

The combined value of these integral nutrients is around

**£100.00 per hectare**

inclusive of the saving of application

# CLUBROOT

all brassica crops are at risk from clubroot

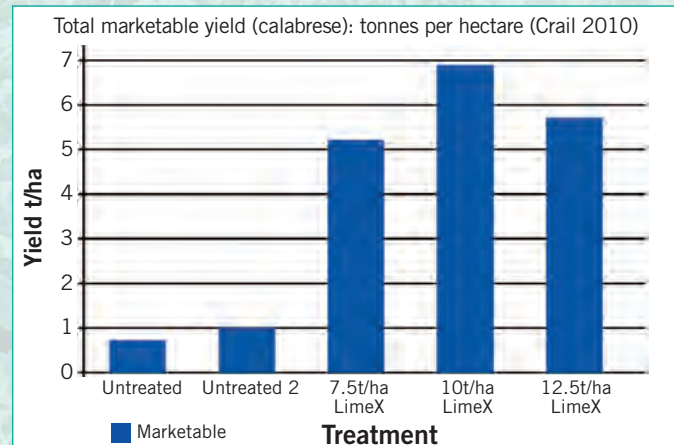
Clubroot is caused by a minute resting spore, *Plasmodiophora brassicae* that can lay dormant for at least two decades before striking at a valuable crop.

In badly infested land entire crops can be devastated, but even with more patchy infection the disease causes uneven maturity, low yields and poor quality. In many cases the affected crop is simply not worth harvesting.

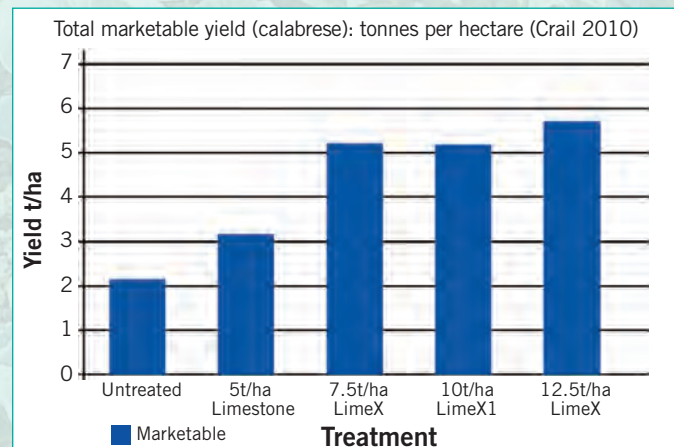
Pre-planting, incorporated LimeX offers unrivalled suppression of clubroot in brassicas.

The fineness of LimeX is essential to raise the pH above 7.2, and to increase available calcium.

LimeX delivers readily available  $\text{Ca}^{2+}$  ions and raises pH rapidly to inhibit resting spore germination; significantly reducing club development and inoculum level.



1 Trial results illustrating yield effect from LimeX compared to two controls without LimeX (Crail 2009, courtesy of Dr. Roy Kennedy).



2 Trial results illustrating yield effect from LimeX compared to a control without LimeX and a local limestone alternative (Crail 2009, courtesy of Dr. Roy Kennedy).

## Phosphate ( $\text{P}_2\text{O}_5$ )

- Minimum of 10kg in every tonne of LimeX70
- At an application rate of 10 tonne/hectare (4t/acre) this equates to 100kg/hectare of  $\text{P}_2\text{O}_5$  worth £60.00
- This is sufficient maintenance phosphate for field brassicas at P Index 2

## Magnesium ( $\text{MgO}$ )

- Minimum of 7kg in every tonne of LimeX70
- At an application rate of 10 tonne/hectare (4t/acre) this equates to 70kg/hectare of  $\text{MgO}$  worth £25.00
- Apply 100kg/hectare  $\text{MgO}$  for field brassicas at Mg Index 1

## Sulphate ( $\text{SO}_3$ )

- Minimum of 6kg in every tonne of LimeX70
- At an application rate of 10 tonnes/hectare (4t/acre) this equates to 60kg/hectare of  $\text{SO}_3$  worth £7.00
- This is a valuable contribution and will significantly reduce the risk of  $\text{SO}_3$  deficiency
- Add 50-70kg/hectare of  $\text{SO}_3$  where sulphate content of soil is low at, or soon after, planting