

GRAINS AIN'T GRAINS

We would like to give you some insight into grain qualities and the different standards that exist. The harvest this year has probably produced one of the largest variations in grain qualities we have seen for many years. You have probably had this discussion with your nutritionist many times, but grains ain't grains.....

All grains are graded according to their potential end use - wheat into milling/flour and feed grades, barley into malting and feed grades. This year saw some of the southern harvest this year "downgraded" from premium quality to feed grade, as the quality traits that are measured did not meet the standard set for human consumption/use. There are also variety restrictions for some categories, relative to the grain's end use.



Traits that are measured include:



Density—Measures the weight of the grain, in kilograms per hectoliter. This measurement gives you an indication of the bulkiness of a grain.

Protein—Minimum and maximum levels are particularly important milling and malting qualities, give an indication of crude protein levels.

Screenings—Measures the proportion of grains under-sized. A sieve is used to collect all grains smaller than the standard acceptable size.

Moisture Content—Indicates the level of moisture of the grain.

Foreign Seeds & Weed Seeds— Contamination is measured, to indicate the purity of the sample.



As you can imagine, grains used for stock do not have as stringent criteria as those used for producing flour. Feed grade cereals typically has a lower "test weight" and a lower potential feed value than milling and malting grades and a therefore attract a lower monetary cost. However, it is still important to use grains of the highest feed value, to ensure value for money and performance from the product. If you buy whole grain, do ensure that you are getting what you are buying. While overall prices may vary from year to year, the relative difference between grades of a grain does not change as much. If a particular source of grain is markedly cheaper than all other sources, there is more than likely a quality difference between the two grains. This statement unfortunately applies to all feedstuffs, there are a lot of 'cheap' alternative feeds being peddled out there at the moment. You should expect a poorer feeding outcome from them.

Other criteria used to measure grains that every buyer should be aware of are:

Pest & Disease— There are many contaminants that can greatly reduce the quality and storage ability of a grain. For example *weevils* are a common insect pest and *black field fungi* and *smut* are contaminants to look out for.

Shot & Sprung Grains— Have been rained on while still on the plant, before being headed. While losses initially can be as low as 6%, this moisture will cause the grain to germinate and begin to grow, as it would in the soil. Not only can this result in reduced quality as growth uses up starch (energy) reserves in the grain, but it can lead to mycotoxin contamination and flow issues for the affected grains.

Trash & Other Material— Refers to chaff and other 'non grain' material, as well as any soil or sand present.