

Mt Garnet: Lot 1 Battle Creek, Mt Garnet Qld 4872

Charters Towers: Lot 6 Flinders Hwy, Charters Towers Qld 4820

Ph 07 4787 7007 **Fax** 07 4787 7008

Roma: Lot 2 Kimbler Road, Roma Qld 4455

www.stocklicktrading.com.au

Stocklick Trading Pty Ltd abn 57 091 727 230

Wet Season Phosphorus Supplementation

Why feed Phosphorus?

Many areas of Northern Australia are phosphorus deficient and the consequential effect is phosphorus deficiency of cattle grazing these pastures. Phosphorus is found in all animal tissue and fluid, where it is required to convert feed into energy, and is crucial for skeletal growth, developing foetus' and milk production.

A number of trials over many years have proven the importance of phosphorus to animal production by showing that inadequate phosphorus reduces growth and fertility and increases breeder deaths. Consequently, several studies across Northern Australia where phosphorus supplements were fed to phosphorus deficient cattle during the wet season showed production increases in, live weight gains by up to 70 kilograms, calving/weaning rates by 15-20 per cent and weaning weights by 10-20 per cent, and a decrease in breeder deaths. Furthermore, phosphorus deficient cattle have a depraved appetite which leads to bone chewing, predisposing the herd to costly Botulism outbreaks.

Why the need to supplement during the wet season?

An animal's phosphorus requirements are related to the animal's intake of protein and energy. Wet season pastures provide high levels of energy and protein allowing for high growth and production. To achieve this level of high growth and production the higher levels of energy and protein need to be matched with higher intakes of phosphorus. Compared to slow growth in the dry season due to lower energy and protein levels, phosphorus demands are low. This is why the largest animal responses and greatest cost effectiveness for phosphorus supplements are during the wet season and hence, the necessity of phosphorus supplements in phosphorus deficient areas during the wet season.

What is the best source of Phosphorous to feed Cattle?

Almost all phosphorous content in loose licks is derived from imported "Mono Dicalcium Phosphate" (MDCP) of various brand names and from various parts of the world. All the common MDCP products used in Australia contain the most readily available phosphorous (Bioavailability) and are considered the safest and most cost effective source of phosphorous for cattle. Despite conjecture, recent Australian University research had concluded that there is "no statistical difference" in solubility of the various forms of MDCP and test results between brands were "Biologically Insignificant". Rock phosphate, super-phosphate and other fertilizer grade phosphorous products are not recommended for cattle consumption.

Wet Season Phosphorus Supplement Economics

Economic returns of feeding phosphorus supplements during the wet season are strongly supported by extensive research and beef producer experience across Northern Australia. Even in 2008 when phosphorus prices were at their highest (with MDCP/Kynofos peaking over \$2000/tonne), an economic analysis on wet season phosphorus supplementation showed that there was still a 3 to 8 times return for money spent on supplement. With phosphorus raw material costs back to approximately \$950-\$1000/tonne you can expect greater returns on your investment in wet season supplementation.

For example, a Stocklick Trading wet season phosphorus supplement containing approximately 10 per cent actual phosphorus costs approximately \$850/tonne ex manufacturer (Phosphorus Blocks approximately \$1250/tonne), and cattle are required to consume around 80 grams per head per day, which costs around 7 cents per head per day or \$7 - \$10 per animal for 4 to 5 month wet season.

In dry cattle, up to a 70kg liveweight bonus can result from an approximate \$10 investment in wet season phosphorus supplementation, and an even bigger bang for your buck with breeders in terms of live weight gain, conceptions and calving/weaning rates, all accumulating over time.

Stocklick Trading's Wet Season Supplements

Stocklick Trading manufacture quality custom blended loose mixes tailored to your individual needs. This is important to ensure your herd is receiving the correct amount of phosphorus, as too often wet season supplements are put out but the cattle don't consume enough to meet their phosphorus requirements. We recommend around 8 grams of Phosphorus per head per day (range 5 – 10grams/head/day). With the cost of supplementation it is critical to get these daily intakes correct to ensure maximum cost effectiveness. This is Stocklick Trading's advantage with custom blended mixes.

Speak to one of Stocklick Trading's Sales Representatives to discuss a customised wet season supplement suitable for your needs and management program