

Chapter 19

Soybean Facts

by W. Morrison*

Scientific Name: *Glycine max*
Family: *Leguminosae* (Legume)

Soybean Seed Size:
Small = 3,500-3,900 per pound
Medium = 3,100-3,500 per pound
Large = 2,600-3,100 per pound

Flower Colors: Purple, White

Seed Colors: Yellow, Brown, Black Green,
Bicolored, Variegated

Hilum Colors: Buff (colorless), Black, Imperfect
Black, Brown

Pubescence Colors: Tawny (golden brown), Gray

Plant Height: 20"-50" (varies by variety and
environmental conditions)

Pod Number: 0-400 per plant

Seed/Pod: 1-5; 2-3 more common

Hypocotyl Color: Green, Purple

1 bushel = 60 lbs.
1 cwt. = 1.66 bu.
1 short ton = 33.33 bu.
1 metric ton = 2,204.6 lb.
1 metric ton = 36.7 bu. soybeans
1 short ton = 0.907 metric ton
1 hectare = 2.471 acres
1 acre = 0.405 hectares
34 bu/A soybeans = 2.29 metric tons/hectare
Protein content of seed – 40%
Oil content of seed – 20%
1 bushel = 11 pounds of oil
1 bushel = 48 pounds of protein-rich meal

Grade Specifications (#1 yellow):
Test Weight – 56 pounds or higher
Heat Damage – 0.2% or less
Total Damage – 2% or less
Foreign Material – 1% or less
Splits – 10% or less
Soybeans of Other Colors – 1% or less

Major Export Customers:

- (1) Economic Community Countries (EU)
- (2) Japan
- (3) Taiwan
- (4) Mexico
- (5) South Korea



Major U.S. Crops:

- (1) Corn – 23%
- (2) Wheat – 23%
- (3) Soybeans – 19%

Major World Oilseed Crops:

- (1) Soybeans – 51%
- (2) Cottonseed – 13%
- (3) Rapeseed – 12%
- (4) Peanut – 10%
- (5) Sunflower – 9%

Major Soybean Producers:

- (1) U.S. – 43%
- (2) Brazil – 21%
- (3) Argentina – 11%
- (4) China – 11%

U.S. Edible Oil Consumption:

- (1) Soybeans – 77%
- (2) Corn – 6%
- (3) Tallow/Lard – 5%
- (4) Cottonseed – 4%

Major Uses:

Oil – Margarine, coffee creamer, vegetable oil, salad dressing, mayonnaise, carriers in inks and paints, environmental friendly fuel for diesel engines, lecithin.

Protein and/or Whole Soybean – Feed for poultry, swine and other animals, tofu, soy sauce, soy flour, soy sprouts, roasted nuts, soy milk, meat extenders, plastics, wood adhesives and textile fibers, pharmaceuticals.

* Taken from *Louisiana Soybean Handbook*. Used with permission from Dr. Walter C. Morrison, Specialist (Agronomy), Louisiana Cooperative Extension Service, Baton Rouge.