Basic Patentability Standards

- Utility
- Novelty
- Non-obviousness
- Written Description
- Enablement
- Definiteness

Utility Patents to Plants

- Possible to protect:
 - Modified plant genes, proteins, products
 - Transgenic plants phenotype (*i.e.*, observable characteristics)
 - Class of varieties with specific traits
 - Plant variety
 - Plant parts cells, tissues, etc.
 - Methods of producing or using plants/varieties

Utility Patents

- 20 years protection from date of filing
- Right to exclude others from making, using, selling, offering for sale, and importing the claimed invention
- Effective only within the United States, U.S. territories, and U.S. possessions
- Requires maintenance fees



18

Utility v. Plant Patents

- An invention may support both a utility patent and a plant patent if the claims are not identical.
- Utility Patent may be useful if the invention is not limited to a particular variety or where method claims are desired.
- Plant Patent may be useful where it is difficult to meet the written description or enablement requirements of a utility patent.



PLANT VARIETY PROTECTION

Plant Variety Protection Act (PVPA)

- Plant Variety Protection Office (PVPO), USDA
- Encourages the development of new varieties of sexually reproduced plants
- Provides protection to those who breed, or discover and develop them
- Applies to plants:
 - <u>Sexually</u> (seed) reproduced
 - Tuber propagated
 - F1 hybrids



Requirements for Plant Variety Protection under PVPA

A Variety must be:

- <u>N</u>ew (available less than 1 year in the US; less than 4 years in a foreign country)
- **Distinct** from all other varieties
- Uniform (all plants look alike)
- <u>Stable</u> (reproduces true to type)

*Applicant submits evidence for NDUS



New Plant Varieties--Plant Patents







1 New Plant Varieties



Granted Plant Patents

	All years, up to 2014	
	Total 18,076	
Top 3 Foreign Countries		
Netherlands	3,095	
Germany	2,154	
Japan	918	
Examples of Asia Countries		
India	51	
Thailand	38	
Indonesia	26	
Chinese Taipei	18	
South Korea	11	
China	9	

New Plant Varieties and Technologies



UPOV

UPOV: INDEPENDENT INTERGOVERNMENTAL ORGANIZATION

The International Convention for the Protection of New Varieties of Plants established in 1961 The International Union for the Protection of New Varieties of Plants Union internationale pour la protection des obtentions végétales



UPOV

The International Convention for the Protection of New Varieties of Plants 1961 revised 1972, 1978, 1991

The International Union for the Protection of New Varieties of Plants

Inter-governmental Organization based in Geneva, Switzerland



30

The mission of UPOV

- is to provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society.
 - The UPOV Convention provides the basis for members to encourage plant breeding by granting breeders of new plant varieties an intellectual property right: the breeder's right.







- http://www.uspto.gov/web/offices/pac/plant/index.html
- http://www.uspto.gov/web/offices/pac/utility/utility.htm
- http://www.ams.usda.gov/PVPO
- http://www.upov.int/portal/index.html.en

THANK YOU!



35