LAFAYETTE — A University of Southwestern Louisiana researcher says that existing USL grain inspection methods are deficient, and improvements are needed. Woodall, an associate professor of statistics, studied the inspection system under a $49,000 grant from the Federal Grin Inspection Service.

Present inspection rules actually discourage improving the quality of U.S. grain, says Woodall. "They are not doing anything the United States does not let them do," he said. Grain companies are simply following the rules to their advantage, he said.

According to one source cited by Woodall, complaints about the quality of U.S. grain rivals from 1984 to 1985. One publication, the Farm Journal, earlier this year quoted the chairman of the Nebraska Wheat Board as saying, "The U.S. sells the dirtiest grain in the world."

Woodall blames the inspection system and not any kind of intentional dishonesty, for poor grain quality. "It is clear that the current CUSUM factors for a 60,000-bushel batch are not statistically sound," Woodall said. "It destroys much of the effectiveness in maintaining the grain standards." Under the CUSUM plan, a shipload of grain is inspected by 60,000-bushel sublots, which are surrounded by acceptable limits. Woodall favors averaging the reinspection score with the original score, rather than substituting the higher rating for the lower rating. The Grain Inspection Service should consider using an absolute limit for differences in quality ratings with the CUSUM sublots, making it more difficult to pass low-quality sublots, he said.

Woodall has made the inspection system uner a $50,000 grant from the Federal Grin Inspection Service. According to one source cited by Woodall, complaints about the quality of U.S. grain rivals from 1984 to 1985. One publication, the Farm Journal, earlier this year quoted the chairman of the Nebraska Wheat Board as saying, "The U.S. sells the dirtiest grain in the world." "If a buyer orders U.S. No. 2 corn, the shipper is better off shipping corn (which is as close as possible to U.S. No. 3 corn)." The shipper can achieve this quality by blending together corn of varying quality levels. Blending is a well-established but controversial practice in grain trading.

The problem is trying to guarantee the quality of a shipload of grain from a comparatively small statistical sample, he said. "Although the overall quality of the grain is checked continuously as it is loaded, and inspectors are well trained, grading factors for a 60,000-bushel batch are determined from roughly a handful of grain." CUSUM allows a shipper to reinspect grain lots that receive a low inspection rating, and if reinspection results in a higher rating, the shipper can substitute the higher rating for the lower rating. The shipper is allowed three reinspections.

Woodall says his examination of U.S. grain farmers wanting higher quality grain shows the system needs fundamental change. He said he favors averaging the differences in quality ratings with the reinspection scores, rather than substituting the higher rating for the lower rating. The Grain Inspection Service should consider using an absolute limit for differences in quality ratings with the CUSUM sublots, making it more difficult to pass low-quality sublots, he said.

In his study for the Grain Inspection Service, Woodall evaluated the Cumulative Sum sampling technique — abbreviated to CUSUM— now used to grade grain as it is loaded onto freighters for export. "It is clear that the current CUSUM plan, with its reinspection procedure, does not provide an adequate check on conformance to the grain standards," he said.

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