

Agronomy Services Manager Chris Howard discusses how choosing the right Enhanced Efficiency Fertiliser can assist in maintaining your soil health

Recent focus in Australian cane growing regions has shifted from solely focusing on production, to a more holistic approach which takes into consideration the link between production and soil and water health. The key contributing factors to soil and water health include soil microbial health, soil organic matter and the level of macronutrients such as nitrogen.

The major challenge for canegrowers when considering microbial health is how to ensure the correct matching of nutrients to the growth cycle of cane. Traditional methods involve providing large levels of nitrogen to the plant, ensuring the plant can recover it when needed to maximise yield. This can however lead to oversupply at times and subsequent denitrification and leaching costing money in reduced efficiency. The use of Enhanced Efficiency Fertiliser (EEF) can assist with the management of supply of nutrients to crops when needed and reduce this oversupply.

Some EEF's, do this at the cost of killing the nitrogen converting bacteria to slow down the conversion to become available when needed. Some forms of EEF however, do not perform the task in this way.

N Protect, an EEF marketed by Impact Fertiliser has a main active ingredient Dicyandiamide (DCD) that will not kill N fixing bacteria, but instead put the bacteria to sleep to stop conversion thus benefiting soil microbial health. (Zacherl, B. & Amberger, A Fertiliser Research 1990). Commonly called a bacteriostatic inhibitor, it is nontoxic to nitrogen fixing bacteria and has been shown to have a negligible effect on other soil bacteria as well, thus maximising yield while at the same time maintaining soil microbial health.