

# GOT MANGANESE PROBLEMS?

## DID YOU KNOW:

- All S. E. Coastal Plains soils are manganese deficient or the manganese is tied up in an unavailable form.
- University research has determined that glyphosate-tolerant genetics induce manganese deficiency resulting in yield drag.
- Broadcasting dry granular manganese is NOT an effective method of application!
- Manganese levels can't be built up in the soil.
- Liming, phosphate, manure, and high soil pH ties up available soil manganese.
- You get 6 times more Manganese with MAN-GRO DF, applied in-furrow or foliar.

## CORRECT THESE PROBLEMS WITH MAN-GRO PRODUCTS



**MAN-GRO<sup>®</sup> DF**  
Dry-Flowable Manganese Powder



- **Apply Foliar or in a Band at Planting**

Sprayable form of Manganese and Sulfur.  
Compatible with most widely used ag chemicals.



**MAN-GRO<sup>®</sup> DF+**  
**Plus Boron**  
Dry-Flowable Manganese and Boron Powder



- **Apply Foliar**

New Sprayable form of Manganese, Boron, and Sulfur.  
Great for Cotton and Peanuts! Make one spray trip with Man-Gro in the tank while spraying ag chemicals.



**TETRA  
MICRONUTRIENTS**

# Apply Manganese In-Furrow at Planting



## MAN-GRO DF In-Furrow Application

- ◆ In-Furrow with crop protection chemicals
- ◆ Compatible with crop protection chemicals
- ◆ Low application rate = low cost per acre

## How MAN-GRO DF is Applied:

MAN-GRO DF was designed to be applied through existing insecticide application equipment at planting. The product is packaged in 25 pound, air tight, plastic pales with re-sealable lids.



**Placed In-Furrow at planting**

**100% water soluble  
100% plant available  
Manganese and Sulfur**

**3-6 pounds  
(1-2 actual lbs Mn)  
In-Furrow is much  
more cost effective!**

Element	Lab Results	Low	Med	Gr
Manganese	14 lbs./Acre			
	*14 actual lbs Mn			

## Agronomically Sound!

When manganese is broadcast, most of the manganese is rapidly tied up in the soil, making it unavailable to the plant. MAN-GRO DF, when placed with the seed, provides manganese and sulfur nutrition upon germination. MAN-GRO DF is 100% water soluble, placed in the root zone, providing manganese nutrition where and when the plant needs it most!

# Foliar Apply Manganese



## MAN-GRO DF is:

- ◆ 31% Manganese (Mn) and 15% Sulfur (S)
- ◆ 100% Water Soluble
- ◆ Dry Flowable Powder for easy mixing



## MAN-GRO DF Plus Boron is:

- ◆ 20% Manganese (Mn) 5% Boron (B)  
10% Sulfur (S)
- ◆ 100% Water Soluble
- ◆ Dry Flowable Powder for easy mixing

## How MAN-GRO DF and MAN-GRO DF Plus Boron are applied:

MAN-GRO DF products are designed to be foliar applied with most\* insecticides, herbicides and fungicides. The product is packaged in 25 pound, air tight, plastic pails with re-sealable lids.

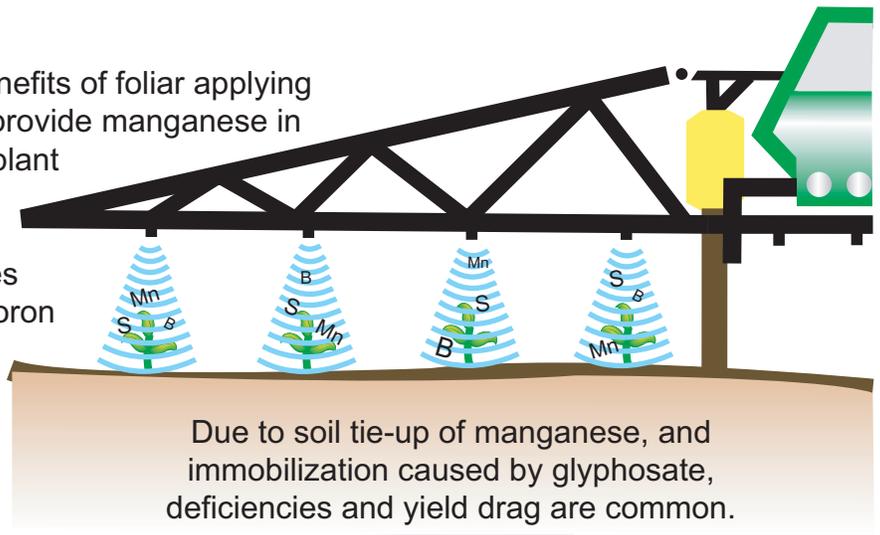


\*Consult MAN-GRO DF and DF Plus Boron compatibility bulletin.

## Agronomically Sound!

All major universities recognize the benefits of foliar applying manganese! MAN-GRO DF products provide manganese in the most available form for maximum plant uptake.

**Bonus** - Boron is essential for all stages of plant growth. MAN-GRO DF Plus Boron provides this essential nutrient in one convenient package.



# Precision Placement Pays!

## ◆ Placement

\*In-Furrow placement concentrates nutrient where it's needed.

## ◆ Source

\*Oxides - unavailable  
\*Chelates - expensive  
MAN-GRO DF - cost effective and available

## ◆ Management

\*Conservation Tillage - Reduces the options for adequate soil application  
\*Foliar application with fungicides and other crop protection chemicals

*Use MAN-GRO DF to take advantage of application opportunities*

## ◆ Equipment

\*Today's equipment will uniformly apply  
MAN-GRO DF consistently and evenly.

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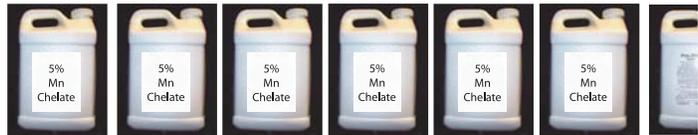
It takes 6 1/2 jugs of 5% chelated liquid to equal the amount of manganese in 1 pail of MAN-GRO

**\$32.50**  
Retail Cost



=

**\$97.50**  
Retail Cost



## KEEP YOUR GROWER COMPETITIVE & PROFITABLE

## USE THE NEW TOOL OF FERTILITY

**MAN-GRO<sup>®</sup> DF**  
Dry-Flowable Manganese Powder

**MAN-GRO<sup>®</sup> DF+**  
**Plus Boron**  
Dry-Flowable Manganese and Boron Powder

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