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Crop quality report 1998

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Abstract
As harvest winds down, quality patterns in the 1998 crop are becoming evident. As is often the case, there is good and bad news. For both corn and soybeans, physical quality is excellent. Test weights are above average and seed size is large. These characteristics generally lead to better storage and handling properties. In both grains, there has been some hang-up in moisture after mid-harvest rains coupled with still-living stems that only recently have been frosted. The dry beans-on-green stems problem returns every year that there is very rapid maturity. Judging by the amount of sprouted beans in harvested fields, combine losses were high this year.

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Corn proteins are at very low levels (below 6.5 percent, with some below 6 percent, basis 15 percent moisture) in many areas. These low levels trace to the heavy loss of nitrogen from early-season rains, and the surprising late-season growth spurt that produced high yields, mostly of starch. Starch contents are very high (>62 percent in many cases), which will give good wet mill yields and probably good animal performance provided protein supplementation is adequate. Plan to test field corn for protein. Variability is huge. The amino acid results are not back yet. The corn crop also demonstrated the weakness of test weight as a predictor of feed quality in nonstress situations.

In contrast, we have rarely seen higher average protein and oil combinations in soybeans. This finding probably traces to the warm weather in August and September, with no frost. Oil is running 19 to 20 percent or higher, and protein 35.5 to 36 percent (basis 13 percent moisture). These percentages are competitive with those of South American soybeans and should ensure that even northern areas will produce 48 percent protein meal or higher.

Some meal will exceed 48 percent protein, which presents opportunities for more precise feed mixing. Meal may be a little wetter than usual, approaching the 12 percent trading standard. Be aware of potential storage and flowability problems in wetter meal.

Overall, the increased soybean quality will offset any reductions in corn protein. Because soybeans have relatively higher concentrations of essential amino acids (lysine, methionine, cysteine, tryptophan), only a 0.25 to 0.35 percentage point rise in soybean protein is needed to maintain aggregate production of amino acids for a 1 percent loss in corn protein. More precise attention, however, to quality in individual feed ingredients is needed. Producers using long-term averages for ration balancing will face problems this year.

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