WHAT IS WHEAT QUALITY?

Wheat quality can mean different things to different people, but it makes most sense to think about it as the quality of wheat required to make high quality end products.

Growers may be looking for high yields of attractive looking, well-filled grains, for the best price.

Millers think in terms of wheat that yields the maximum amount of white flour per tonne of grain, since flour commands a higher price than by-products such as bran and pollard. Millers also have to meet the flour specifications demanded by their customers, such as the required protein content, dough strength, water absorption, mixing properties and falling number.

Cereal Processors, the millers’ customers, manufacture products such as cakes, biscuits, bread, pasta, noodles, flatbreads or quality animal feeds. Different properties are required, depending on the product.

Because the end-use determines the quality required, wheat totally unsuitable for one application may have excellent quality for another. For example, wheat with excellent bread-making quality would be regarded as having extremely poor cake-making potential.

The quality required for different end products is described more fully in Quality Wheat CRC’s 2 day Quality Wheat for Quality Products and Quality Wheat - Meeting Market Requirements courses held at regional centres. For details on courses held in centres such as Wagga, Horsham, Toowoomba, Adelaide and Narrabri, contact Michael Southan on ph. 02 98889600. For courses held in Northam, contact Jennifer Casson, ph. 08 9574 0044.
WHAT IS AUSTRALIAN WHEAT USED FOR?

Bread Wheats are classified as hard or soft according to their grain hardness as measured by chewing (not recommended), by their resistance to abrasion or crushing, or by the time taken to grind a fixed weight of grain. At country silos, there are further categories (grades) according to the appearance, variety, screenings, protein content and falling number.

Hard Wheats are used for bread production. These wheats are low in yellow pigment, and for bread-making, should have grain protein levels greater than 11.5%. Varieties giving particular combinations of dough strength and mixing times are favoured by bakers. Other major products of hard wheats include most forms of Asian noodles and flat breads, as well as manufactured starch and gluten. There are few markets available for hard wheats with grain protein below 10%.

Soft Wheats, with a low protein content, are used for cakes, sweet biscuits and pastries. For cracker biscuits, hard wheat flours with a higher protein level are used. The soft flour market is much smaller than the market for hard wheat flours.

Durum Wheats are used for making Italian style pasta products such as spaghetti, macaroni, etc. These wheats are very hard, and are botanically different from bread wheats - they have a different number of chromosomes. For pasta production, durum varieties with high levels of protein and yellow pigment are favoured. The grain is milled to a much coarser texture than for bread and cake manufacture, producing semolina.

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