

Seminar on feasibility of China's accession to UPOV '91 中国加入UPOV91文本可行性之研讨会

UPOV'78 vs. UPOV'91 and the importance of accession to UPOV'91

UPOV78文本与UPOV91文本的比较及加入UPOV91 文本的重要性

Peter Button

彼得·巴登

Vice Secretary-General, UPOV

国际植物新品种保护联盟（UPOV）副秘书长

Beijing

北京

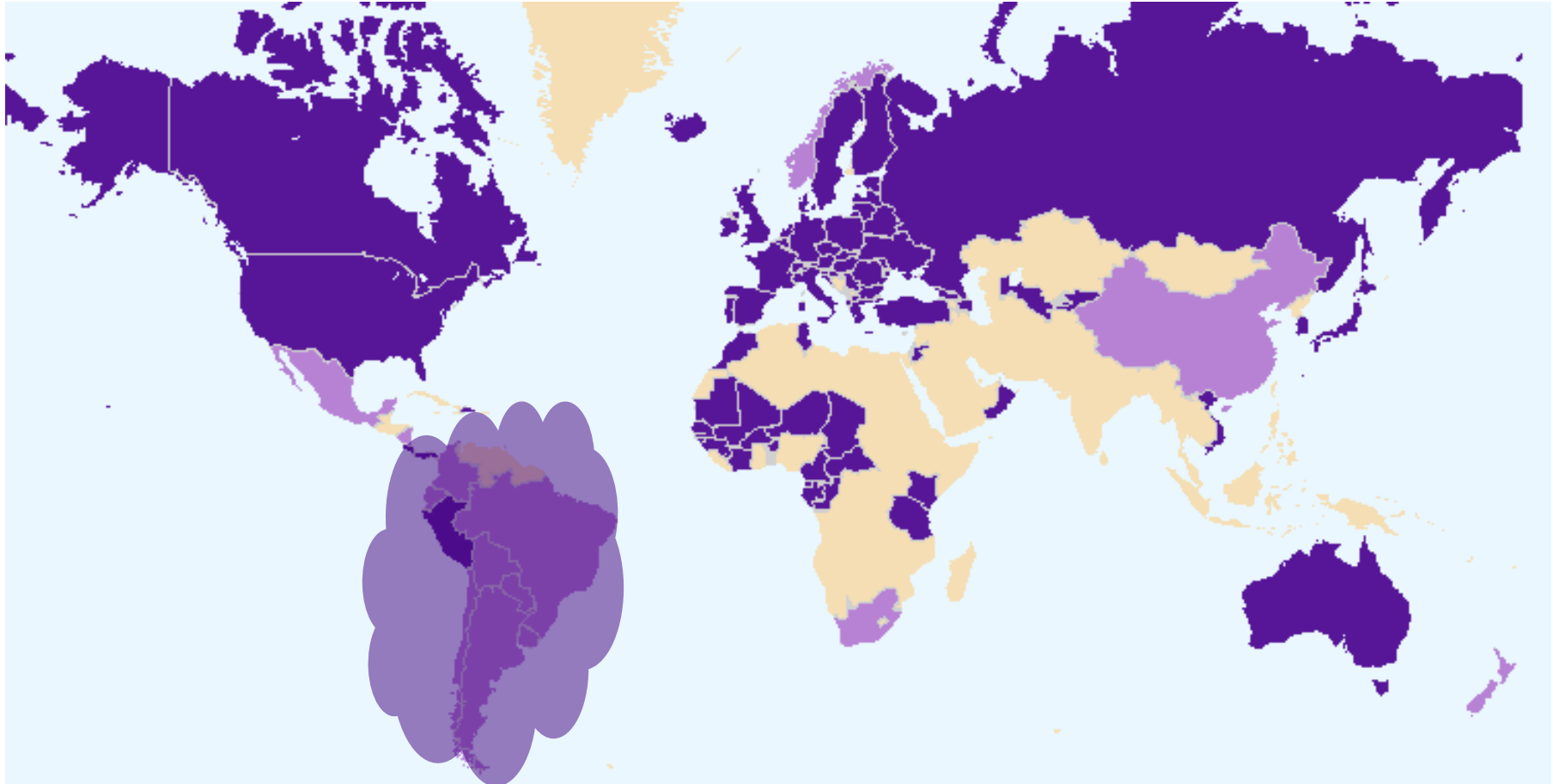
April 13, 2017

2017年4月13日



UPOV Membership

UPOV成员情况



1991 Act: 56 members – Other Acts: 18 members

1991年文本：56个成员 –其他文本：18个成员

The boundaries shown on this map do not imply the expression of any opinion whatsoever on the part of UPOV concerning the legal status of any country or territory
本地图中所示边界不代表UPOV方面对任何国家或地区法律状态所持有的任何意见。

PREVIEW

概览

Some key provisions of the 1991 Act:

1991年文本的部分重要条款：

- 1. Breeder and Variety**
育种者及品种
- 2. Plant Genera and Species**
植物种属
- 3. Provisional Protection**
临时性保护
- 4. Duration**
保护期限
- 5. Scope/Exceptions**
范围/例外情形

PREVIEW

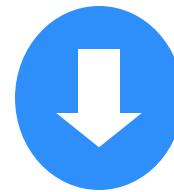
概览

Some key provisions of the 1991 Act:

1991年文本的部分重要条款：

- 1. Breeder and Variety: DEFINITIONS**
育种者及品种：定义
2. Plant Genera and Species
植物种属
3. Provisional Protection
临时性保护
4. Duration
保护期限
5. Scope/Exceptions
范围/例外情形

DISCOVERY
发现 OR 或
FIND 找到



**DEVELOPMENT IS
NECESSARY**
必须是开发

VARIETY

品种

- **plant grouping- lowest known rank**
已知最低一级植物分类单元中的植物分类
- **irrespective of whether conditions for the grant are met**
不论授予条件是否满足
- **defined by the expression of the characteristics resulting from genotype(s)**
通过基因型或基因型组合的特征的表达予以定义
- **distinguished from other plant grouping**
有别于其他植物分类
- **unit suitable for being propagated unchanged**
经过繁殖后其适应性未变，被认为是一个分类单元

DISTINCTNESS

特异性

Must be clearly distinguishable from any other variety (whether protected or not) whose existence is a matter of common knowledge

必须明显有别于人所共知的任何其他品种（无论是否受到保护）

...anywhere in the World
在世界上任何地方.....



PREVIEW

概览

Some key provisions of the 1991 Act:

1991年文本的部分重要条款：

1. Breeder and Variety
育种者及品种
2. **Plant Genera and Species: the DUS challenge**
植物种属：DUS挑战
3. Provisional Protection
临时性保护
4. Duration
保护期限
5. Scope/Exceptions
范围/例外情形

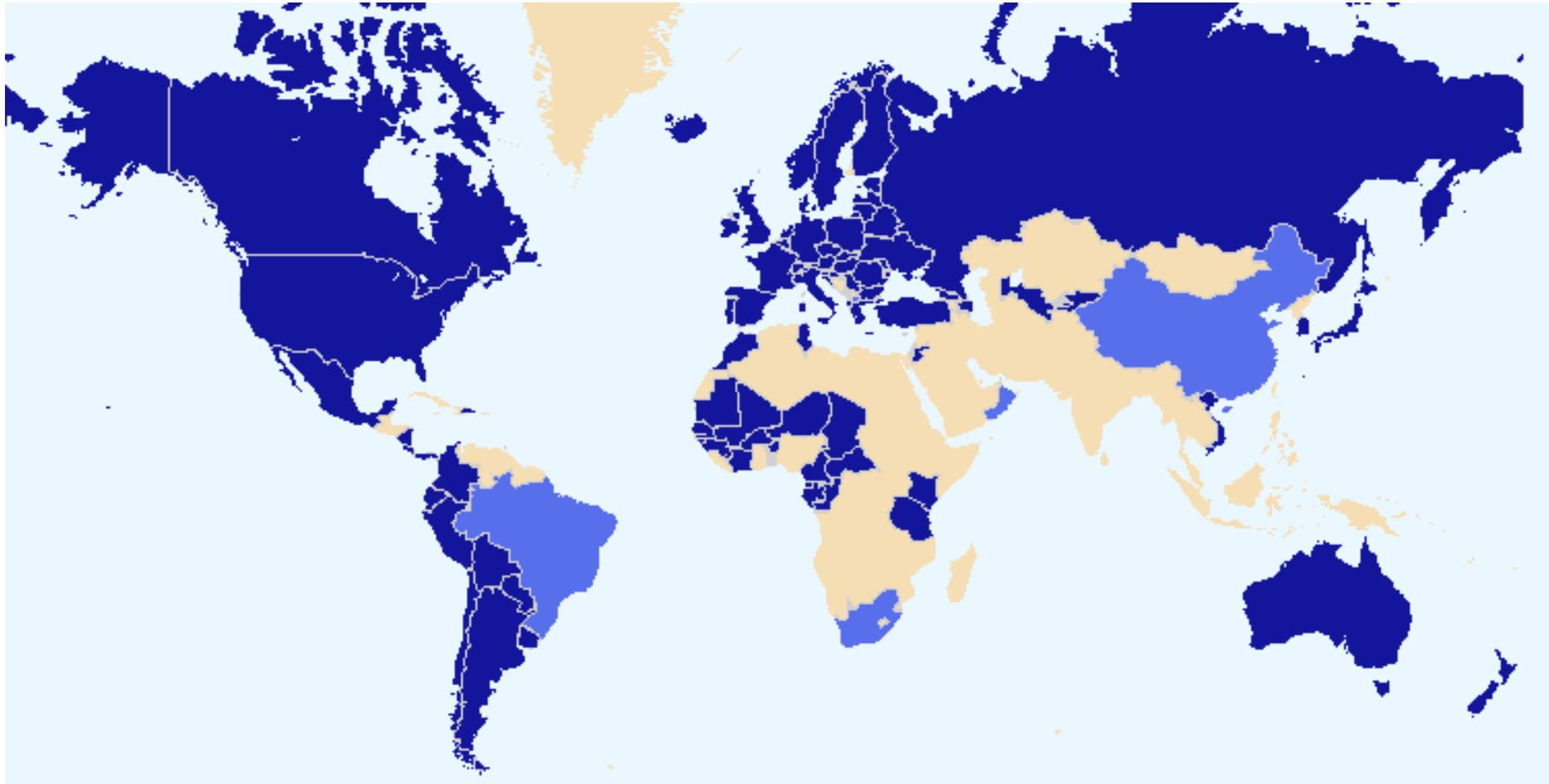
MINIMUM GENERA AND SPECIES TO BE PROTECTED

受保护的属和种的最低数量

	1978 Act 1978年文本	1991 Act 1991年文本
On joining UPOV 加入UPOV时	5 genera or species 5个属或种	15 genera or species 15个属或种
Thereafter 之后	24 genera or species (within 8 years) 24个属或种 (在8年内)	ALL genera and species within: 所有属或种: • 10 years (new members) 10年 (新成员) • 5 years (existing members) 5年 (现有成员)

Taxa to be protected by the members of the Union: end 2017

联盟成员将保护的类群：2017年结束



All genera and species
所有属和种

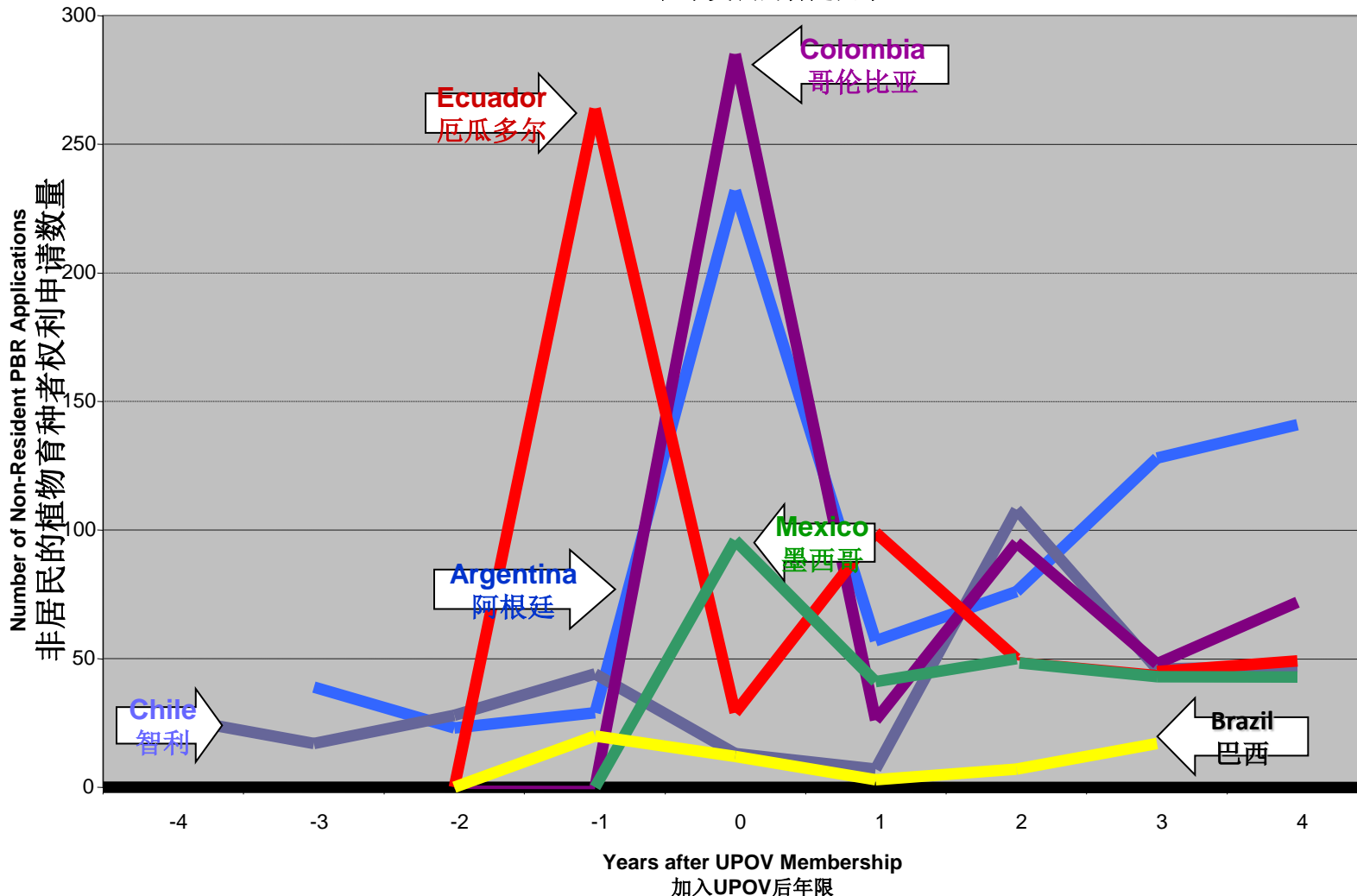
Selected genera and species
特定的属和种

All genera and species: 68 members
所有属和种：68个成员

Selected genera and species: 6 members
特定的属和种：6个成员

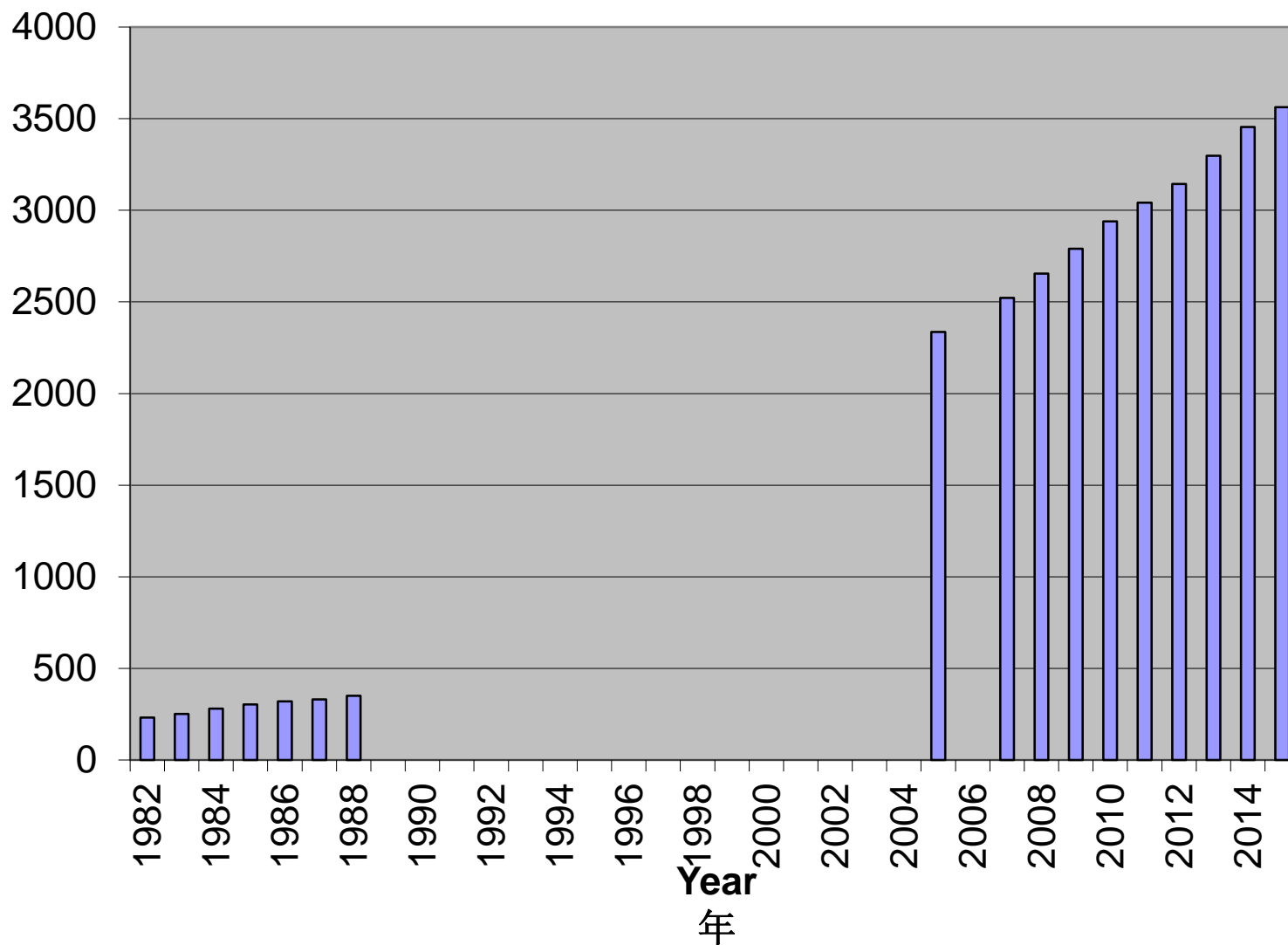
(4 members bound by 1978 Act)
(4个成员受1978年文本约束)

NON-RESIDENT PBR APPLICATIONS
 非居民的植物育种者权利申请
 (Selected Countries in Latin America)
 (拉丁美洲的特定国家)



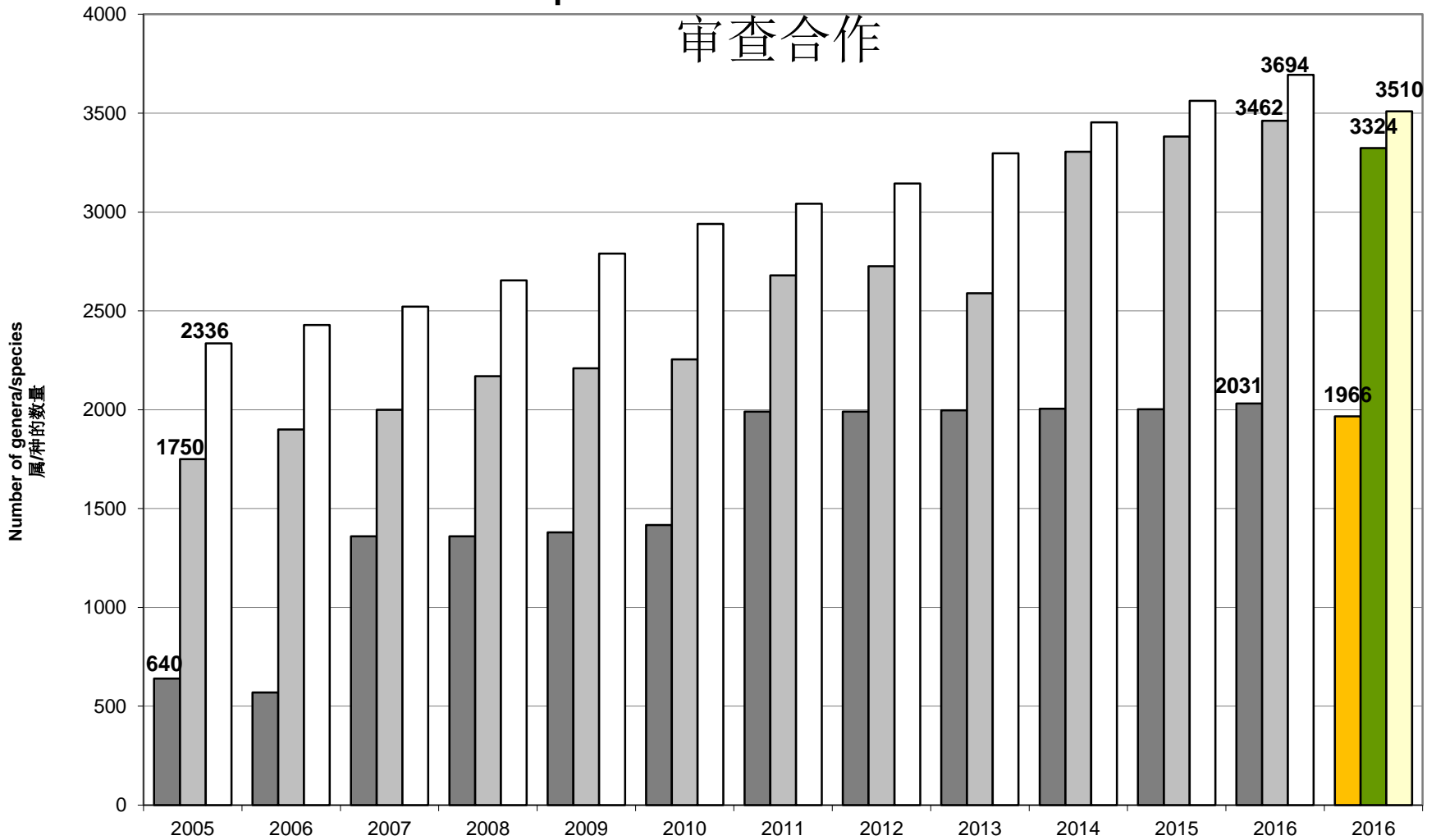
UPOV Argentina, Chile, Colombia, Ecuador and Mexico provide protection for all genera and species of the plant kingdom. 阿根廷、智利、哥伦比亚、厄瓜多尔及墨西哥为植物界全部属和种提供保护。

**Number of plant genera and species
for which protection sought (UPOV Members)
(UPOV成员) 拟保护的植物属和种的数量**



Cooperation in Examination

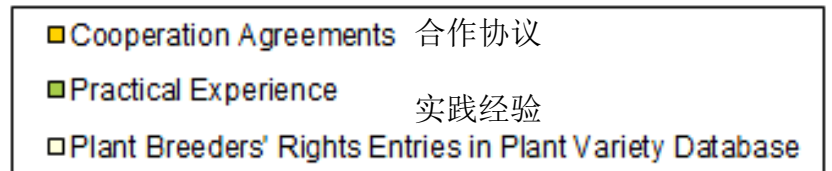
审查合作



Plant genera/species only: 仅涉及植物属/种:



植物品种数据库中植物育种者权利录入数



植物品种数据库中植物育种者权利录入数

GENIE Database

GENIE（译为“妖怪”）数据库

(**Genus** / **species**)
(取自“属/种”这两个单词)



- ⌘ GENIE Database
- ⌘ List of Crop / Species
- ⌘ List of Authorities
- ⌘ Standard Reports
- ⌘ UPOV Code Reports and Changes
- ⌘ UPOV Code System
- ⌘ Plant Variety Database

Triticum aestivum L. (TRITI_AES)

DUS Guidance and Cooperation

DUS指南及合作

Name & Denomination Class
Protection
DUS Guidance and Cooperation

UPOV Principal Botanical Name: **Triticum aestivum L.** UPOV Code: **TRITI_AES**

Other Botanical Names: **Triticum aestivum L. emend. Fiori et Paol.**

English Common Names: **Wheat**

[UPOV Test Guidelines](#) TG/3/11 + Corr. [Drafting Authority](#) None

Entries between ^ ^ indicate Test Guidelines that cover a lower botanical rank (for example in the case of a genus: there are Test Guidelines at the level of one of the species in the genus).

Cooperation in DUS Examination (key to [abbreviations](#)) **DUS审查的合作 (缩写解释)**

- [Authorities with Practical Experience](#)**
- 拥有实践经验的机构**
- [Agreements for Cooperation in DUS Examination](#)**
- [DUS审查的合作协议](#)**
- [Utilization of Existing DUS Reports](#)**
- 利用现有DUS报告**

Entries in parenthesis indicate experience at the level of a higher botanical rank to which it belongs.
 Entries between ^ ^ indicate experience at the level of a lower botanical rank (for example in the case of a genus: there is experience at the level of one the species in the genus).

<=> in the receiving column indicates that the authority specified in the offering is a requested member of the Union.
 (): Genus or species covered by agreement for a taxon of a higher rank to which it belongs (e.g. in the case of a species: the genus or family is covered by an agreement).

AUTHORITY	NOTES
Albania	
(Argentina)	
Austria	
Azerbaijan	
Belgium	
Bolivia (Plurinational State of)	

OFFERING AUTHORITY / EXAMINATION OFFICE	AUTHORITIES RECEIVING EXAMINATION REPORTS	NOTES
<=>	(Switzerland)	(Switzerland) : DUS tests are not conducted in Switzerland. In cases where a DUS test report is not available

Cooperation between Authorities

不同机构间的合作

Cooperation between Authorities can involve:
不同机构间的合作将涉及：

- **purchase of DUS Test Reports** from other Authorities
向其他机构**购买DUS测试报告**
- **bilateral arrangements** to remove the need for duplication of DUS Tests
双边协议，以避免重复进行DUS测试的需要
- **centralized DUS testing** at regional or global level
区域或全球层面的**集中DUS测试**

Cooperation between Authorities

不同机构间的合作

Cooperation between Authorities is important for:

不同机构间进行合作的重要性在于：

- **minimizing the time** for DUS examination
最大程度降低DUS审查的时间
- **minimizing the cost** of DUS examination
最大程度降低DUS审查的成本
- **optimizing examination of Distinctness** in growing trials
优化生长试验中特异性的审查
- **offering protection for all plant genera and species**
为所有植物属和种提供保护

Cooperation with Breeders

与育种者的合作

DUS Testing in Cooperation with Breeders

与育种者进行DUS测试

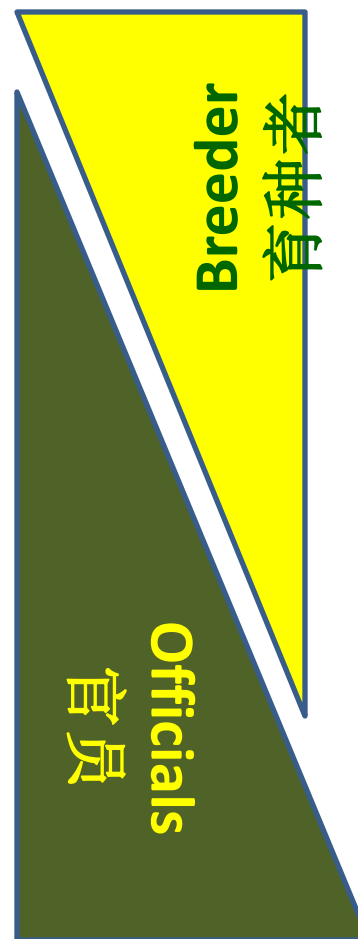
- is always under the **control of the Authority**
始终处于**主管部门的控制之下**
- can involve the applicant in all aspects of conducting the DUS Test but will always result in a **decision being taken by the Authority**
进行DUS测试中各个方面均有申请人的参与，但始终以**主管部门作出决策**告终

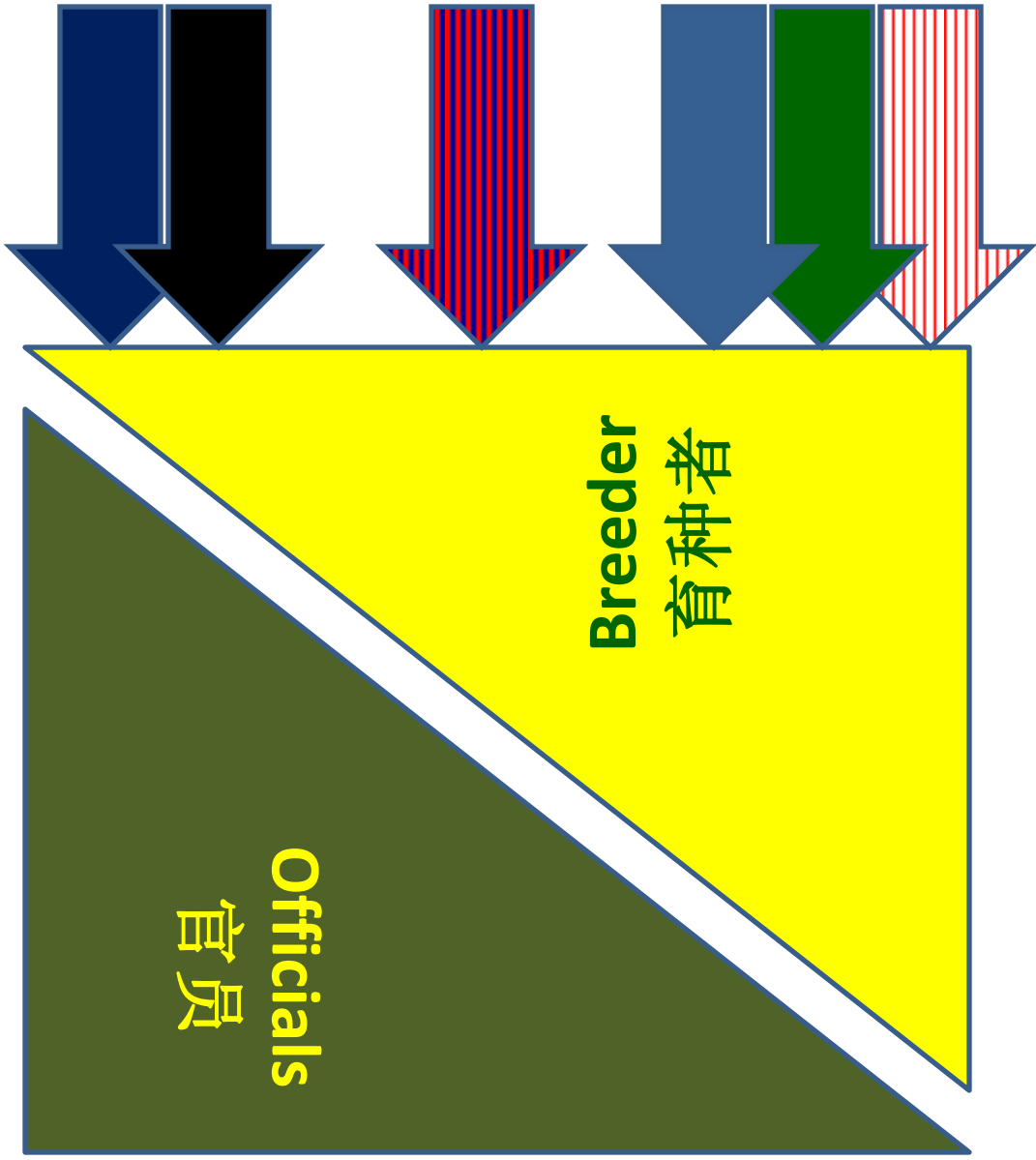
Assuming that no purchase of DUS report

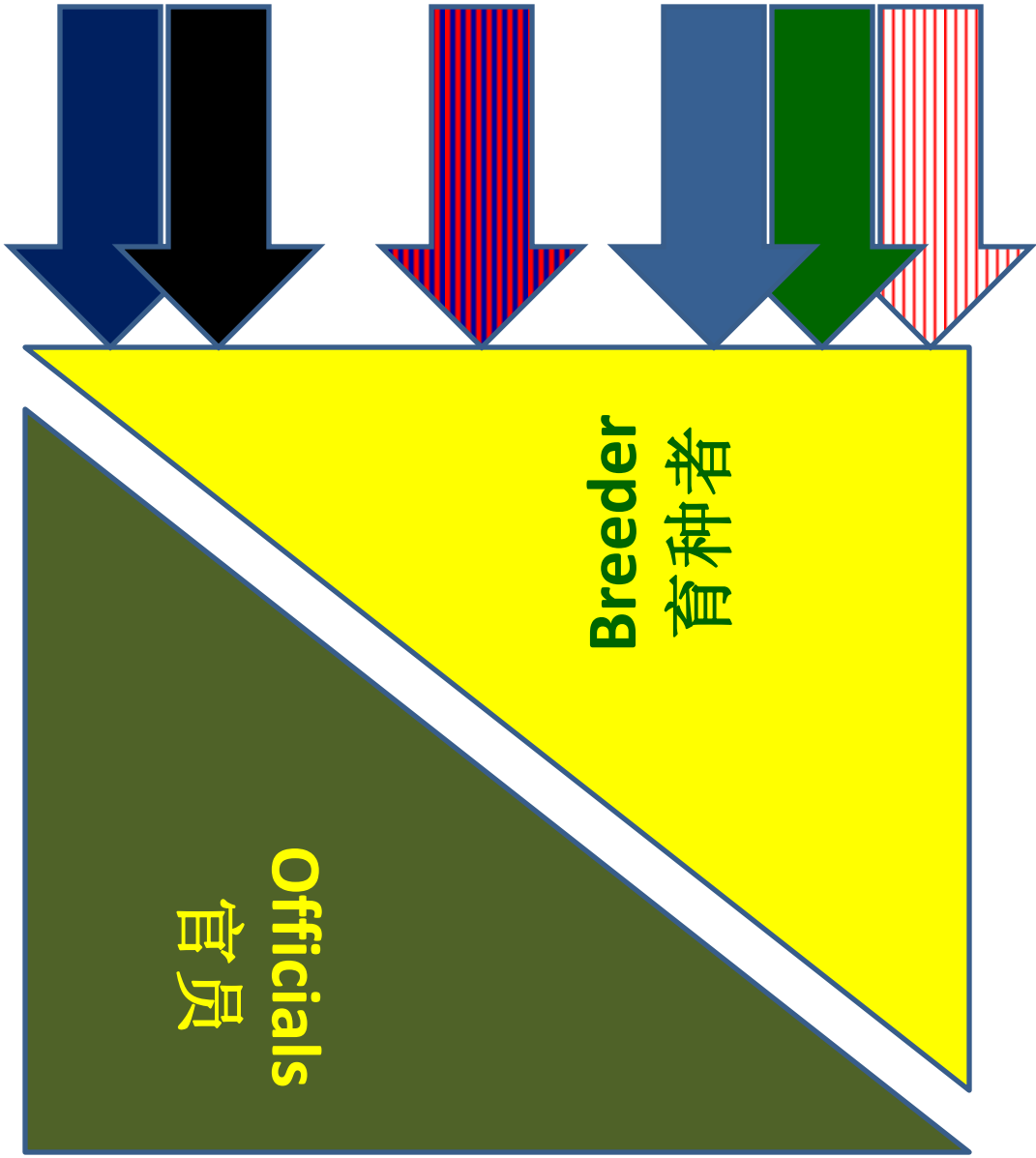
假设不购买DUS报告

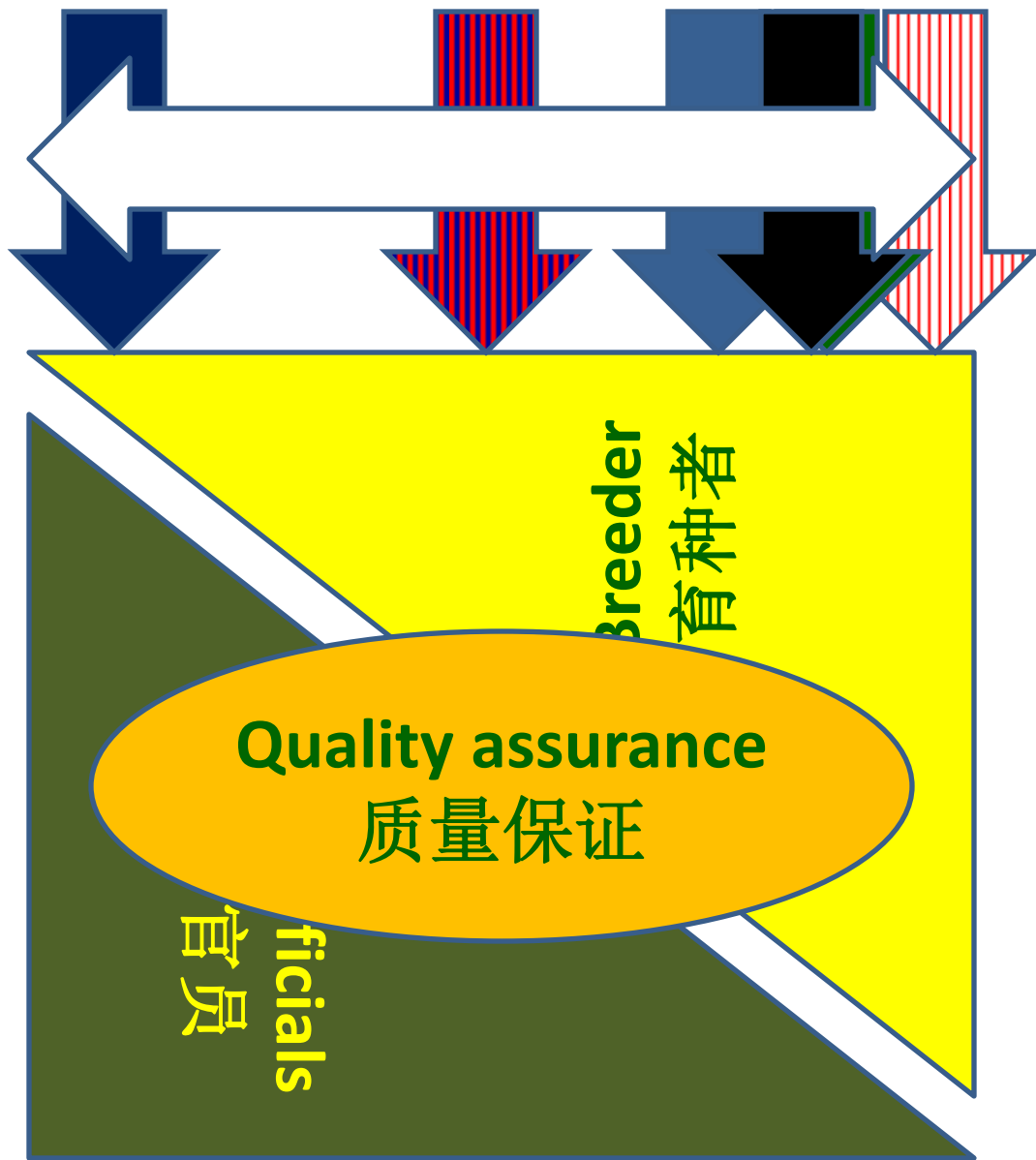
	育种者 (或代表育种者的代理机构)	Breeder (or agency on behalf of breeder)	Authority (or agency on behalf of Authority)
在DUS测试前 (技术调查问卷)	Prior to DUS trial (Technical Questionnaire)		
品种说明	Variety description	X	
确定类似品种	Identification of similar varieties	(x)	(x)
DUS测试	DUS Trial		
提供试验场地设施	Provision of trial site facilities	(x)	(x)
种植品种	Planting of varieties	(x)	(x)
植物耕种	Plant husbandry	(x)	(x)
选址	Choice of location	(x)	(x)
DUS测试品种的挑选	Selection of varieties for DUS trial	(x)	(x)
DUS测试的组织	Organization of DUS trial	(x)	(x)
记录特征	Recording characteristics	(x)	(x)
数据分析	Data analysis	(x)	(x)
试验的监控	Monitoring of trial		X
分析的核实	Verification of analysis		X
决定	Decision		
			X

主管机构
(或代表育种者的代理机构)

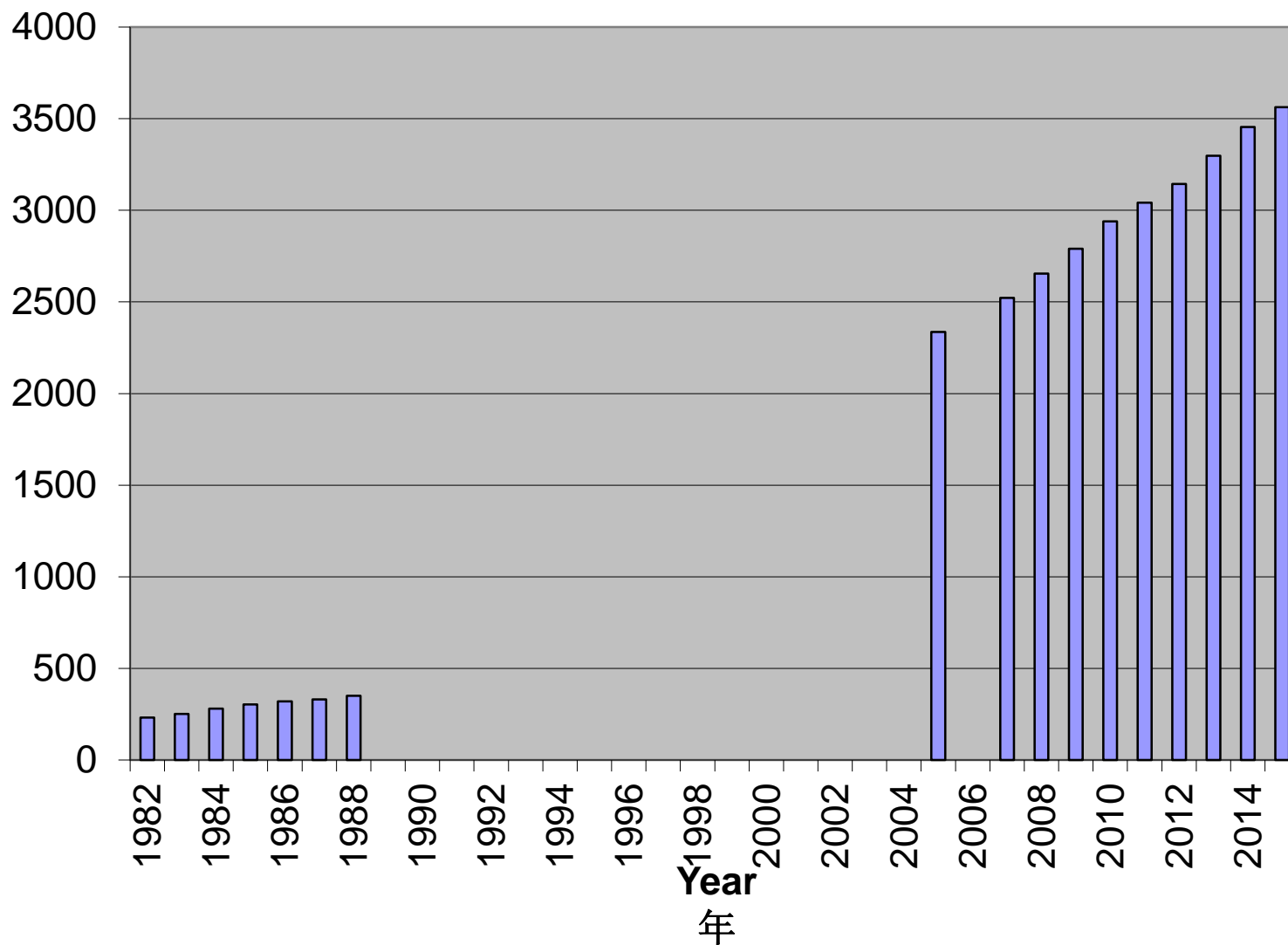






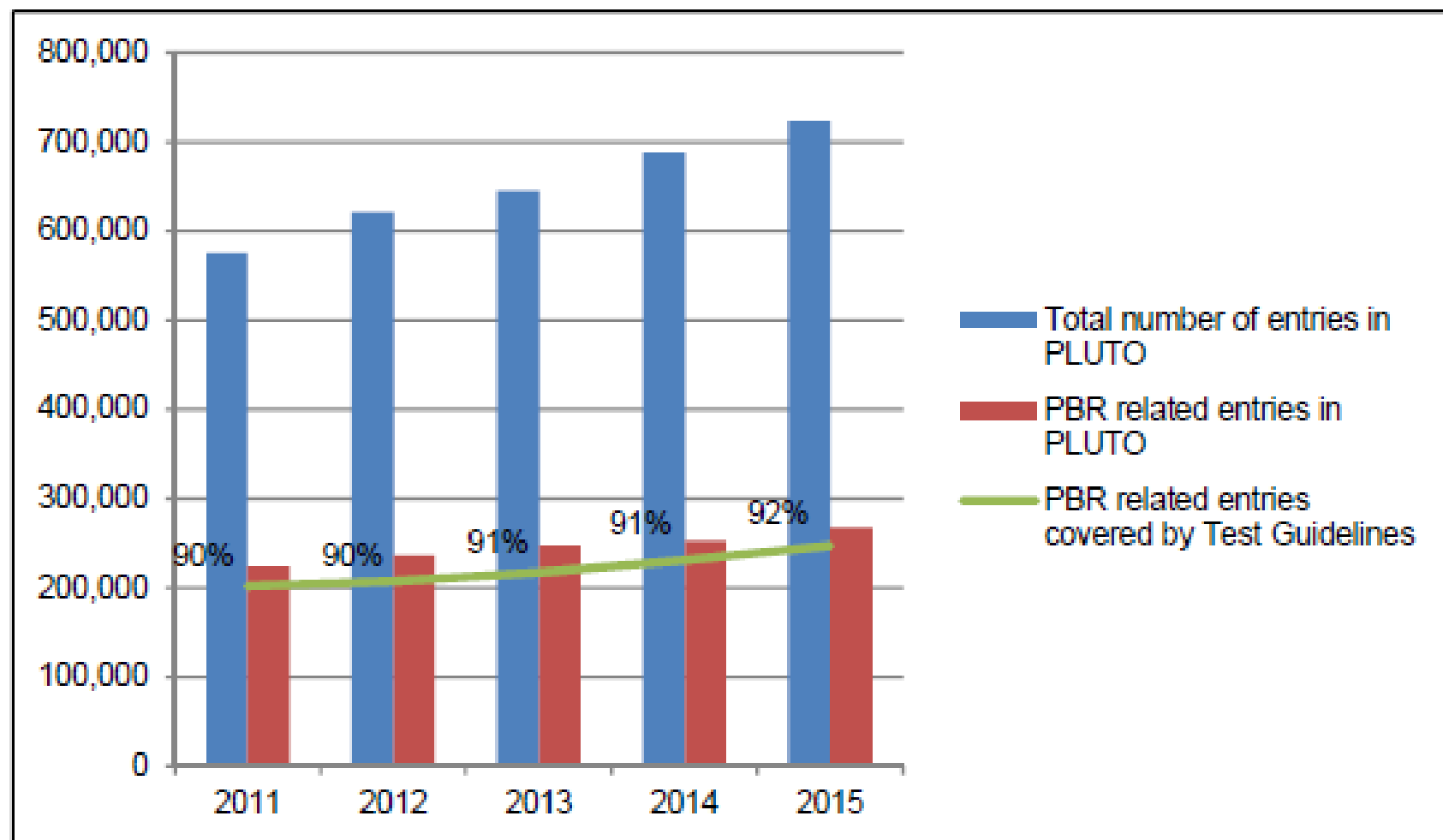


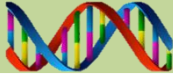
**Number of plant genera and species
for which protection sought (UPOV Members)**
(UPOV成员) 拟保护的植物属和种的数量



Plant genera/species	Examiners needed?
~ 300	10
~ 3,200	
~ 3,500	

Figure 6. Plant Breeders' Rights Entries in Plant Variety Database covered by Test Guidelines



Plant genera/species	% applications	Examiners needed?
 ~ 300		10
~ 3,200		
~ 3,500		

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4. **Duration**
保护期限
5. **Scope/Exceptions**
范围/例外情形
 - **material** 重大
 - **varieties** 品种
 - **actsder's Right** 行为人的权利

HARVESTED MATERIAL

收获材料

1978 Act
1978年文本

OPTIONAL
可选

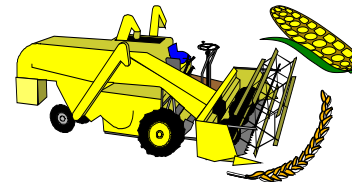
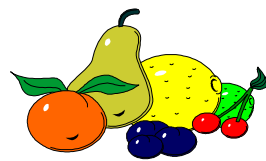
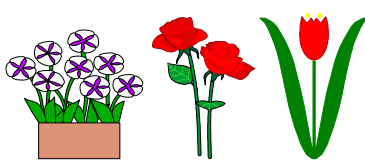
(for certain genera or
species)
(对于特定属或种)

1991 Act
1991年文本

COVERED
涵盖

where unauthorized use of
propagating material
未经授权使用繁殖材料时

unless breeder had reasonable
opportunity to exercise right in
propagating material
除非育种者有行使繁殖材料权利的合
理机会



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范围/例外情形
 - material 重大
 - **varieties** 品种
 - **actsder's Right** 行为人的权利

VARIETIES COVERED

涵盖的品种

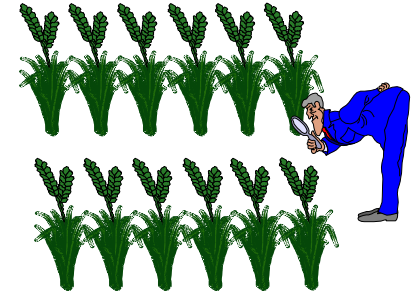
In addition to the protected variety itself...

除受保护品种本身.....

VARIETIES:

具备以下特征的品种:

- **not clearly distinguishable** from the protected variety
无法与受保护品种加以明显区别
- whose production **requires the repeated use** of the protected variety
其生产**要求反复利用**受保护的品种
e.g. hybrids requiring repeated use of parent lines
例如: 杂交要求反复利用亲本
- which are **essentially derived** from the protected variety ...
属于从受保护品种中**实质派生**所得.....



ESSENTIALLY DERIVED VARIETIES

实质性派生品种

PURPOSE:

目的:

to ensure sustainable plant breeding development by:
通过以下方式确保可持续的植物育种开发:

- providing effective protection for the breeder and
为育种者提供有效的保护，及
- encouraging cooperation between breeders and
developers of new technologies such as genetic
modification

鼓励育种者与新技术开发者之间进行转基因等合作

ESSENTIALLY DERIVED VARIETIES

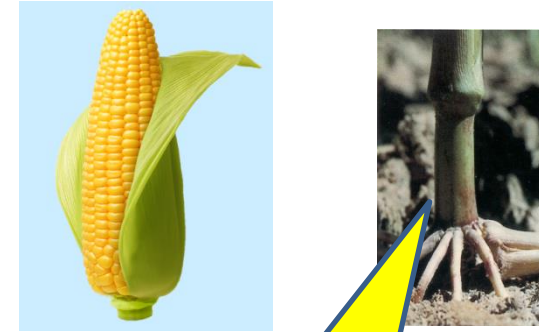
实质性派生品种

Protected plant variety
受保护的植物品种



Patented genetic element
获得专利的基因要素

>===<



Protected by Patent?
受专利保护?
Protected by PBR?
受植物育种者权利保护?

- if EDV (1991 Act only)
如为实质性派生品种 (仅1991年文本)

Distinct
特异性

ESSENTIALLY DERIVED VARIETIES

实质性派生品种

...a variety shall be deemed to be **essentially derived from** another variety (“the **initial variety**”) **when**

符合以下条件，一个品种应被视为实质性派生于另一品种（“原始品种”）……

(i) it is **predominantly derived from the initial variety**, or from a variety that is itself predominantly derived from the initial variety, **while retaining the expression of the essential characteristics** that result from the genotype or combination of genotypes of the initial variety,

主要从原始品种派生的，或从本身即是主要从原始品种派生的品种派生的，但同时却保有受原始品种基因型或基因型组合控制的基本种特性的表达；

(ii) it is **clearly distinguishable** from the initial variety and
能明显区别于原始品种；及

(iii) except for the differences which result from the act of derivation, it **conforms to the initial variety in the expression of the essential characteristics** that result from the genotype or combination of genotypes of the initial variety.

除派生性状差异外，受原始品种基因型或基因型组合控制的基本种特性的表达与原始品种相同。

ESSENTIALLY DERIVED VARIETY?

实质性派生品种？



UPOV/EXN/EDV/2

Predominantly derived from the initial variety (Article 14(5)(b)(i))

主要从原始品种派生（第14(5)(b)(i)条）

- A derived variety could not, in practice, retain the expression of the essential characteristics of the variety from which it is derived unless it is **almost entirely derived from that initial variety**

实践中，一个派生品种不能保有从其派生出的品种的基本种特性的表达，除非其几乎完全从该原始品种中派生而出



UPOV/EXN/EDV/2

Predominantly derived from the initial variety

主要从原始品种派生而出

The following might be considered in relation to the notion of “**essential characteristics**”:

以下可能被视为与概念 “**基本特征**” 有关:

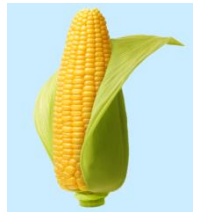
(i) essential characteristics [...] means **heritable traits** [...] that contribute to the principal features, performance or value of the variety;

基本特征【...】是指促成品种的主要特性、性能或价值的可遗传特点【...】；

(ii) characteristics that are **important from the perspective of the producer, seller, supplier, buyer, recipient, or user**;

对生产者、出售者、供应者、购买者、接收者或使用
者而言重要的特征；

UPOV/EXN/EDV/2



(iii) characteristics that are **essential for the variety as a whole, including, for example, morphological, physiological, agronomic, industrial and biochemical characteristics**

对品种整体而言必不可少的特征，包括例如形态、生理、农艺、产业及生化特征。

UPOV/EXN/EDV/2



(iv) essential characteristics **may or may not be phenotypic characteristics used for the examination of distinctness, uniformity and stability (DUS);**

可能是或可能不是被用作审查特异性、一致性及稳定性（DUS）的表性特征的基本特征；

UPOV/EXN/EDV/2

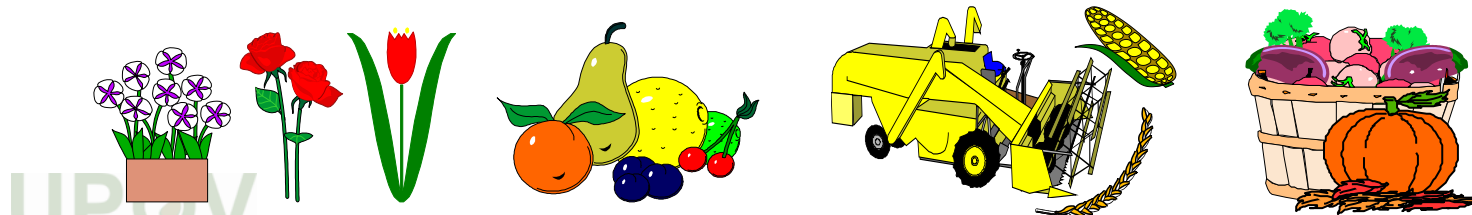


(v) essential characteristics are **not restricted to those characteristics that relate only to high performance or value** (for instance, disease resistance may be considered as an essential characteristic when the variety has susceptibility to disease);

不限于该等仅与高产或高价值（例如抗病性在品种易患病时可能会被视为基本特征）有关的基本特征；

(vi) essential characteristics **may be different in different crops/species.**

不同农作物/种的基本特征不尽相同。



UPOV

(Photo图片: istockphoto/valentinarr)

ESSENTIALLY DERIVED VARIETIES

实质性派生品种

- Implementation

实施情况

- With regard to establishing whether a variety is an essentially derived variety, a **common view expressed by members of the UPOV** is that the existence of a relationship of essential derivation between protected varieties is a **matter for the holders of plant breeders' rights in the varieties concerned.**

就确认一个品种是否为实质性派生品种而言，**UPOV成员的共同观点是，受保护品种之间的实质性派生关系的存在是相关品种中植物育种者权利的问题。**

ESSENTIALLY DERIVED VARIETIES

实质性派生品种

Can EDVs be protected ?

实质性派生品种能获得保护吗？

YES
是

Can EDVs be commercially exploited?

实质性派生品种可以进行商业利用吗？

AUTHORIZATION
NEEDED
需要授权

**It requires the authorization of the
PBR holder of the initial variety
and of the PBR holder of the EDV**

要求原始品种的植物育种者权利人以及实质性派生品种的植物育种者权利人的授权

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4. **Duration**
保护期限
5. **Scope/Exceptions**
范围/例外情形
 - material 重大
 - varieties 品种
 - acts covered Right 行为所覆盖的权利

ACTS COVERED

涵盖的文本

1978 Act
1987年文本

Production for the purposes of **commercial marketing** of the reproductive or vegetative propagating material, as such, of the variety 为对有性或无性生殖材料进行**商业营销**之目的**生产**品种
[...]

1991 Act
1991年文本

Production or reproduction
生产或繁殖
[...]

EXCEPTIONS TO THE BREEDER'S RIGHT (1991 Act)

育种者权利的例外情形（1991年文本）

Compulsory

强制性例外

Acts done:

以下行为:

- **privately and for non-commercial purposes** 私人的非商业性行为;
- for experimental purposes 试验性行为
- **breeding other varieties (breeder's exemption)** 培育其他品种的行为（“育种者豁免”）

Optional

非强制性例外

Farm-saved seed

农民自留种

UPOV

EXCEPTIONS TO THE BREEDER'S RIGHT

育种者权利的例外情形

- Compulsory 强制性例外情形

- (i) Acts done privately **and** for non-commercial purposes
私人的**及**非商业性行为

- **amateur gardener**
业余园艺家

Acts Possibly falling within the scope of the exception
可能属于例外情形的行为



EXCEPTIONS TO THE BREEDER'S RIGHT

育种者权利的例外情形

- **Compulsory 强制性例外情形**

(i) Acts done privately **and** for non-commercial purposes
私人的**及**非商业性行为

- propagation of a variety by a **farmer exclusively** for the production of a **food crop to be consumed entirely by that farmer and the dependents of the farmer** living on that holding 农民繁殖品种**纯粹**为生产粮食作物，全部供在该农场生活的农民自己及其家人消费 **therefore 因此**
“**subsistence farming**” where these constitute acts done privately and for non-commercial purposes, may be considered by a UPOV member to be excluded from the scope of the breeder's right “自给农作” 凡为私人及非商业性目的从事的行为，可以被UPOV成员认为排除在育种者权利的保护范围之外

Acts Possibly falling within the scope of the exception
可能属于例外情形的行为



EXCEPTIONS TO THE BREEDER'S RIGHT (1991 Act)

育种者权利的例外情形（1991年文本）

Compulsory

强制性例外

Acts done:

以下行为:

- privately and for non-commercial purposes 私人的非商业性行为;
- for experimental purposes 试验性行为
- breeding other varieties (breeder's exemption") 培育其他品种的行为（“育种者豁免”）

Optional

非强制性例外

Farm-saved seed

农民自留种

OPTIONAL EXCEPTION TO THE BREEDER'S RIGHT

育种者权利的非强制性例外情形

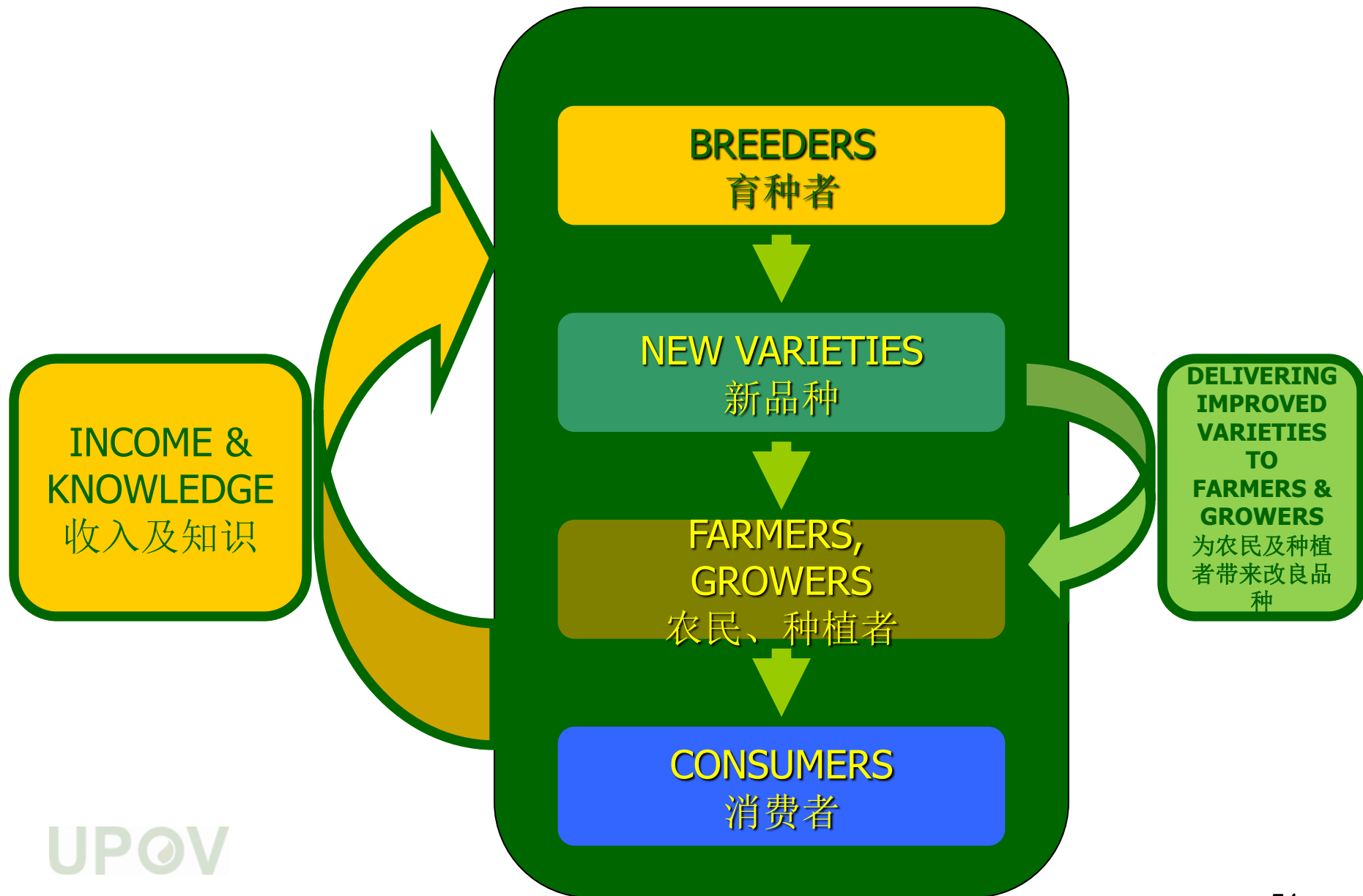
A Contracting Party may restrict the breeder's rights in order to permit farmers to use:

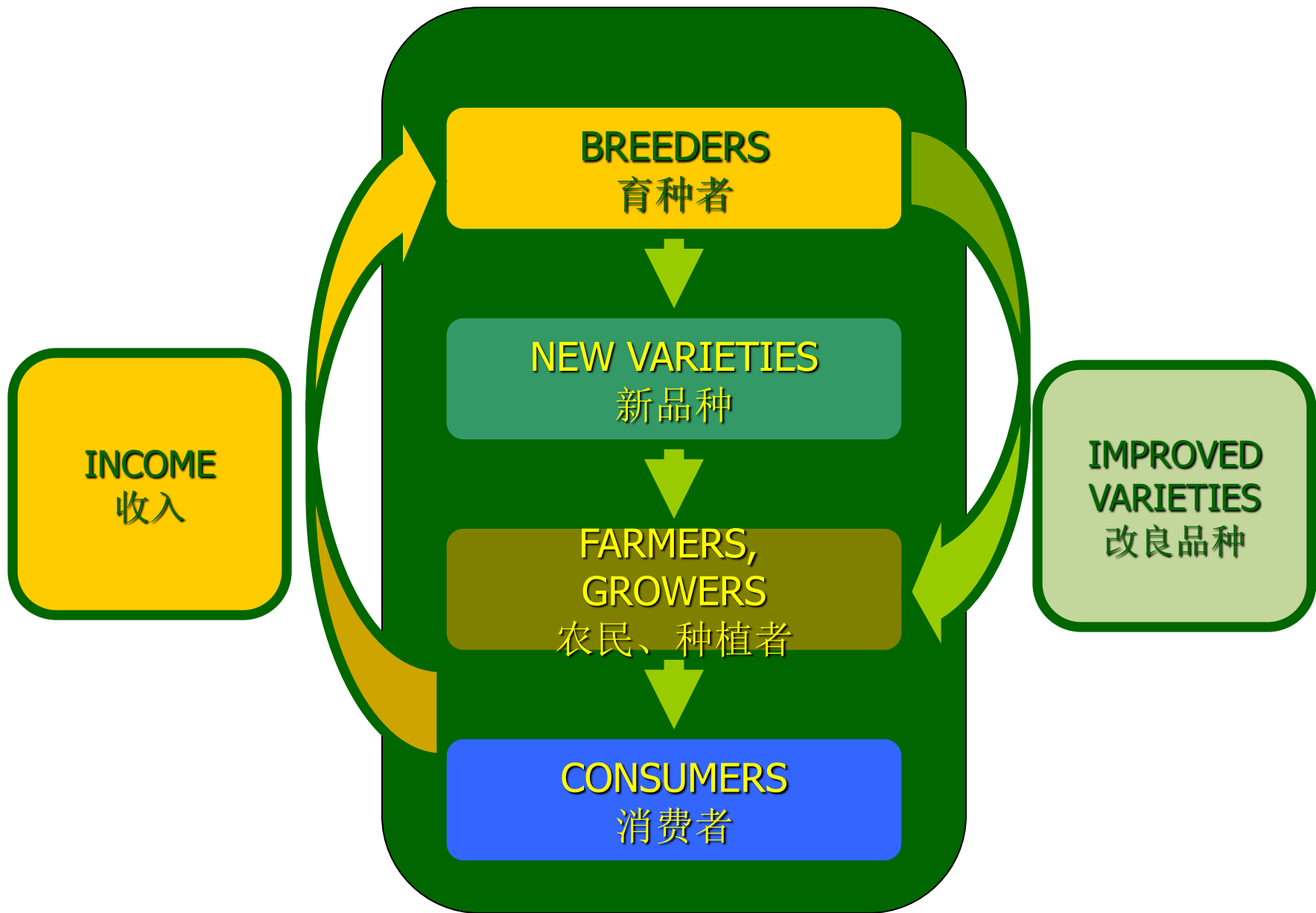
缔约方为允许农民进行以下使用之目的，可限制育种者权利：

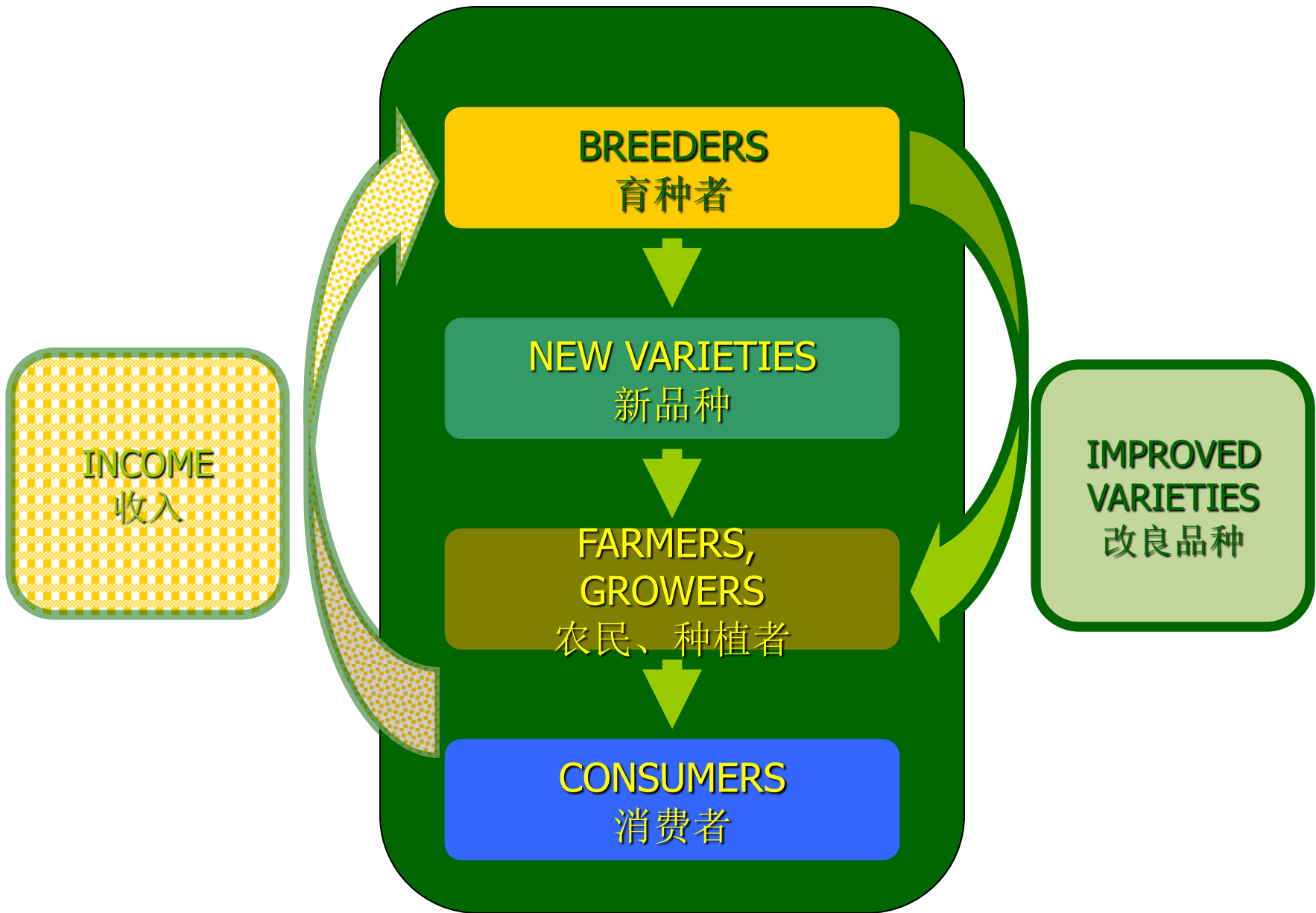
- for propagating purposes **on their own holdings**
为繁殖目的，在自己农场土地上
the product of the harvest
自种自收
- **obtained on their own holdings**
在自己农场土地上
from the protected variety
从受保护的品种
- **within reasonable limits**
在合理限度内
- **subject to safeguarding legitimate interests of the breeder**
在保障育种者合法权益的情况下

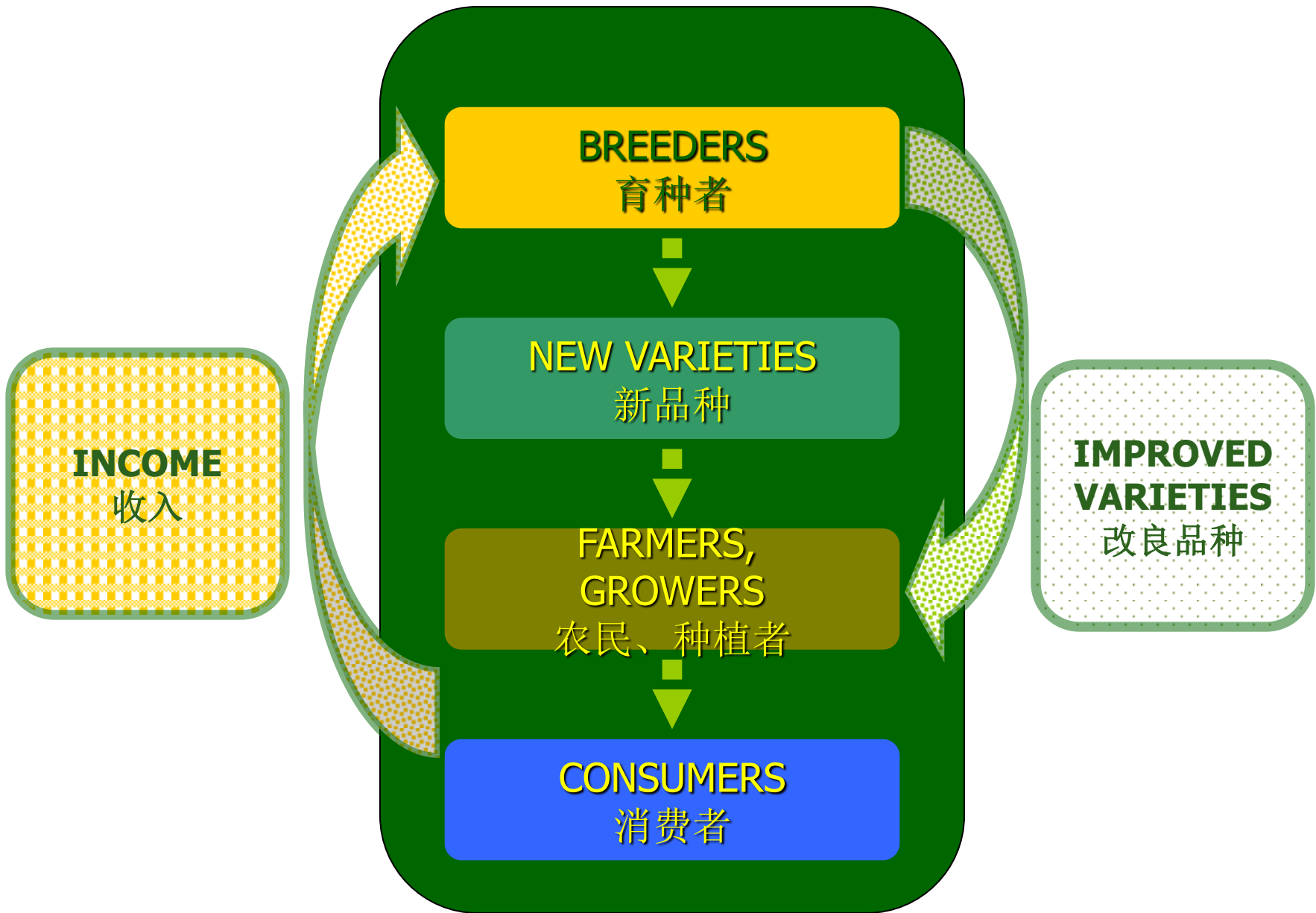
Impact of Plant Variety Protection

植物品种保护的影响







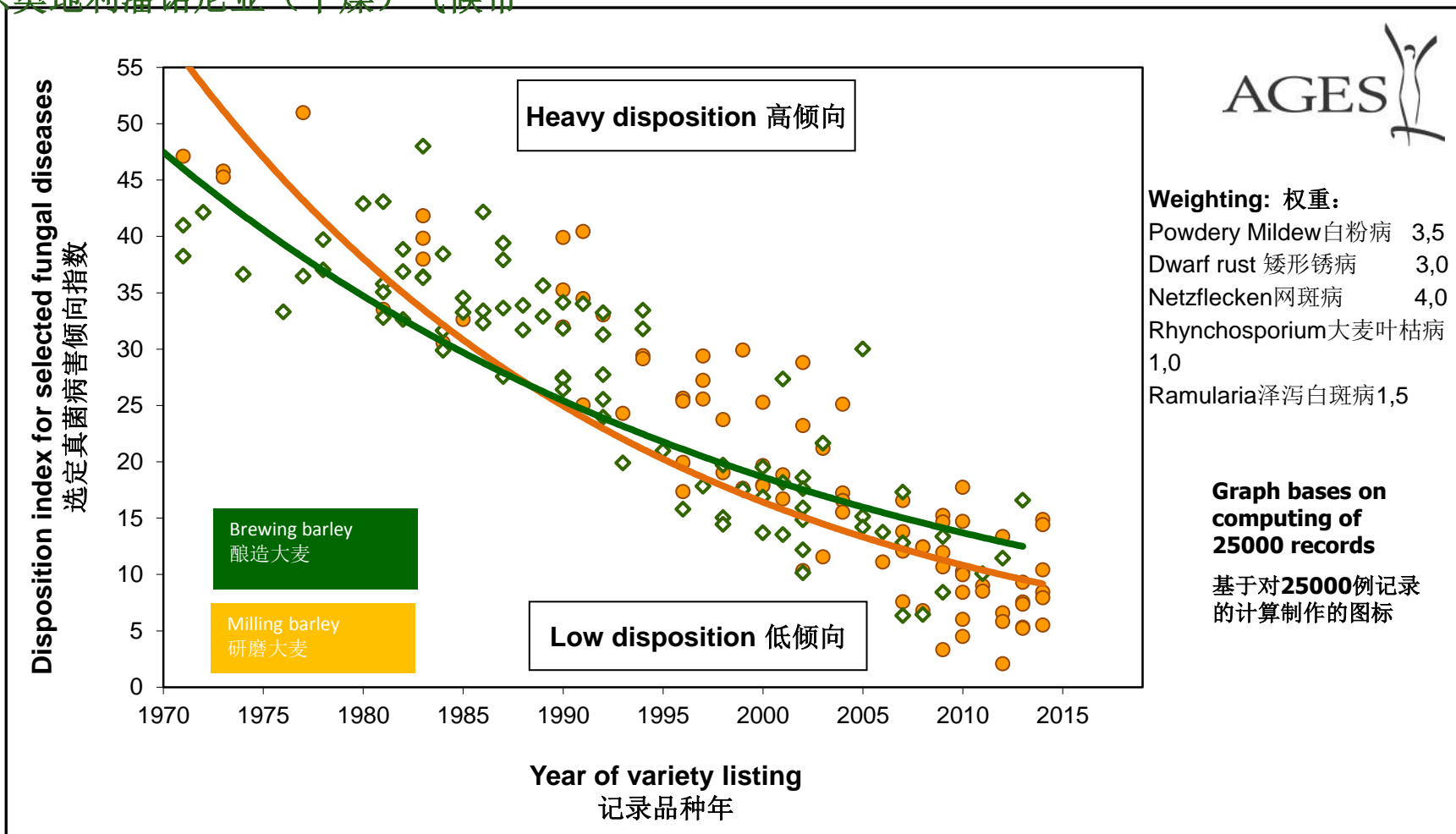


Disposition for selected diseases on varieties on summer barley

Pannonic (dry) climate zone of eastern Austria

夏季大麦品种选定病害的倾向

东奥地利潘诺尼亚（干燥）气候带



Source: Austrian Agency for Health and Food Safety, 2015: Austrian descriptive list of varieties of agricultural crop species, Issue 21/2015, ISSN 1560-635X. Mr. Clemens Flamm

来源：奥地利卫生与食品安全局，2015年：奥地利农作物种品种描述性清单，第21/2015期，ISSN 1560-635X。 克莱门斯·弗拉姆先生

Impact of Plant Variety Protection

植物品种保护的影响

