

FIELD FACTS

HYDRO BULLET™ BIG IRON: FOLIAR RESULTS ON CITRUS

KEY FINDINGS:

HYDRO BULLET BIG IRON

INCREASES AVERAGE IRON CONCENTRATION
IN NAVEL ORANGES BY

+26%

AND IN MANDARIN ORANGES BY

+41%

VS. THE GROWER STANDARD PRACTICE ALONE

NAVEL ORANGE TRIAL DETAILS:

METRIC	VALUE
Variety	Cara Cara
Application Method	Foliar
Timing	Petal fall
Location	Lindsey, CA
Rate	1 qt/ac Big Iron, compared with 1 qt/ac 5% iron sulfate solution
Replications	4
Iron Concentration Measurements	Taken at pea sized fruit

OBJECTIVE:

Iron is a critical nutrient for chlorophyll and energy production in crops, but it can be difficult to manage due to potential interactions with other chemistries — either in the tank mix or in the soil. In order to demonstrate the benefits of a foliar application of Big Iron, field trials were completed on citrus crops.

OVERVIEW:

Hydro Bullet Big Iron (3% S, 5.5% Fe) contains a low molecular weight acid coordination complex that is more plant available for rapid iron uptake. This is a patent-pending iron delivery system, new to the market.

MANDARIN ORANGE TRIAL DETAILS:

METRIC	VALUE
Variety	Clementine
Application Method	Foliar
Timing	Petal fall
Location	Delano, CA
Rate	1 qt/ac Big Iron, compared with 1 qt/ac 6% iron EDTA solution
Replications	4
Iron Concentration Measurements	Taken 21 days after application

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NAVEL ORANGE TRIAL RESULTS:

Hydro Bullet™ Big Iron increased iron uptake by 26% compared with the 5% iron sulfate solution (Figure 1). The researchers also measured a 4.6% yield increase in the Big Iron treatment (results not shown).

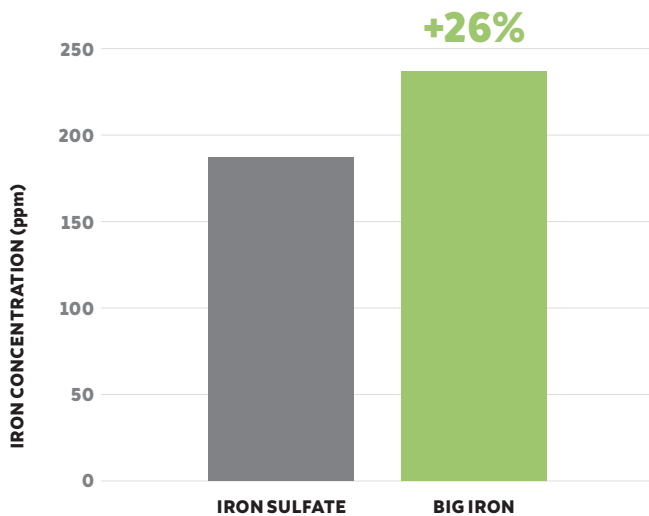


FIGURE 1. Iron concentration in navel orange fruit at pea size.

MANDARIN ORANGE TRIAL RESULTS:

Hydro Bullet Big Iron increased iron uptake by 41% compared with the 6% iron EDTA solution (Figure 2). The researchers did not find any significant effects between the two treatments on canopy volume or diameter (results not shown).

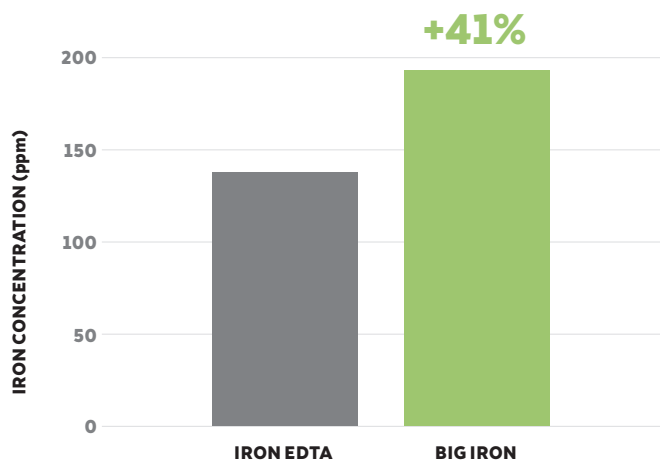


FIGURE 2. Iron concentration in mandarin orange fruit 21 days after application.

SUMMARY:

The results of these greenhouse studies demonstrate the benefit of the low molecular weight acid iron delivery system present in Hydro Bullet Big Iron. Unprotected iron sulfate sources are not compatible with most tank mix chemistries and therefore have poor foliar uptake results. Traditional synthetic iron chelates have big, bulky bonds and typically demonstrate poor foliar performance. Hydro Bullet Big Iron presents a new, improved foliar iron tool for growers looking for improved efficiency from their iron fertilizer source.

Apply Big Iron foliar at 1-2 qt/ac as needed to manage iron deficiencies and promote chlorophyll use in the crop.

For more information, visit HydroBulletNutrition.com

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