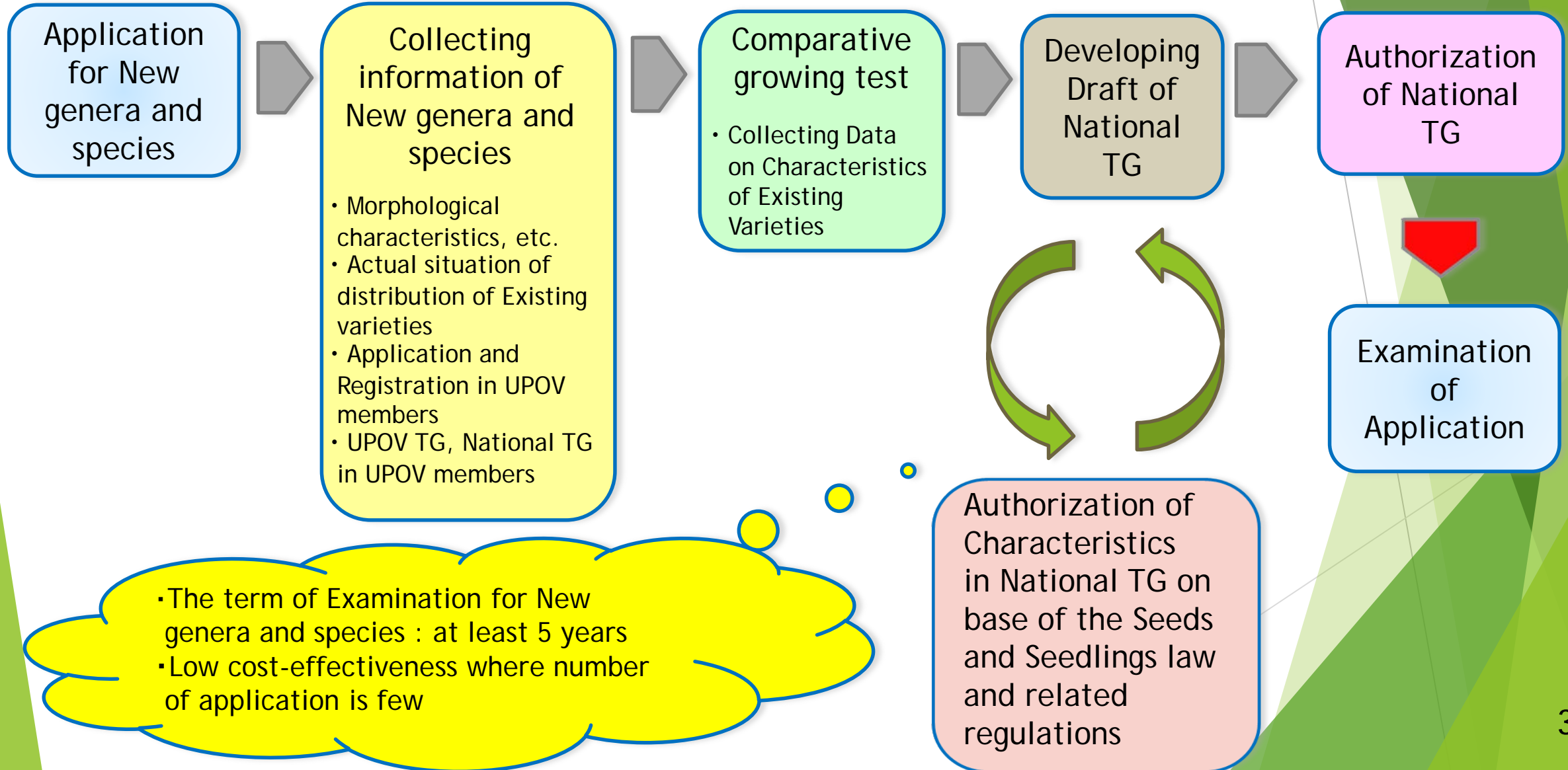
Situation 1;

When the applications for the candidate variety were filed, there were not the plants and seedlings/scions of these varieties in Japan.
(such as application by non-residents)

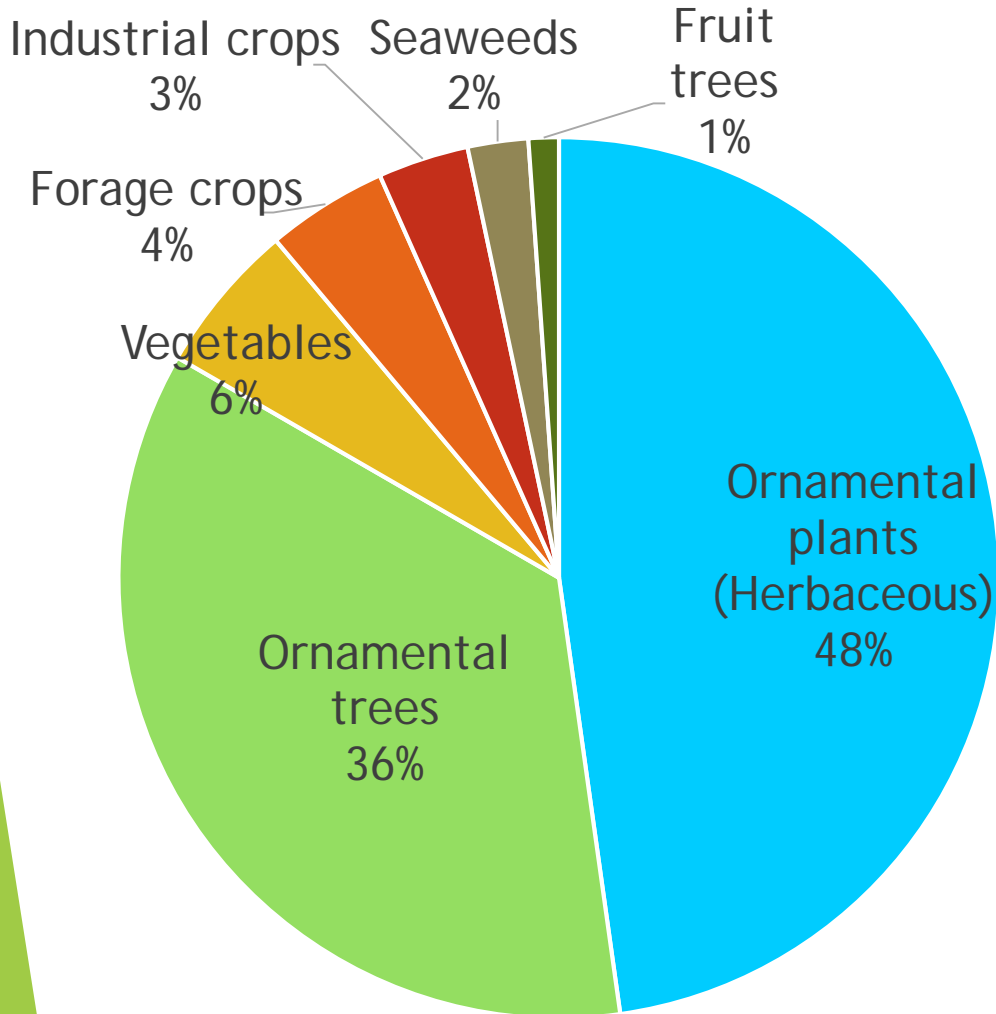
Situation 2;

The genera and species of the candidate varieties have been not cultured commercially in Japan.
(such as application for Tropical fruits)

Extension of the term for Examination of Application of New genera and species



Developing National TGs for New genera and species (for applications in FY 2007~FY 2016)



Only applications by non-residents

Number of application	Number of new genera and species
1	14
2	6
3	1
4	2
5	2
6	2
7	0
8	0
9	0
10	1
11~	1
Total	29

Example of Application for Tropical Fruits by non-residents

- ▶ *Musa acuminata* Colla (Banana)
 - ▶ Application date : 31/03/2008
 - ▶ Registration date : not yet
- ▶ *Mangifera indica* L. (Mango)
 - ▶ Application date : 11/11/2008
 - ▶ Registration date: 21/08/2017
- ▶ *Ziziphus mauritiana* Lam. (Indian jujibe)
 - ▶ Application date : 11/11/2008
 - ▶ Registration date: not yet
- ▶ *Litchi chinensis* Sonn. (Litchi)
 - ▶ Application date : 18/05/2009
 - ▶ Registration date: not yet

Quarantine of seeds and seedlings

Post-entry quarantine of listed Fruit tree seedlings/scions, (see below)

Isolated cultivation by national authority for a certain period of time (at least for a year) is compulsory.

* Remarks

Import Prohibition

Certain plants possibly carrying some pests (such as Mediterranean fruits fly, Fire blight) from the listed countries are prohibited.

Fruit tree seedlings scions subject to Post-entry quarantine (including rootstock plant)

- ▶ *Fragaria* L.
- ▶ *Poncirus* Raf. (*Pseudaegle* Mig.)
- ▶ *Rubus* L.
- ▶ *Fortunella* Swingle
- ▶ *Castanea* Mill.
- ▶ *Juglans* L.
- ▶ *Vaccinium* L.
- ▶ *Prunus* L.
- ▶ *Ribes* L.
- ▶ *Pyrus* L.
- ▶ *Vitis* L.
- ▶ *Citrus* L.
- ▶ *Myrica* L.
- ▶ *Malus* (Tour) Mill.

Effort for effective implementation by International Cooperation in Examination

- EU (CPVO) ; Petunia, Calibrachoa (2007)
Chrysanthemum (2010)
Rose (2011)
- Example variety set for East Asia on UPOV TG for rice (2003-2008, Japan-China-Korea)
 - UPOV TGs for RICE had started revision under the TWA
- MOU between NCSS and Naktuinbouw for technical cooperation on the manual development



Topics in PVP system of Japan

▶ Outflow of high quality Japanese variety
→ Importance of Registration in PVP system
in foreign country

▶ Conclusion of MOC concerning free charge
provision of Japan's examination results

▶ Electronic Application for PBRs in Japan

Importance of harmonized protection for Intellectual property right in global market

- For promoting export of high quality Japanese variety to consumers in the third countries, it is crucial to prevent non-licensed cultivation outside Japan.
- Since it is impossible to prevent from carrying seeds or seedlings over borders physically, it is essential to protect intellectual property right legally in the targeted country.

Non-licensed cultivation

High quality varieties bred in Japan are produced in outside Japan and exported to the third countries

Beni-hoppe



Shine Muscat



These fruits cultivated outside Japan are sold as "Original Japan" in world market.

"Lost of export market" for "genuine" products made in Japan

Need to variety registration immediately after development

Counterfeit of trademark or GI

Confirm a melon labeled on "Yubari Japan" to a faked one is sold in Thailand



Issue a **warning notice** requesting a producer to stop using and abandon a faked label.

Acceptance of the condition by the producer but voluntary base


Moving forward to internationally harmonized IPR protection system, particularly in Asian region

● Support to breeders applying registration in foreign countries

Encourage breeders to apply prominent varieties in prioritized groups complying with UPOV and/or national rule


● Establishment of a consulting office and guidelines for application

Establish a consulting office to advise to breeders who are applying to foreign countries
Publish guidelines including a prototype application form and relevant laws and regulations

- 
- Around 150 varieties are applying to a couple countries
 - Guidelines for applying to U.S.A, Korea, China and Indonesia have been published

● Strengthening PVP system in East Asia region

Established a “East Asia PVP forum” consists of ASEAN 10 countries, China, Korea and Japan in 2008 and support to member countries to facilitate international harmonization of the PVP system.

- 
- Myanmar and Brunei are expected to be UPOV member countries adding to current member countries, China, Korea, Vietnam, Singapore and Japan.
 - The 10th anniversary forum was held in Naypyidaw, Myanmar, 11 September 2017, and adopted to prepare EAPVP's Next 10 year strategic plan at next forum.

Conclusion of MOC concerning free charge provision of Japan's examination results related to plant varieties to overseas authorities

- ◆ To expand export of seeds and seedlings bred in Japan, it's essential that intellectual properties owned by Japanese seed companies are protected overseas.
- ◆ Under the UPOV Convention, it is provided that UPOV Members can utilize results of examination of new varieties when they examine the same varieties.



Japan has concluded MOC related to free provision of examination results of Japan's authority to corresponding authorities of the following 11 countries where many applications of Japan's seed companies have been done.

Parties



Australia



Brazil



New Zealand



Swiss



Vietnam



European Union (EU)



Russian Federation



Kenya



Mexico



Israel



Netherland

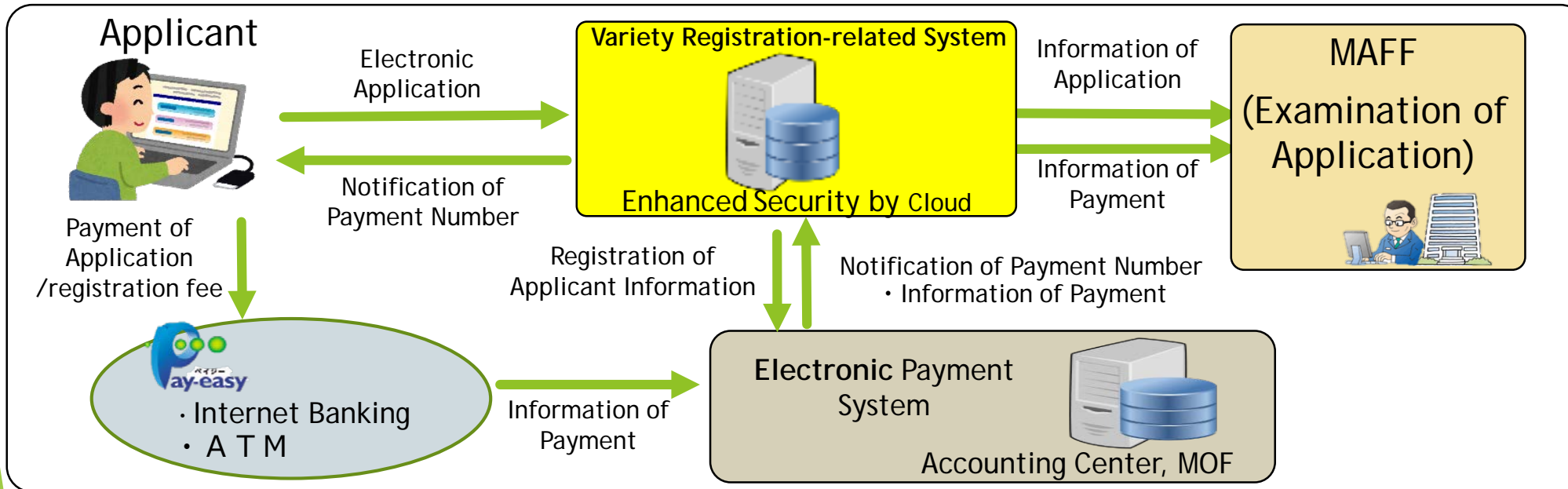


Further promotion of conclusion of MOC concerning free provision of examination results with other UPOV Members including China

Electronic Application for PBRs in Japan

MAFF will start operation of an electronic application system independent from UPOV's system, however Japanese system is reflecting UPOV's one. New system will enable Electronic application and Payment.

(Start of operation of New system : Feb, 2018~)



<Merit for Applicant>

- ① Reducing the load for developing Application Form
- ② Preventing omission in entry and error in writing (Function of Checking input contents)
- ③ Display of Supplementary explanation on input contents
- ④ Understanding the situation of Application/Payment (Confirmation via internet, email, etc.)
- ⑤ Supporting management after registration (Confirmation of payment of registration fee)

* Electronic application system in UPOV is also under development with great contribution from China and Japan

Thank you for your attention

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the frame, creating a modern, layered effect against the white background.