

# NUTRIENTS LOCKED UP?

WE HAVE THE KEY



AVAIL® PHOSPHORUS FERTILISER ENHANCER



# AVAIL HAS BEEN CALLED THE MOST IMPORTANT FERTILISER ADVANCE IN 30 YEARS.

AND DOZENS OF FIELD TRIALS AGREE.  
AVAIL MAKES YOUR FERTILISER WORK  
HARDER FOR YOU.



## YOU INVEST A LOT OF TIME AND MONEY TO PROVIDE YOUR CROPS WITH THE NUTRIENTS THEY NEED TO DELIVER THE YIELDS YOU WANT. BUT IN THE CASE OF PHOSPHORUS, UP TO 95% OF IT MAY NEVER REACH YOUR CROP.

Research has shown 75-95% of phosphorus fertiliser is locked up, or fixed, in the soil. And if it's fixed, it's not helping your crop. Having enough phosphorus available to your crop is especially important now, with reduced use rates becoming more common.

That's why SFP created AVAIL® Phosphorus Fertiliser Enhancer. Using patented technology, AVAIL gets plants more of what they need, especially early in the growth cycle.

### A WINNING COMBINATION

You can apply AVAIL to any phosphorus fertiliser. It is water soluble and leaves no environmental footprint. Best of all, AVAIL lasts throughout the growing season.

AVAIL has been shown to work in any crop, in any soil type. So unlock your crop's potential with AVAIL - and get more of what you want at harvest.



- Inhibits fixation of phosphate fertiliser, promoting availability of phosphorus
- Works in any crop, any soil, any climate
- Potential yield increase of 5-15% vs. fertiliser alone
- Outstanding return on investment potential

# HOW AVAIL WORKS



**WHILE THE SCIENCE BEHIND AVAIL MAY BE COMPLEX, THE IDEA IS SIMPLE.**

Certain natural processes in the soil interfere with phosphate's ability to be available to the plant. By minimising the adverse effect of these elements on phosphorus fertiliser at the microenvironment level, AVAIL increases the potential for more phosphorus to be available to the plant's root system.

Simply put, AVAIL means more phosphate for your crops and more yield potential for you.

**ANY CROP, ANY SOIL, ANY CLIMATE**

With phosphate fertiliser alone, calcium, iron, magnesium and aluminium ions fix phosphorus in the soil.

AVAIL, based on exclusive SFP technology, surrounds phosphorus in a water-soluble "shield". By blocking other elements, AVAIL helps keep phosphorus more available to your crops.

## CONVENTIONAL

With fertiliser alone, calcium, iron, magnesium and aluminium ions fix phosphorus in the soil, keeping it tied up and making it unavailable to the plant.

## AVAIL SCIENCE

AVAIL technology surrounds phosphorus in a water-soluble "shield". This shield expands to block the elements that tie up phosphorus in the soil.



Negative Phosphorus  
(negative charge)

The diagram shows a central purple circle representing a negative phosphorus ion. It is surrounded by a cluster of white spheres with '+' signs, representing cations like calcium, iron, magnesium, and aluminium. These cations are attracted to the phosphorus ion, forming a stable, insoluble complex in the soil. The soil is depicted with grey roots and several purple phosphorus ions that are not bound to cations, representing the small amount of available phosphorus.



Negative Phosphorus  
(negative charge)

The diagram shows a central purple circle representing a negative phosphorus ion. It is surrounded by a yellow ring, representing the AVAIL technology's water-soluble "shield". This shield expands to block the elements that tie up phosphorus in the soil. The soil is depicted with grey roots and several purple phosphorus ions, each surrounded by a yellow shield, representing the AVAIL technology's water-soluble "shield". This shield expands to block the elements that tie up phosphorus in the soil.

# THE AVAIL DIFFERENCE

IN STUDY AFTER STUDY, AVAIL HAS BEEN SHOWN TO REDUCE PHOSPHATE FIXATION AND BOOST POTENTIAL YIELDS BY 5-15%

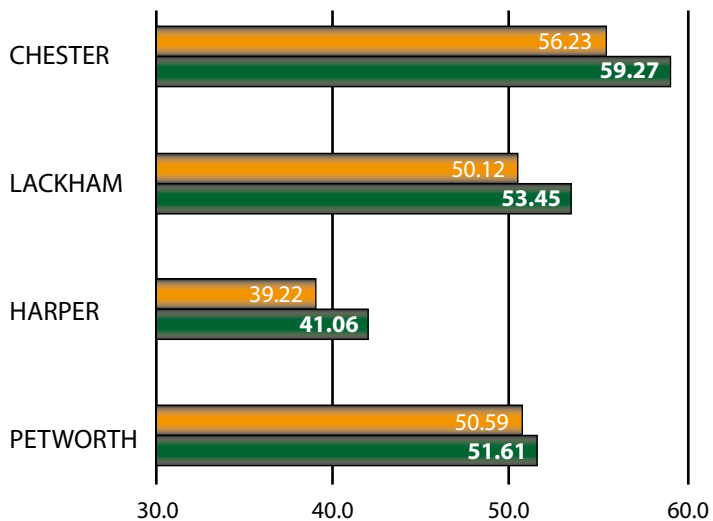
Trials carried out by Harper Adams at four separate sites showed significant yield responses to the use of AVAIL. The results below show how a lower rate of phosphate treated with AVAIL outperformed the “standard” rate of untreated DAP (50kg per acre), yielding on average 2.3 tonnes/ha more.

## Maize Yields t/ha

2008 Harper Adams University College

		CHESTER	LACKHAM	HARPER	PETWORTH
FRESH YIELDS	Standard P and N	56.23	50.12	39.22	50.59
	<b>25kg P + AVAIL</b>	<b>59.27</b>	<b>53.45</b>	<b>41.06</b>	<b>51.61</b>
DRY YIELDS	Standard P and N	16.26	14.66	16.93	15.99
	<b>25kg P + AVAIL</b>	<b>16.55</b>	<b>15.30</b>	<b>17.67</b>	<b>17.00</b>

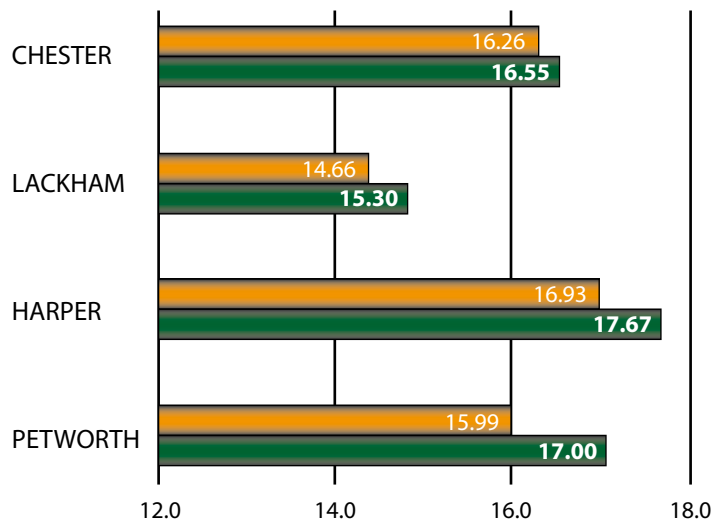
## AVAIL Maize Fresh Yield t/ha 2008 Harper Adams University College



YIELD t/ha

Standard P and N      25kg P + AVAIL

## AVAIL Maize Dry Yield t/ha 2008 Harper Adams University College



YIELD t/ha

Standard P and N      25kg P + AVAIL

# AVAIL<sup>®</sup> FOR PHOSPHATE FERTILISER



For further details please contact your local fertiliser stockist  
or Goulding Fertilisers on 021 4911611 / [www.gouldings.ie](http://www.gouldings.ie)

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