

Trial Results

Alroc has proven beneficial, over the last 5 years, in a variety of situations from broad acre crops to orchards, vineyards, pastures, lucerne, turf, vegetables, and even natives. Farmers see the benefits of Alroc in the long-term improvement of their soil structure, and increased productivity, without negative affects on the environment.

Farmers trialling Alroc for the first time often ask where their crop is going to get its nitrogen. They are surprised to discover the increase in nitrogen levels in leaf tissue samples, compared to the conventionally fertilised control crop. This is expressed in higher than normal protein levels in the finished crop. There are a couple of explanations for this;- the associated trace elements found in Alroc will optimise the up-take of nitrogen. The Alroc will increase microbial activity, which in turn fixes more nitrogen into the humus. The extensive feeder root system developed by plants which are not chemically fed, has greater access to the available nutrients, including nitrogen.

Alroc is used extensively by cereal farmers, who report an increase in protein in almost every harvest. Vineyards report increased nitrogen in petiole analyses and increased sugar content in the fruit. (see case study). Legumes respond well to Alroc minerals. Growers comment on the strong root systems, increased nodulation and good growth. Peanut crops, report less fungal problems and increased production.

Dairy farms report an increase in milk production and the health of their cows. Alroc remineralisation programs undertaken with pastures produce an increase in root development, better germination, healthier greener paddocks which persist longer in dry times. It is interesting to see that animals choose to graze the nutrient-filled pastures fertilised with Alroc, before the conventionally fertilised sections of their paddocks. There is a big increase in farmers feeding their animals Alroc minerals mixed with grain, molasses or in lick blocks.

What of the benefits for home gardeners interested in their lawn, vegetables, fruit trees, or roses? You can expect that your plants will be healthier, with bigger blooms, producing nutrient-rich, tasty fruit, with a longer shelf-life. Your healthy garden will be better able to withstand pest and disease organism infestations. The increase in root

development means the plants will cope with dry periods better. Alroc will also neutralise your acidic soil.

"Acidic soils cover nearly one third of the N.S.W. coast and cost \$2 Billion in lost farm production every year." - Weekend Australian 8/7/95.

Acidic soils are common in all states of Australia and are a major concern for farmers, the environment, and our health. Highly acidic soils produce crops with underdeveloped root systems, low mineral content and yields below full potential. Stock grazing on acidic pasture are generally unhealthy due to nutrients being locked-up by the acid conditions. Aluminium toxicity is also a major problem.

Acidic soils occur naturally, but conventional farming techniques and acid forming fertilisers compound the problem. Traditionally, lime is applied at heavy rates to counteract the acidity. Lime is predominantly calcium which is a very important mineral for good farm productivity, but it can cause an imbalance. Farmers are discovering that Alroc neutralises the acidity more efficiently because it contains a broad spectrum of minerals to compliment its limestone/ dolomite component. Unlike lime, Alroc is granulated and can be spread by the farmer himself without the need for a contractor with a belt spreader. Alroc can even be applied by aircraft.

True farm budgeting should account for future restoration costs for the rural ecology. Alroc is a cheap alternative farm input that works. It is cost effective both in the short and long term, because it saves on repairs to the rural ecosystem in the future. Soil degradation is eliminated if Alroc and other sound sustainable farming practices (green-manure crops, minimal tillage methods and crop rotations), are utilised.