1-1-1987

Wheat payments and protein content

Department of Agriculture, Western Australia

Follow this and additional works at: https://researchlibrary.agric.wa.gov.au/journal_agriculture4

Part of the Agricultural Economics Commons, Agronomy and Crop Sciences Commons, and the Food Processing Commons

Recommended Citation
Department of Agriculture, Western Australia (1987) "Wheat payments and protein content," Journal of the Department of Agriculture, Western Australia, Series 4: Vol. 28 : No. 4 , Article 5.
Available at: https://researchlibrary.agric.wa.gov.au/journal_agriculture4/vol28/iss4/5

This article is brought to you for free and open access by Research Library. It has been accepted for inclusion in Journal of the Department of Agriculture, Western Australia, Series 4 by an authorized administrator of Research Library. For more information, please contact jennifer.heathcote@agric.wa.gov.au, sandra.papenfus@agric.wa.gov.au, paul.orange@dpird.wa.gov.au.
In recent years there has been increasing support from within the Australian wheat industry for the principle of wheat growers receiving payment for their grain according to market value.

Individual loads are now tested for quality characteristics such as hectolitre weight, unmillable material and moisture content; deliveries to the Australian Hard (A. Hard) grade are also tested for protein content.

Ideally, a comprehensive assessment of quality would involve extending protein testing to all wheat deliveries, and the incorporation of additional tests for grain hardness, milling quality and dough strength. Other tests would be needed to assess quality for some end-uses of wheat. Also required would be the development of quality indices for various end-uses to which all these results would be applied. Increased segregation of wheat deliveries would be needed to take advantage of the increased specification of quality of individual loads and to cater for particular quality requirements for certain end-uses.

At present, technology is not sufficiently advanced to enable rapid and accurate analysis of individual loads for all important quality factors.

A more practical system of quality assessment would be one based on allowances for various basic measures (such as hectolitre weight, unmillable material and moisture content), variety (to allow for genetic differences in quality, such as grain hardness, milling quality and dough strength), and protein content. Protein content is important in determining end-uses of wheat but wheat varieties differ in their suitability for various end-uses at different levels of protein.

Proposal
A preliminary proposal of the Australian Wheat Board is to introduce a graduated scale of payment for protein content in Australian Standard White (ASW) wheat, with premiums applying to levels above 10.5 per cent protein and discounts to levels below. An amount of $3 per tonne per 1 per cent protein would apply over the range 9.5 to 11.5 per cent protein, and $2 per tonne per 1 per cent protein above and below this range. The initial emphasis is on protein content because of the availability of near-infrared reflectance analysers to rapidly and accurately measure protein content, and the increased specification for higher protein content by some major markets.

The proposal has led to several comments and queries by industry observers.

It has been suggested that if a sliding scale of payment were to be introduced for protein level in individual loads of ASW wheat, then similar scales should be considered for other readily quantifiable measures such as hectolitre weight, moisture content and level of unmillable material. The Australian Wheat Board is considering these additional criteria.

The need to consider wheat variety and protein level together in relation to end-use is of particular relevance to Western Australia. Although high protein levels are required by many markets which buy Australian Standard White (A.S.W.) wheat, medium protein levels (about 10.0 to 10.5 per cent) are preferred for one important end-use of Western Australian wheat—white, Japanese-type noodles. Additional requirements for this market are a softer grain type, intermediate dough strength, moderately low levels of yellow pigment in the flour and high starch paste viscosity. One solution may be to carry out a special segregation for this market, based on the varieties Eradu and Gamenya and to a lesser extent Halberd (which meets the market requirements in all respects except grain hardness) and this is being considered.

Another principle for consideration is that the price differential for wheat protein level should be realistically set to reflect true market value. At price differentials initially indicated ($2 to $3 per 1 cent protein) it would appear, in most cases, to be uneconomical to change farming practices to obtain higher payments for protein. If the price differential is set too high, growers might be encouraged to adopt practices which cost more than the increase in the value of the wheat they produce.