

Soybeans of Other Colors (SBOC): 2026 Harvest Brief

Some 2026 soybean loads have off-color beans, and some terminals are discounting or rejecting loads. The extent of the issue and its market impact remain unclear. This brief covers what to look for, what SBOC means for protein, oil, and grade, and what to do pre-delivery

What you may see



Enlist E3® discoloration. Dark seed coat, often with light brown or gray banding or shading around the hilum.



Green seed. Chlorophyll did not break down. Can be caused by hot, dry weather during seed fill, or an early frost or freeze.



Diaporthe seed decay. Wrinkled, cracked seed, often with white mold. Can result in damaged kernels.



Purple seed stain. Purple spots on the seed. Can earn a special "purple mottled or stained" grade.

How it affects your grade

- SBOC is no longer a grading factor. Since September 1, 2023, the grade is set by damaged kernels, foreign material, and splits.
- SBOC still affects class. A sample is yellow only if SBOC is 10% or less. Above 10% may be graded as mixed.
- Buyers can set their own limits. Some export markets are sensitive to SBOC regardless of class. Indonesia's tempeh producers, for example, need clean yellow soybeans.
- Other problems can also be docked. Purple seed stain can earn a special grade. Diaporthe seed decay can result in damaged kernels. Severe seed coat cracking or weather-related deterioration may also affect quality and grading.

Protein and oil

- Enlist E3® discoloration does not appear to change protein or oil.
- A USDA study of 100 official yellow soybean samples from the 2021 crop, with SBOC from 2.0 to 6.9 percent, found no significant protein or oil differences.
- Green seed can reduce oil quality.
- Purple seed stain is not likely affecting seed composition, but buyers may still discount it for appearance. Purple mottled beans are excluded from the 10% SBOC and domestic processors have generally said they will accept them without discount, but export acceptance is less certain

Before you deliver

1. **Get the elevator's current discount schedule in writing.** Schedules vary by elevator and change over time. Ask how SBOC, purple seed stain, and damaged kernels are handled, whether discounts are a percent of price or cents per bushel, and at what level discounts start and loads are rejected.
2. **Send a representative sample before you drive down.** Pull probe samples from several spots in the bin or truck, mix them, and send the mixed sample for a grade and discount estimate. One sample from one corner may not reflect the whole load. Final grading and discounts may differ when the load is officially sampled
3. **Shop around if you can.** Discounts can depend on whether a terminal feeds crush or export channels.

For questions, contact your buyer or your state extension office.

Image credits: Photos: Rachel Vann (University of Illinois Urbana-Champaign), Cory Knutt (Pembina Valley Online), Kristina Petrović (Crop Protection Network), and Adam Sisson (Iowa State University, Bugwood.org), as credited in the Science for Success post. Full article found here: <https://soybeanscienceforsuccess.org/2026/10/16/understanding-current-soybean-seed-quality-problems/>

Content adapted from: Casteel, S., Conley, S., Naeve, S., Ortel, C., Ortmeier-Clarke, H., and Vann, R., "Understanding Current Soybean Seed Quality Problems," Science for Success (2026, USB approved). Tao, Y., and Norden, T., "Study of Soybeans of Other Colors and the Impact on End-Use Functionality in 2021-2022 Market Samples," USDA AMS Federal Grain Inspection Service (2022). FGIS/USDA SBOC grading change as summarized by Field Advisor (2023). Gretchen Mosher, Iowa State University Grain Testing Laboratory, quoted in DTN, "Grain Quality Concerns Rise for Corn, Soybeans," Oct. 8, 2026.