Policies for Seed Industry Promoting Innovation and Development of Plant Breeding in China

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OVER 1.4 BILLION

NATIONAL FOOD SECURITY
I. Policies and Regulations Concerning the Seed Industry

II. Policies Promote Plant Breeding Innovation and Development

III. Outlook
I. Policies and Regulations Concerning the Seed Industry

1997

*PVP Regulations* promulgated
I. Policies and Regulations Concerning the Seed Industry

- 1997: Became the member of UPOV
- 1999: Started to accept PBR applications
I. Policies and Regulations Concerning the Seed Industry

Seed Law Enacted

Seed Law Amended

1997
1999
2000

- Raised PVP legal status
- DUS tests for variety management
- Increased penalties for PBR infringement
I. Policies and Regulations Concerning the Seed Industry

• **Opinions on Accelerating the Development of Modern Crop Seed Industry (SC No.8)**
• Proposed to establish a modern crop seed industry
• Combined with seed companies, universities and research institutes.
I. Policies and Regulations Concerning the Seed Industry

- 1997
- 1999
- 2000
- 2011
- 2013

Opinions on Deepening the Institutional Reform and Improving the Innovation Capability of Seed Industry (SC No.109)
I. Policies and Regulations Concerning the Seed Industry

- promote enterprises technological innovation
- stimulate the enthusiasm of research personnel
- enhance government investment
- Improve the capability of basic public welfare service
- speed up the building of seed production bases
- tighten seed market supervision


SC No.8, SC No.109
I. Policies and Regulations Concerning the Seed Industry

- Promoting the Transformation of Scientific and Technological Achievements Law
I. Policies and Regulations Concerning the Seed Industry

- Opinions on Strengthening the Protection of Intellectual Property Rights
- strengthen the protection of new plant varieties
- accelerate the procedures for examination and approval
II. Policies Promote Plant Breeding Innovation and Development

Regulations

1. NO FEE

- PVP Registration
  - major crops
  - non-major crops

- Published
- Total

- Graph showing trends over years:
II. Policies Promote Plant Breeding Innovation and Development

Regulations

1

2

≥50%

Mechanism

≥50%

SEED FUND
II. Policies Promote Plant Breeding Innovation and Development

1. Regulations
2. Mechanism
3. Management

- Department for Seed Industry
- Revise and improve the registration criteria
- Strengthen seed market supervision
II. Policies Promote Plant Breeding Innovation and Development

Basic Theoretical Research
Germplasm Resources
Breeding Methods

Technology

Environmentally friendly
Better resistance
Less cultivation
Adapt to mechanization

YIELD QUALITY

Regulations
Mechanism
Management
1
2
3
4
II. Policies Promote Plant Breeding Innovation and Development
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1. Plant Breeding
2. Plant Variety Protection

- National Research Institutions Applications
- National Enterprises Applications

2011, SC No. 8
II. Policies Promote Plant Breeding Innovation and Development

1. Plant Breeding

2. Plant Variety Protection

3. Enterprise Development

WORLDWIDE COMPETITIVE ENVIRONMENT FOR SEEDS

- Bayer* (DEU)
- Corteva (USA)
- Syngenta (LPHI)
- Vilmorin & Cie (FRA)
- KWS (DEU)
- BASF (DEU)
- DLF** (NLK)
- Rijk Zwaan (NLD)
- Sakata (JPH)
- LPHT (CHN)

In MLY. Sources: company release and internal est. sales for 2020. Syngenta, LPHT sales for 2019. Vilmorin & Cie and KWS before IFRS!11. Strategic partnerships include 50% of AgReliant and Soils sales for Vilmorin & Cie and AgReliant and Kanfeng sales for KWS.

* Bayer: field seed sales include soybean, corn and an internal est. of other field seed sales (cotton, rapeseed, wheat, rice & sorghum).
** DLF seed sales restarted excluding the vegetable seed multiplication business and the potato business.

Exchange rate: EUR 1 = USD 1.11

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III. Outlook

- Seed Law
- PVP Regulations

Expanding PBR Scope
Establishing EDV System
Increasing Penalties

UPOV 1991 Act

REVISING
Thanks for your attention!