

Biostimulants

Foliar nutrients combined
with R100 biostimulant

Cearum is designed for use on cereals and contains a balanced ratio of manganese, copper and zinc, combined with the biostimulant R100.

R100 boosts nutrient uptake and increases cytokinin levels to stimulate growth. Manganese, zinc and copper are all required for early plant establishment, tiller production and maximising photosynthesis for the maintenance of healthy green leaves. They are also constituents of superoxide dismutase (SOD) enzymes, which are important in the detoxification of damaging free oxygen radicals formed under stress conditions. Copper is also required for ear fertility and grain set.

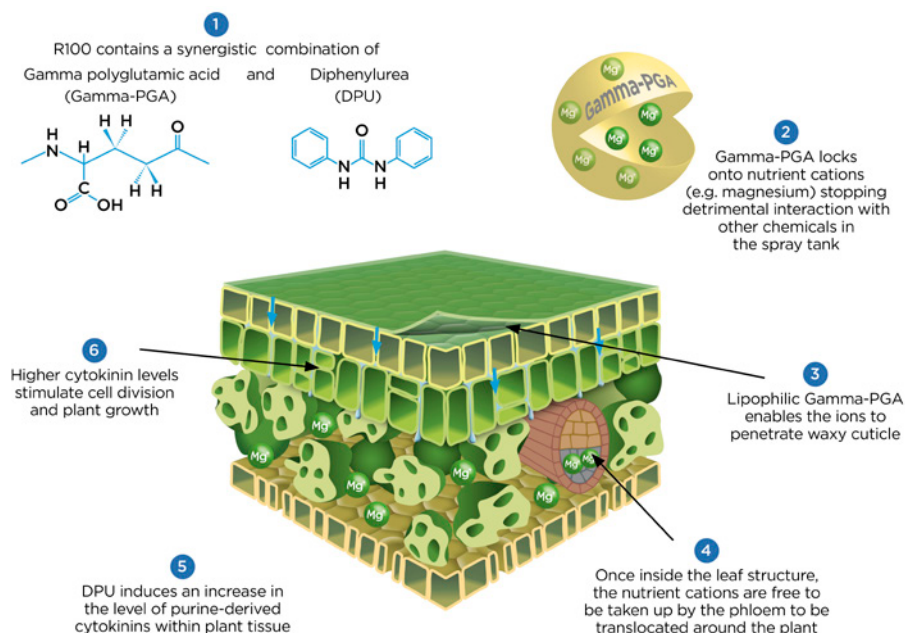
Analysis	% w/w	g/l
Sulphur trioxide	7.6% (3% S)	109
Copper sulphate	1.1%	15.7
Manganese sulphate/ Nitrate blend	9.6%	137.5
Zinc sulphate/ Nitrate blend	2.2%	31.5
Also formulated with 4.1% N and 0.2% MgO		
+ R100 biostimulant		
Pack size:	10 litres, 300 litres	
Dose rate:	0.85 – 2.0 l/ha	
Key Crops:	Cereals	

What is R100® and what does it do?

R100 biostimulant contains a patented combination of two disubstituted urea compounds (DPU) and gamma polyglutamic acid.

DPU boosts cytokinin levels in tissues with resulting increased cell division and growth.

Gamma-PGA binds to foliar applied cations to improve uptake.



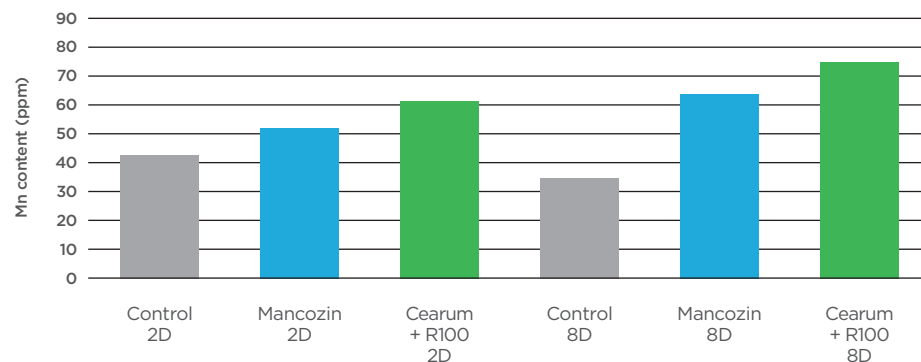
Agronomic guidelines:

- The manganese content is a mixture of fast uptake nitrate and more persistent sulphate forms
- Readily compatible with many plant protection products
- Add to the spray tank FIRST
- Do not mix Cearum with Mecoprop
- Do not apply in less than 100 l/ha spray volume (150/ha preferable).

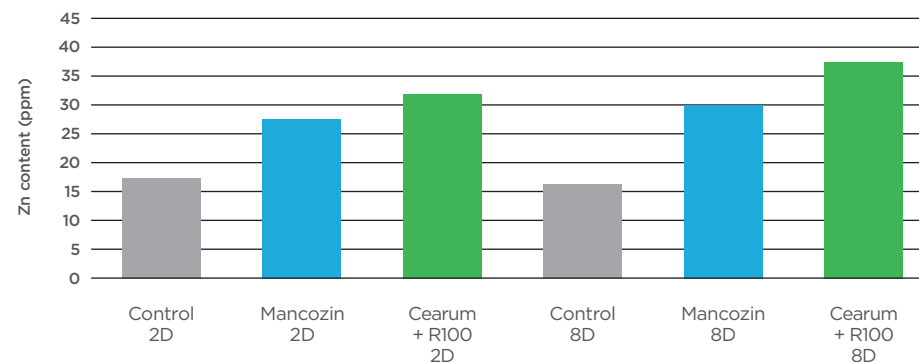
Trials results

The inclusion of R100 biostimulant to Cearum significantly increases the uptake of manganese, zinc and copper. Independent studies by the University of Nottingham on Concerto spring barley evaluated the performance of Mancozin and Cearum with R100 on plants deficient in manganese, zinc and copper. Results were taken two and eight days after treatment. *Source: Dr S Rossall, University of Nottingham March 2020*

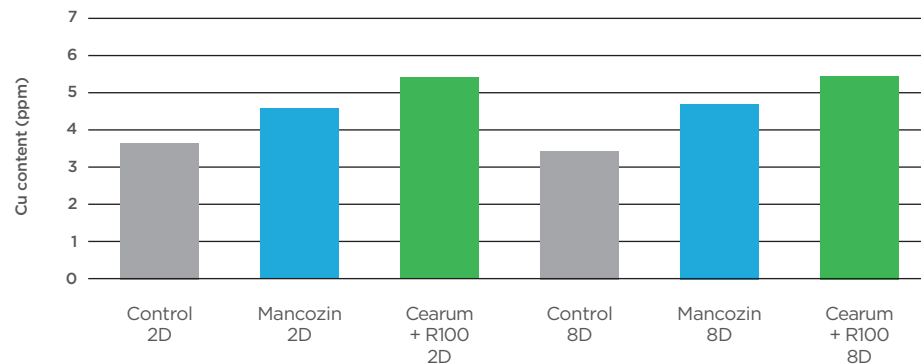
Manganese: R100 significantly increases Mn content



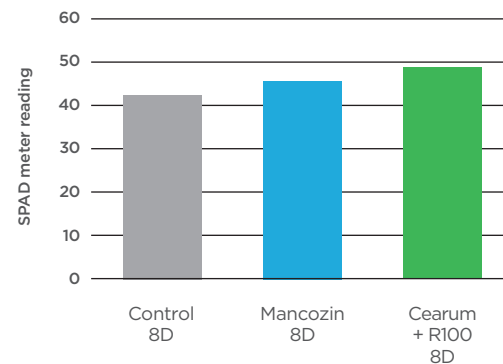
Zinc: R100 significantly increases Zn content



Copper: R100 significantly increases Cu content



Chlorophyll content assessed by SPAD meter



The inclusion of R100 resulted in a small but significant increase in chlorophyll content after 8 days in comparison with Mancozin.