

# Manganese

Fortiori<sup>™</sup> is an advanced foliar spray, which delivers manganese in a form that is compatible with glyphosate and glufosinate.

## Benefits of Fortiori

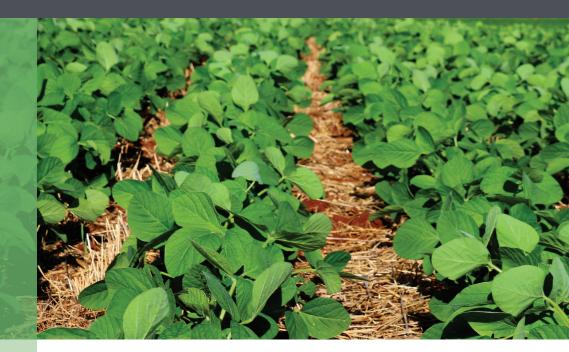
 Unique patent pending formulation

 Helps prevent and treat manganese deficiency, as well as providing nitrogen and potassium



Excellent foliar uptake

Leading compatibility with glyphosate, glufosinate and other agrochemical foliar sprays



### Nutrient content

Nutrient	Mn	N	К	K <sub>2</sub> O equivalent
%w/w	6	5	8.5	10.2
g/L	81	67	115	138

# Excellent herbicide compatibility

A number of trials, across a range of weed species, were conducted to assess the herbicide compatibility of Fortiori. In Brazil the effect of various Mn products, applied at an equivalent rate of 100 g/ha, were assessed for their impact on glyphosate weed control. The effect of treatment was highly significant (P<0.001), and significant differences between formulations are indicated by different letters above the bars in Figure 1.

Including Fortiori into the herbicide treatment did not affect the weed control (compared to glyphosate alone) showing that Fortiori has excellent compatibility with glyphosate. The four other competitor products showed a decrease in weed control, indicating their inclusion has caused compatibility issues with glyphosate.

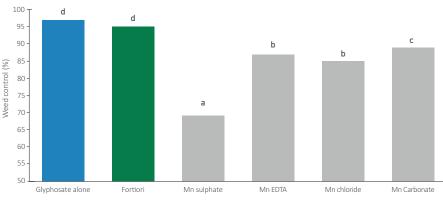


Figure 1: Fortiori did not significantly impact on glyphosate efficacy, unlike four competitor products

#### Excellent herbicide foliar uptake

Fortiori supports the foliar uptake of glyphosate and glufosinate. Unlike Fortiori, competitor products often contain Mn that is not sufficiently chelated, which can react with herbicides to reduce their efficacy.

A trial was carried out to determine the impact of adding 100g/ha Mn on herbicide uptake, when weeds were sprayed with either glufosinate (Figure 2) or glyphosate (Figure 3). The Mn products included Fortiori and four commercial products based on different Mn salts.

There were significant differences in herbicide absorption 36 hrs after spraying for both glufosinate (P<0.01) and glyphosate (P<0.001). In both cases, Fortiori treated plants showed the highest herbicide absorption, although these treatments were not significantly different to the herbicide alone controls. Some of the commercial Mn products gave significant reductions in herbicide absorption.

#### Good weed control even with problematic species

Three trials were carried out to measure weed control in a soybean crop. Glyphosate was sprayed at V2, along with 1 or 2 L/ha of Fortiori or two commercial Mn products at their recommended rates. For some weed species there was good weed control with all Mn products (Figure 4). However, for some of the harder to control weed species, the commercial Mn products gave reduced weed control when compared with Fortiori or the glyphosate alone treatments.

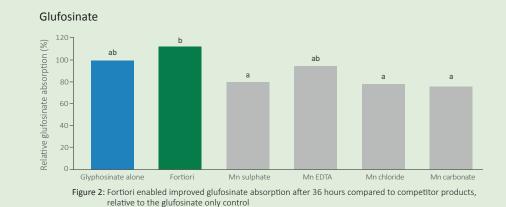
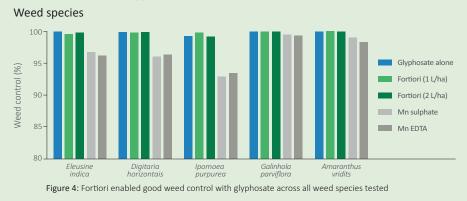




Figure 3: Fortiori enabled improved glyphosate absorption after 36 hours compared to competitor products, relative to the glyphosate only control



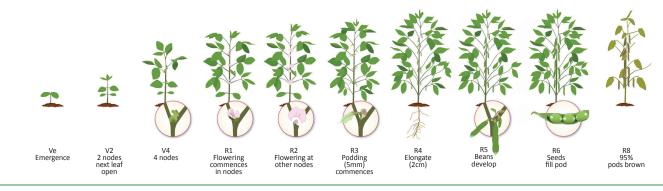


## Directions for use

Shake well before use. Apply 0.5 to 2 L/ha as required during vegetative growth along with herbicides. For more detailed advice, consult your agronomist.

### Tank mixing

Fortiori is compatible with most pesticides, adjuvants and foliar fertilisers. Always conduct a jar test before use to ensure physical compatibility.



Sertiori<sup>®</sup>

Find more information about Fortiori: www.plantimpact.com e: info@plantimpact.com



