

Reducing Weed Seeds in U.S. Soybean Exports to China

Grain exports to China are critical to the U.S. economy.



Grain accounts for **nearly 30%** of all U.S. agricultural exports, which were valued at \$138.4 billion in 2017.



China is the **#1 importer** of U.S. grain.



U.S. grain exports to China exceed **\$13 billion** per year.



Soybeans are one of the United States' top exports to China.



Approximately **1 out of every 3 bushels** of U.S. soybeans is exported to China.



U.S. soybean exports to China were valued at **\$12.4 billion** in 2017.



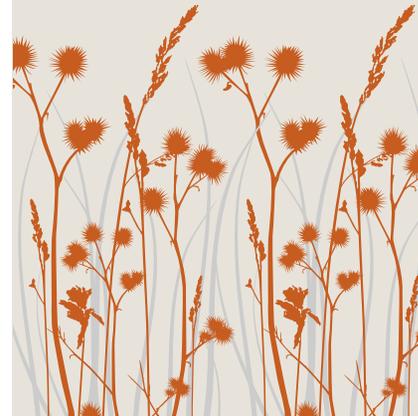
Soybeans are **91%** by value of all U.S. grains shipped to China.



Soybean grain is a generally low-risk product; the issue is weed seeds.



80% of all intercepted seeds come from 4 types of weeds: **ragweed, cocklebur, Johnson grass, and pigweed.**



A farm-to-export systems approach can reduce weed seeds.



The **systems approach** is a series of measures that can be applied across the supply chain to reduce weed seeds in soybeans. It includes:

- Integrated weed management
- Harvesting best practices
- Enhanced sampling, inspection, and analysis
- Storage and handling best practices
- Routine monitoring across the supply chain



For more information, go to www.aphis.usda.gov/soybean-systems-approach

The Systems Approach for U.S. Soybean Exports

Participants from farm to export can help reduce weed seed content and maintain and enhance the value of U.S. soybeans.

On the Farm: Producers who may be experiencing difficulty controlling weeds or who wish to strengthen their integrated weed management program may want to work with Extension or their local Certified Crop Adviser to develop a tailored approach based on the recommendations below.

At Grain Elevators: Grain elevator operators may implement certain practices to lower weed seed and foreign material content during storage, transportation, and at the point of export based on the recommendations below.

At Export: USDA is working closely with China's General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) to ensure uninterrupted trade in U.S. soybeans.



Weed Control



- Plant soybeans in narrow rows spaced apart 15 inches or less
- Rotate herbicide modes of action
- Control escape weeds with additional herbicide applications or mechanical removal
- Manage weeds in field borders
- Rotate crops and guard against volunteer crop plants
- Double crop and maintain vigilant weed control measures through second crop
- Use cover crops to manage weeds
- Incorporate some tillage, if possible, when other control measures are ineffective or not feasible



Harvesting



- Adjust combine cutting heights and other settings to minimize weed seed and other foreign material in the harvested grain
- Avoid harvesting weeds when possible
- Regularly clean combines to prevent weed spread and cross-crop contamination
- Segregate soybeans with low foreign material content from those with higher volumes, when possible
- Regularly clean out bins and conveyances



Handling



- Examine soybeans upon arrival for weed seeds, especially ragweed, Johnson grass, cocklebur, pigweed, and volunteer corn
- Consider separating weed seeds from soybeans through mechanical cleaning or other means and then denaturing or destroying the seeds



Sampling, Inspection, and Analysis



- USDA and U.S. trade associations will monitor weed seed and foreign material content in soybeans to evaluate the effectiveness of the systems approach. This includes:
- Conducting a national survey at country and export elevators
 - Analyzing data to identify opportunities for improving the results of the systems approach



Trade Support



- Cooperation between USDA and AQSIQ to address technical issues
- Expedited clearance in China of shipments that have 1% or less foreign material
- Collaboration with AQSIQ to evaluate program effectiveness

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