

Thailand Seed Industry

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East-West Seed Group

Thailand Seed Industry

- **Current status**
- **Product development process**
- **Seed company**





AR
angon

Hanoi

LAOS

Chiang Rai

Viangchan
(Vientiane)

Chiang Mai

Uttaradit

Udon Thani

Tak

Phitsanulok

Khon Kaen

Mae Sot

Nakhon Sawan

Ubon Ratchathani

Uthai Thani

Nakhon Ratchasima

Ban Pong

Lop Buri

Bangkok
(Krung Thep)

Samut Songkhram

CAMBODIA

Hua Hin

Chanthaburi

Phnom Penh

Pattaya
Gulf of Thailand

Surat Thani

Phuket

Songkhla

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MALAYSIA

Current Status

- Exporting corn and vegetable seed to many countries
- Importing some vegetable and field crop seed
- Several seed companies with breeding activities; mainly corn and vegetables
- Good facilities for seed processing
- Major exporter of rice, cassava, sugar, sweet corn, baby corn
- Importing soybean, corn, cotton
- Enacted PVP law in 1999

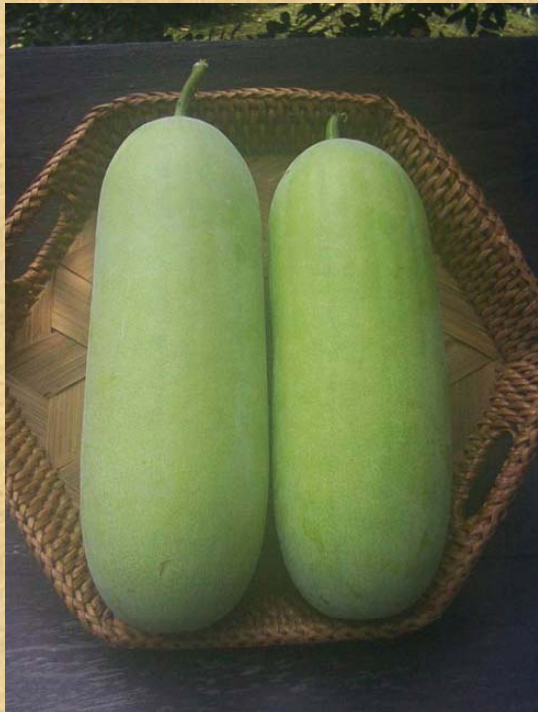
Major Field Crop

- Rice
- Sugarcane
- Sorghum
- Soybean
- Peanut
- Cassava
- Maize;
- Sunflower;
- Mungbean



Major Vegetable Crop

- Sweet corn
- Baby corn
- Tomato
- Watermelon
- Ridge gourd
- Melon
- Chinese cabbage
- Coriander
- Kangkong
- Waxy corn
- Hot pepper
- Eggplant
- Bitter gourd
- Wax gourd
- Cabbage
- Cauliflower
- Chinese kale
- Yard-long bean



Kangkong

Thailand Seed Requirement

| Crop | Area (Mha) | Seed (1,000 kg) | Value (M\$) |
|-----------------|------------|-----------------|-------------|
| Rice | 10.4 | 900,000 | 317 |
| Field crops | 1.59 | 42,334 | 69 |
| Vegetable crops | 0.56 | 12,830 | 50 |
| Flowers | NA | 160 | 0.7 |
| Total | 12.55 | 955,324 | 436.7 |

Field crops: soybean, mungbean, peanut, field corn, sunflower



Seed Import

(Mil ₱)

| Crop | 2004 | 2005 | 2006 |
|-----------------|------|------|------|
| Field corn | 109 | 125 | 120 |
| Sunflower | 98 | 59 | 90 |
| Cabbage | 70 | 77 | 67 |
| Coriander | 43 | 46 | 46 |
| Chinese radish | 20 | 26 | 31 |
| Chinese kale | 24 | 29 | 29 |
| Sorghum | 20 | 26 | 24 |
| Chinese cabbage | 24 | 19 | 19 |
| Pakchoy | 17 | 20 | 18 |
| Cauliflower | 20 | 21 | 17 |
| Total | 466 | 527 | 557 |



Seed Export

(Mil ฿)

| Crop | 2004 | 2005 | 2006 |
|----------------|-------|-------|-------|
| Field corn | 608 | 610 | 666 |
| Tomato | 167 | 245 | 272 |
| Watermelon | 189 | 175 | 197 |
| Pepper | 120 | 133 | 181 |
| Cucumber | 132 | 139 | 171 |
| Sweet corn | 30 | 57 | 69 |
| Kangkong | 105 | 111 | 59 |
| Cabbage | 22 | 33 | 34 |
| Yard-long bean | 9 | 12 | 11 |
| Total | 1,432 | 1,568 | 1,723 |

US\$ 1 = 34 Thai baht

Product development process

- **Pure/Inbred line development**
- **Variety/Hybrid evaluation**
- **Field testing**
- **Commercialization**
- **No registration requirement**

Private Seed company in Thailand

- **Three types of seed companies**
 - Seed production and export
 - Seed import and marketing
 - Breeding, seed production and marketing
- **Field crops: Field corn; Sunflower; Sorghum; Hybrid rice**
- **Vegetable crops: Solanaceous; Cucurbits; Green corn; Brassicas; Leafy vegetables;**
- **Flower and ornamental crops: Marigold;**

Seed Company

- *Multinational seed company*
 - Monsanto: field corn, Hybrid rice, Vegetables
 - Syngenta: field corn, Baby corn, vegetables, Hybrid rice
 - Pioneer Hi-Bred: field corn, Sorghum, Sunflower, Hybrid rice
 - BioSeed: field corn, hybrid rice
 - Pacific Seeds (Advanta): field corn, sweet corn, waxy corn, baby corn
 - Clause (Limagrain): vegetables
 - Bayer: hybrid rice, vegetables

Seed Company

- ***Regional/Local seed company: > 80***
 - Seed production and export
 - Seed import and Marketing
 - Breeding, Production and Marketing
 - CP: field corn, sweet corn, waxy corn, baby corn
 - East-West Seed: vegetables
 - ChiaTai: vegetables
 - Seed Asia: field corn
 - Advance Seed; Vanda Seed; Dynamic Seed; etc.

Future Trend

- **Seed health**
- **UPOV**
- **Hybrid rice**
- **GMOs**