



Nickerson (UK) Ltd,  
Rothwell, Market Rasen, Lincolnshire, LN7 6DT  
Tel: 01472 371471 Fax: 01472 371386

Whilst every care is taken to produce reliable and accurate guidelines,  
no liability can be accepted for any use made of this information.

# MULTIMAX



Web Site: [www.nickerson.co.uk](http://www.nickerson.co.uk)  
E-mail: [enquiries@nickerson.co.uk](mailto:enquiries@nickerson.co.uk)



## THE ROLE OF POTASSIUM

- Increases root growth and improves drought resistance
- Maintains turgor, reduces water loss and wilting
- Aids in photosynthesis and food formation
- Enhances translocation of sugars & starch particularly during grain fill
- Produces grain rich in starch
- Increased protein content in plants
- Builds cellulose and reduces lodging
- Activates many enzyme systems
- Maximises N usage
- Reduces disease susceptibility



MULTIMAX TREATED

CONTROL

## THE ROLE OF PHOSPHORUS

- Key role in crop maturation
- Very important in water relations along with Potassium, improved drought resistance
- Major role in energy relations and photosynthesis and therefore is vital at key growth stages
- Can increase the plants cold tolerance
- Involved with the overall health of the crop and resistance to environmental pressure. This gives improved plant nutrient health.
- Vital to maximise rooting
- Increased grain sites
- Improved rooting maximises nutrient uptake

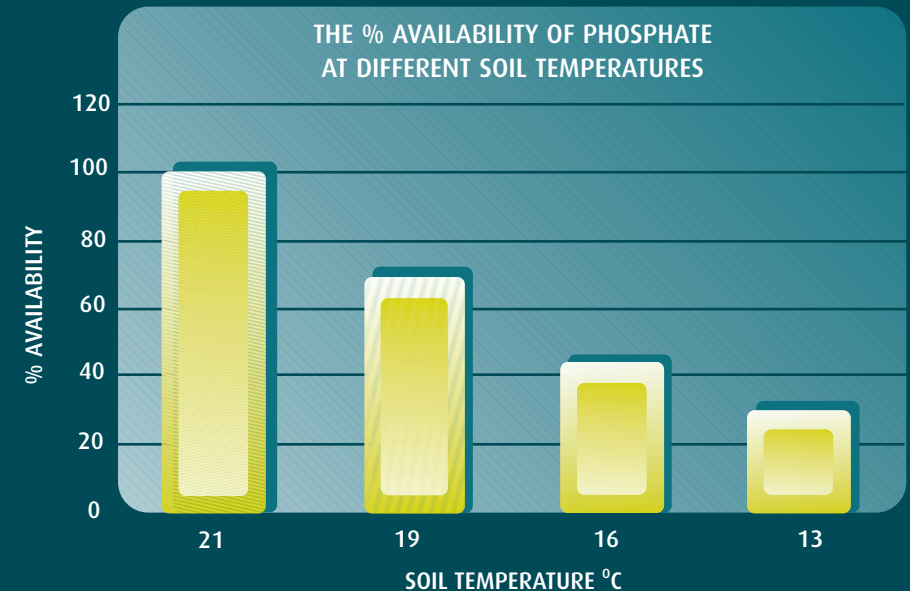
## NUTRIENT AVAILABILITY

There are many limitations to root and foliar uptake of both phosphate and potash

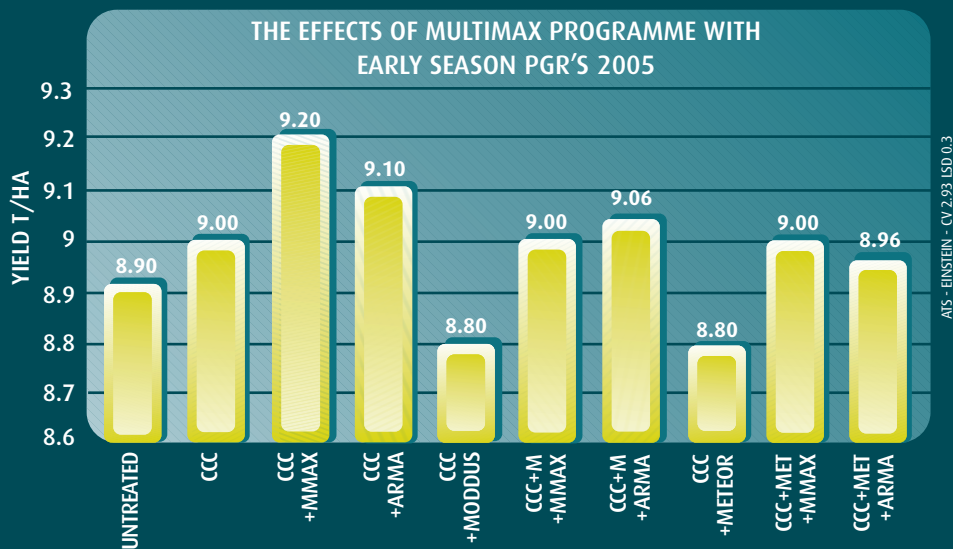
- Soil temperature
- Low soil oxygen levels e.g. increased water holding in the soil
- Low soil organic matter
- Soil texture and pH
- Other nutrient interactions
- Limited root volumes of major arable crops

## CEREAL BENEFITS

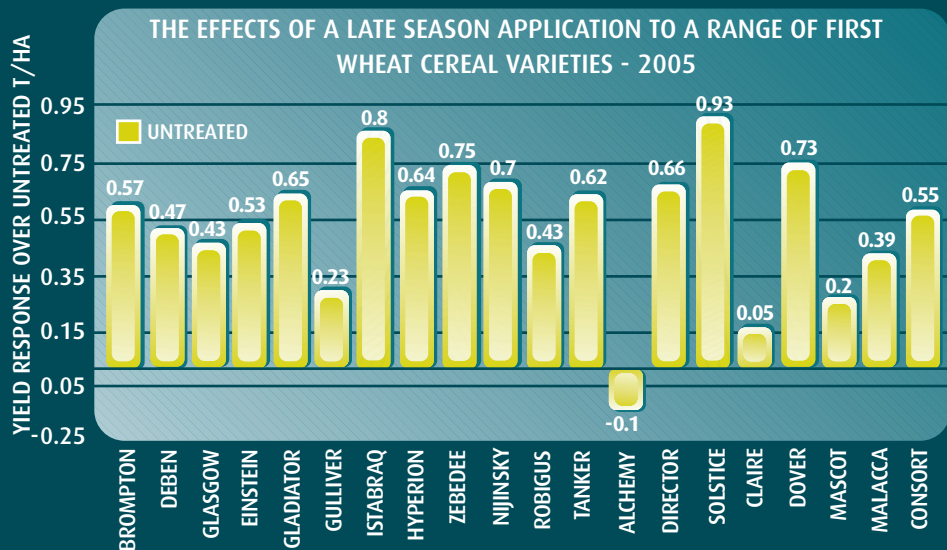
- Increased emergence
- Improved establishment
- Increased root biomass
- Increased overwintering
- Improved PGR effects
- Increased number of grain sites
- Increased yield
- Improved quality – baking and malting
- Enhanced disease tolerance – take-all, eyespot, sharp eyespot, rust
- Increased resistance to lodging



EARLY SEASON PGR WORK



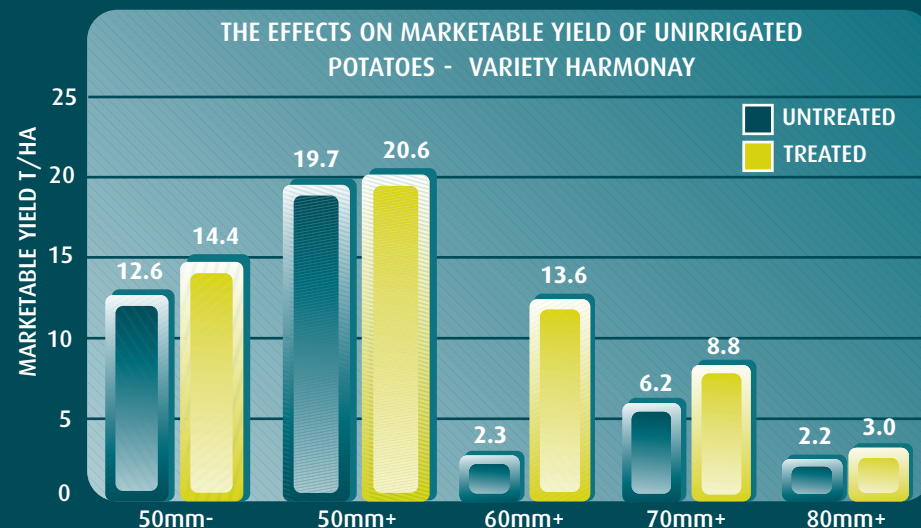
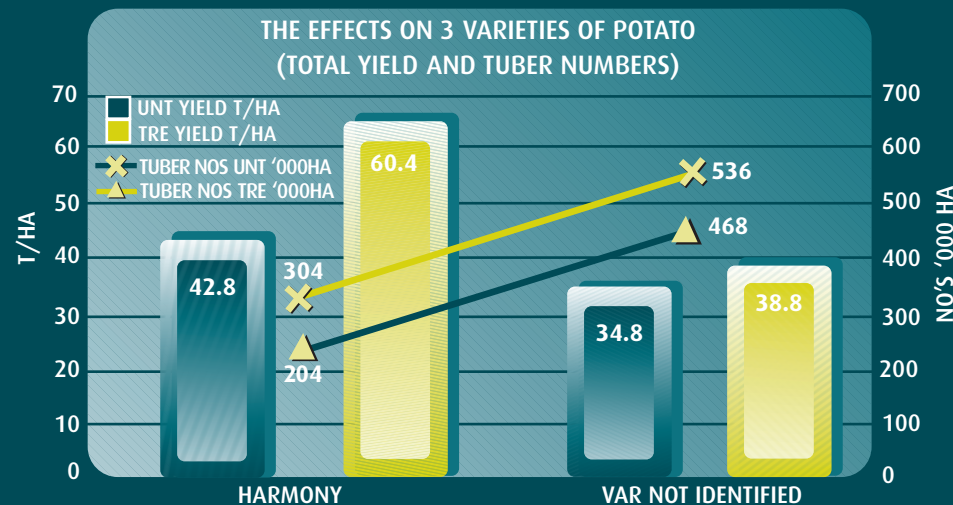
FIRST WHEAT LATE SEASON OPPORTUNITIES 2005



MULTIMAX

POTATOES

The potato crop has a high demand for phosphate especially at periods of rapid growth and tuber development. Foliar applied Multimax has resulted in measurable increases in both total yield and marketable yield.



MULTIMAX

Early nutrition is important because of the chemical nature of P in the soil. Being immobile, it does not easily move to the root.

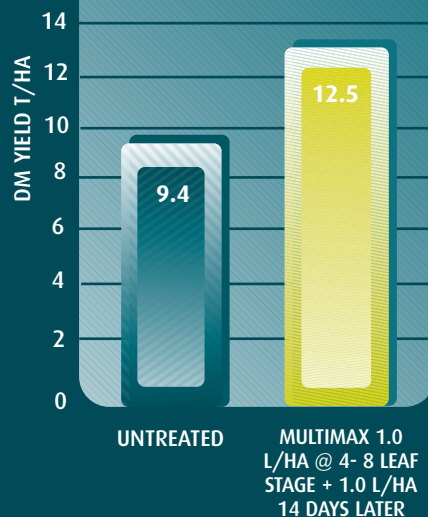


TREATED

UNTREATED

- Roots must grow to where the P is, since P is nearly immobile in most soils.
- Seedlings and young plants provided with high P develop higher attainable yield potential.
- Uptake of P continues through the season.
- Applied P during the early phases of growth often boosts yield.
- P fertility management is key to profitability and efficient use of nitrogen.
- The traditional purpling symptom does not always show, and not all purpling is due to P deficiency. Cold weather conditions, and certain corn hybrids, can induce the purple colour.
- Zinc deficiency can impair P regulation and high soil P or high amounts of applied soil P can induce Zn deficiency especially if soil Zn levels are low.

### THE EFFECTS OF A MULTIMAX PROGRAMME ON MAIZE AVERAGE 4 TRIALS



### CEREALS

Applications can be made to stressed crops to maximise root function and nutrient utilisation.

0.5 L/ha	GS 12-16 to aid establishment
0.5 L/ha	GS 30-32 with PGR programme to enhance root function, aid PGR performance, minimise take-all impacts and maximise yield
0.5 L/ha	GS 37-39 to enhance yield
0.5 L/ha	GS 59 to enhance yield and quality

### POTATOES

Increased tuber number and marketable yield:

1 L/ha	2-3 leaf stage
2 L/ha	tuber initiation

Increased marketable yield:

2 L/ha	tuber initiation
1 L/ha	2 weeks later

### MAIZE

1-2 L/ha	4-8 leaf stage, repeat 14 days later if required
----------	--

### GRASSLAND

0.5 – 1 L/ha	2-4 leaf stage
0.5 – 1 L/ha	when grass commences spring growth

### OILSEED RAPE

1 – 2 L/ha	2-3 leaf stage
1 – 2 L/ha	at stem extension

### SUGAR BEET

2 L/ha	4-6 true leaf stage
1 L/ha	6-8 true leaf stage