A COMPARISON OF DOCKAGE ASSESSMENTS WITH TOTAL SCREENINGS

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The correct estimation of the amount of foreign substances present in a carlot of wheat as it arrives at the terminal market for disposal to buyers presents a problem of considerable importance to the producer, the seller, and the buyer, who, in most cases, is the miller. The reports on dockage and foreign material other than dockage presented by the state grain inspection departments and licensed inspectors, in accordance with the directions of the Handbook of Official Grain Standards, represent careful endeavors toward the estimation from samples of the proportions of good sound wheat, straw, foreign grains, etc., present in the entire bulk sampled.

The economic importance of a correct estimation of dockage in wheat arriving at terminal markets in the United States becomes clear from the fact that an average error of only 0.5% less estimated dockage than might be actually found from cleaning all the wheat would result for the average post-war crop in a gain to the sellers and a loss to the buyers of approximately 4.2 million bushels of grain per annum. In accordance with official statements, material thus classed as dockage should correspond closely to the screenings derived from the bulk grain by the customary cleaning machinery used in commercial mills. The separators of this class in use at the Minnesota State Testing Mill have been described in Bulletin 23 of the Minnesota State Department of Agriculture, and represent standard cleaning machinery of modern milling practice. The screenings from the receiving and milling separators have been grouped as one unit in this study and will be referred to as total mill screenings.

SOURCE OF DATA

The data embodied in this discussion have been published in full in the annual reports of operation of the Minnesota State Testing Mill by Bailey (1, 2), Bailey and Sherwood (3), and Sherwood (5, 6, 7), covering the crop seasons of 1921 to 1926, inclusive. Wheats of the hard red spring class plus a very few white wheats

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3Reference by number is to "Literature Cited," p. 571.