

TECHNOTE

Designed as a nutritional complex that complements early in-crop foliar applications to promote plant health and productivity. Zinc (Zn) accelerates root and shoot growth, improving total photosynthate accumulation to allow plants to maximise their genetic potential.

TOPZinc Max is a unique phytostimulant that is suitable for application on all crops. Exhibiting a comprehensive formulation allows the product to perform without the addition of a pesticide additive. Ideally suited as a spray tank partner for post-emergent herbicides, such as Velocity® and Intervix®, the recommended application timing is during the early vegetative phase.



Figure 1: Visual canopy differences following an early-season Velocity® (670 mL/ha) application.

Table 1: Critical information for TOPZinc Max.

Product Type	Phytostimulant
Use Rate	500 mL/ha
Timing	Vegetative
Compatibility	All pesticides
Crop Suitability	All crops
Nutrient Composition (% w/v)	Nitrogen 2.92% Phosphorus 2.52% Sulphur 0.68% Zinc 0.88% Molybdenum 0.84%
Pack Sizes Available	110L & 1000L

How does TOPZinc Max work?

Following the patented **Spraytec** formula, product composition consists of chelated nutrients, phosphites and application technology. **TOPZinc Max** incorporates nutrients in a chelated form to ensure rapid and safe plant uptake. The addition of multiple nutrients is tailored to complement the early timing of application.

Zn specifically, is an important driver of multiple plant enzymes responsible for metabolic reactions that facilitate growth and development. Without Zn, these reactions would be significantly reduced. The added presence of phosphites promote the upregulation of the phosphorus acquisition metabolism. Essentially, this encourages the plant to acquire more phosphorus, which leads to improved crop health, quality and yield. Refined application technology increases overall spray efficacy to improve economic return and guarantee quality of performance.



Ongoing research and development

Spraytec has committed to conducting extensive trial work with independent research organisations to guarantee confidence of product performance in Australia. We maintain values of transparency and innovation to ensure that our contribution to sustaining the longevity of the agricultural industry is credible. Full final reports of all trials are available on our website.

Significant trial results

Figure 2 illustrates a yield response in barley following a post-emergent herbicide application of Intervix®. According to label directions, Hasten® is the advised additive, and subsequently was selected as a comparative treatment for TOPZinc Max. Neither treatment adversely affected the crop, with no biomass reduction or phytotoxicity observed. However, yield results were conclusive, showing a +460 kg/ha difference. This significant yield increase is respective of the essential Zn provided at an important growth stage, and is complemented by the application technology within the formulation.

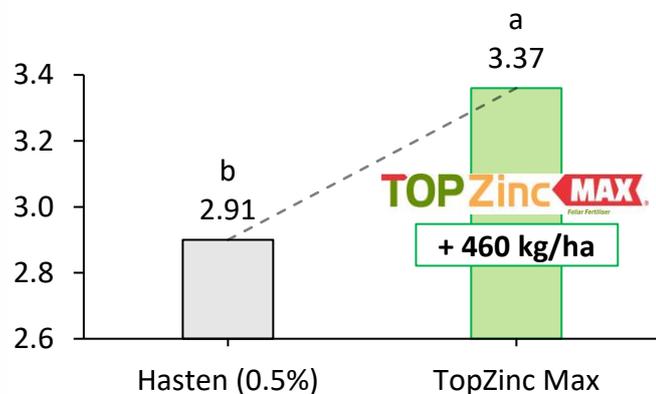


Figure 2: Barley yield (t/ha) following an early-season herbicide application of Intervix® (600 mL/ha). Trial conducted in Quairading, WA by Living Farm (2020).

Figure 3 details a similar trial conducted on wheat, and reflects the yield trend observed when TOPZinc Max is included in a post-emergent herbicide application. Despite being a low-yielding trial, numerical differences were observed when compared to Hasten®, the recommended additive partner for Velocity®.

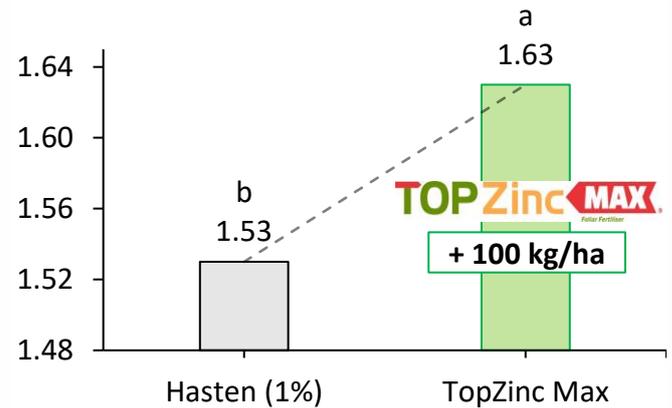


Figure 3: Wheat yield (t/ha) following an early-season herbicide application of Velocity® (670 mL/ha). Trial conducted in Northam, WA by Kalyx (2020).

Key messages and conclusions

TOPZinc Max is formulated according to a proprietary blend of ingredients that ensures product performance is consistent and to a high quality in varying conditions.

Incorporating chelated nutrition, phosphites and application technology differentiates TOPZinc Max from comparable additives.

Spraytec has trialled TOPZinc Max exhaustively at a global and Australian level, to advocate producer confidence in guaranteeing quality. Upholding the demands of producers is at the forefront of our product development, as we seek to maximise crop productivity, whilst incentivising simplicity and practicality from an operational perspective. Use it once, trust it always.

Spraytec Australia has compiled this information to its best ability and in alignment with industry protocols. The information and recommendations derived in this technote are based on trials and results determined to be consistent at the time of publication. As the application of our products is beyond our control, results may vary according to external variables and/or resistance development. To the maximum extent permitted by law, Spraytec Australia shall not be liable for any detrimental connection arising from the use of any information, analysis and recommendations presented in this publication. As per industry practice, TOPZinc Max must be used as directed and in agreement with label instructions.

