

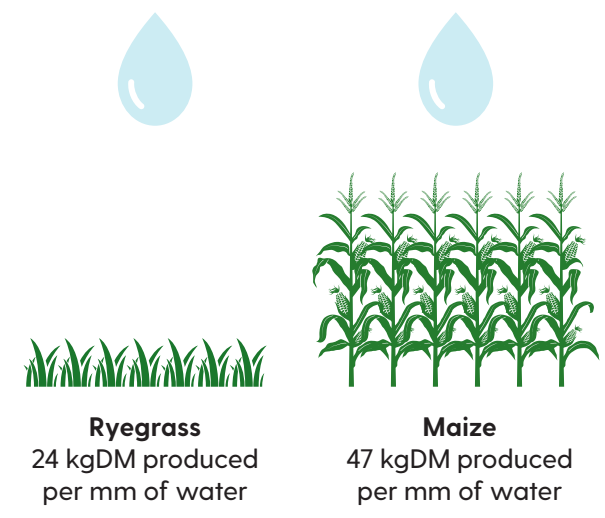


The proven environmental benefits of maize silage make it the crop for the future. Whether it is using water efficiently, diluting urinary nitrogen or making the most of dairy shed effluent, growing and feeding maize silage is a winner.

More drymatter from every drop

The maize plant produces more drymatter from every drop of water it receives. Its extensive rooting system allows it to capture water at depths up to three times greater than perennial ryegrass⁶.

Figure 6: Ryegrass vs maize water use efficiency⁶



Mine excess soil nutrients

Dairy-shed effluent paddocks lose more nitrogen to groundwater than most other paddocks on your farm. Maize is the perfect solution. Because maize silage grows a large amount of drymatter, it also requires a large

amount of nutrients especially nitrogen and potassium. The good news is that the nutrient requirement of a maize silage crop very closely matches the nutrients supplied by typical dairy-shed effluent.

Table 3: Maize silage nutrient removal rates and the nutrient composition of typical dairy shed effluent

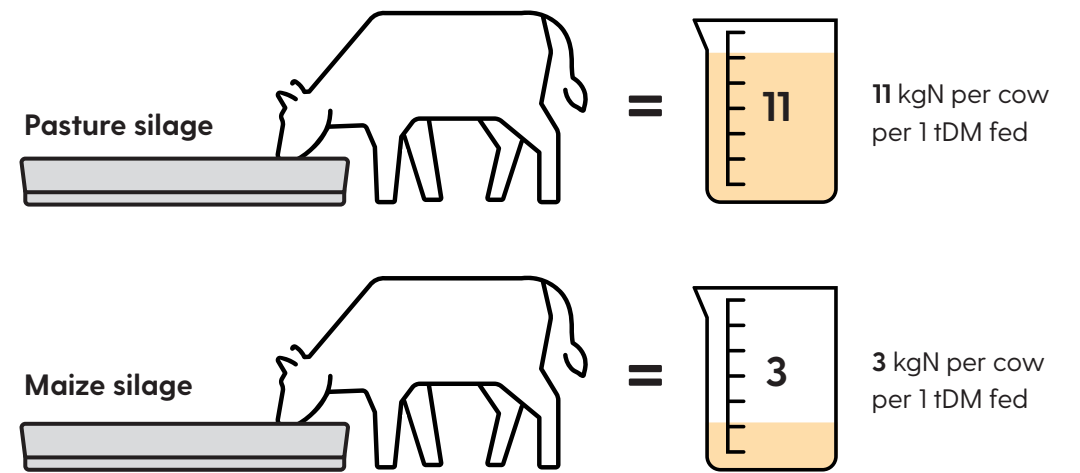
	Nitrogen (N)	Phosphorus (P)	Potassium (K)
Typical Dairy Shed Effluent (kg/m ³) ⁷	0.45	0.06	0.35
Maize Silage Crop Removal (kg/tDM) ⁸	12.8	2.6	12.0

Dilute urinary nitrogen

For most of the year the protein content of pasture is higher than cow requirements. Surplus dietary protein is excreted in the urine and is a major source of nitrogen in waterways. Maize

silage contains excellent levels of carbohydrate in the form of starch, but low levels of protein. It can be used to decrease the amount of nitrogen in cow urine by more than 70%⁹.

Figure 7: Urinary nitrogen output of cows eating high protein pasture silage vs maize silage⁹



Keep animals off pasture

One of the most effective ways for dairy farmers to decrease nitrogen leaching is to stand animals off pasture especially during the winter months when pasture nitrogen demand is low and rainfall is high. A stack

of maize silage and a stand-off pad with feeding facilities, you can look after your cows while also protecting the environment. Pasture pugging and overgrazing can be eliminated so you will also grow more grass in the long run.



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