Get the best bang for buck from your fertiliser dollar

Fertiliser is one of the biggest costs that farmers face on an annual basis. What information do you use to make the decision of how much fertiliser to apply, the type and timing of application? There are some simple principles that everyone should be doing to ensure their fertiliser dollar is being optimized.

Without going into the different fertiliser products that are out there, there are several things farmers can do make sure that the decision about types and rates of fertiliser is best suited to their farm situation.

Firstly, how much nutrient is coming off the land as product? Secondly, how much nutrient is available in the soil to grow your product? Provided you start at optimum nutrient levels, the application of nutrients needed is simply the difference: maintenance dressings (assuming none is lost through sediment transfer, erosion, leaching etc). If soil nutrient levels are well above optimum levels, then you can well afford to cut back on your fertiliser dollar. If your nutrient levels are well below optimum levels then you need to apply extra in the form of a capital dressing plus your maintenance requirements otherwise your current farming practice is unsustainable.

Nutrients present in the soil can easily be determined by soil tests. Most fertiliser companies will happily do these for you. Soil testing should be a science rather than an art, and since you are the person paying for these tests, you need to ensure that the tests are fact not fiction.

It is critical that the samples for each transect comes from the same soil type. All soil types behave differently. We have seen results from samples that came from a combination of ash and sedimentary soils. An ash soil has a high phosphate retention, whilst the sedimentary soil has a low phosphate retention – the combined sample results are meaningless. If you don't know the soil types on your property, get out there and dig some holes or get someone to map it for you. If you don't know this information you can not make an informed decision on the most appropriate fertiliser policy for your farm.

Established permanent sampling transects (lines) over the major soil types on the farm is a big step to reducing the variability of soil test results. Many fertiliser reps do this, but do you as the landowner know where these transects are and are you 100% confident that the same transects are being tested each time?

Often it is not the actual numbers shown in the soil test results that are meaningful, but the trends over time. Permanent sampling transects give you the ability to look at trends over the years (and many fertiliser reps later).

Soil sampling should be undertaken at the same time of the year, in similar conditions, every one or two years. Often it may be wise to delay sampling to as close to fertiliser application as possible, so you get a better picture of the current nutrient status of the soil.

It is simply good farming practice to do a nutrient budget for your property. This is the difference between what comes off the land, and what is either applied or is in the soil. Most fertiliser reps will do this for you but you need to understand what the results mean. The more accurate the information you can provide in regards to stocking rates and polices and the different soil test results, the more effective decision making tool the nutrient budget will be. Furthermore, many councils are now requiring farmers to have nutrient management plans or budgets.

Once you have reliable soil test results and have determined how much of each nutrient you need for optimum production from your nutrient budget, you are now in a position to consider the different types of fertiliser. To get the best bang for bucks, you need to compare apples with apples. To do this, determine the cost per kg of nutrient (for example N, P, K or S) for the various products out there. Remember, your budget tells you how much you need for maintenance, so don't spend money on nutrients you aren't utilizing.

Fertiliser is your biggest cost and it is imperative you maximize your fertiliser dollar with the right information.