

EXPERTS FOR GROWTH



**Basafer<sup>®</sup>**

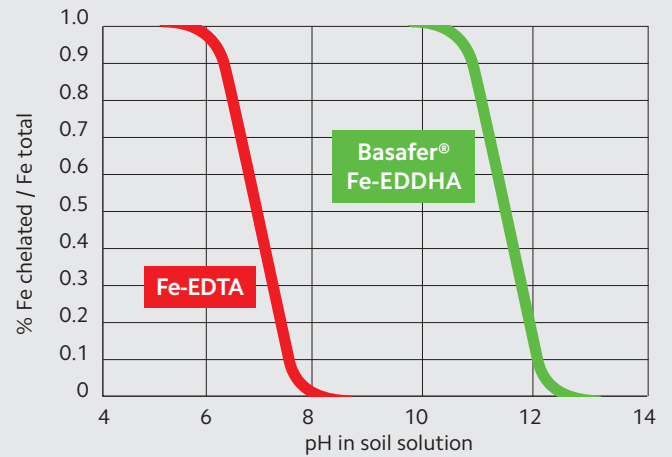
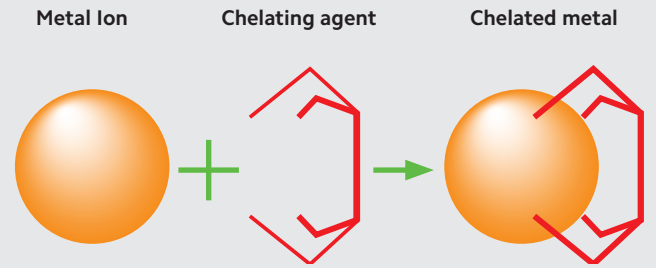
**Iron Chelate  
For Root Uptake**

## The benefits

- Perfect iron availability for root uptake
- Best chelate under high pH conditions up to pH 10
- 100% water soluble micro granules
- Highly efficient ortho-ortho complex in
  - Basafer® Plus: 83% ortho-ortho (5% out of 6% Fe)
  - Basafer®: 58% ortho-ortho (3,5% out of 6% Fe)
- Two Basafer® options in different pack sizes for commercial consideration (Basafer® Plus is recommended in technically advanced farms)

## Difference of Fe-chelates as function of the pH

EDDHA Fe-chelates are highly stable in the soil (EDTA to be used for foliar application)

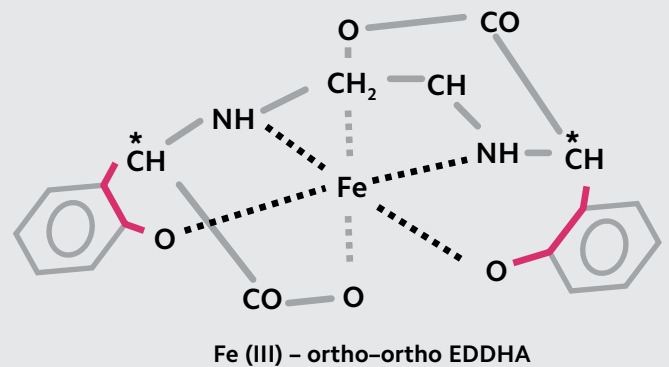
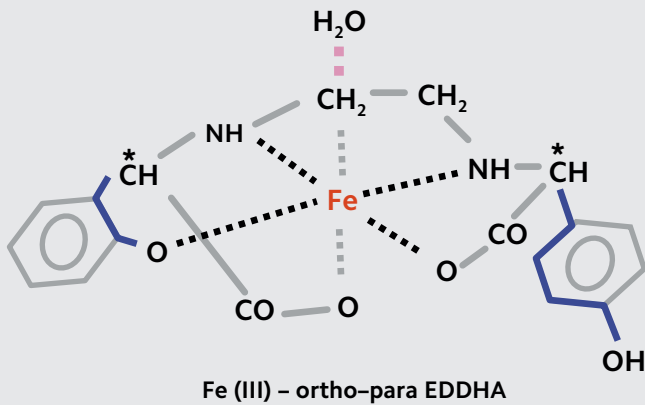






## The effect

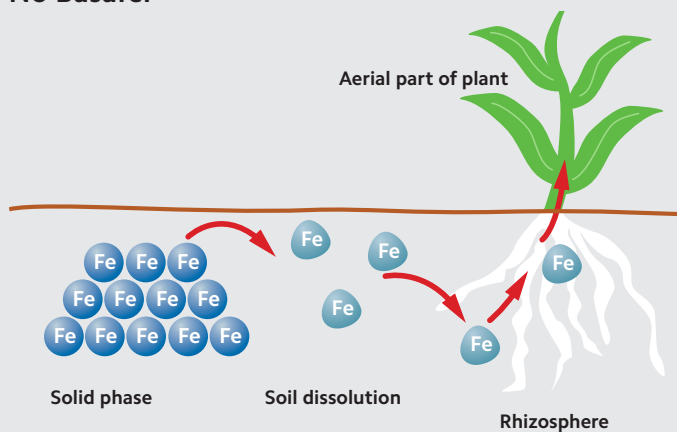
- Iron is found in abundance in most soils but is frequently not plant-available.
- Particularly under unfavourable pH conditions and/or the presence of bicarbonates, iron is tightly bound within the soil or water.
- Example:  $\text{Fe}^{++} + 2\text{OH}^- \rightarrow \text{Fe}(\text{OH})_3$  (insoluble).
- To keep iron water-soluble a chelate (Greek: claw) complex is required; salts like sulphates are often inefficient.
- Complex organic molecules such as iron EDDHA chelates develop two different complexes with different soil stability.



ortho-ortho complex with constantly 6 connections within the structure is highly stable

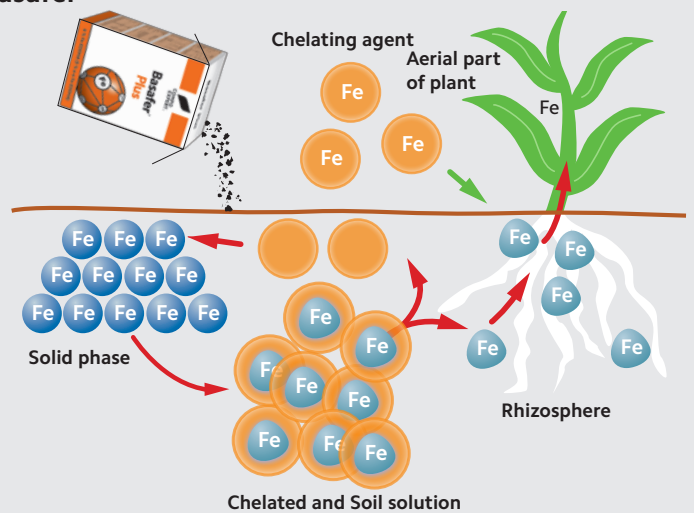
## Iron shuttle effect:

### No Basafer®



Soil bound iron is abundant, but unavailable

### Basafer®



EDDHA chelate to carry soil bound iron into the plant

## How to apply

- Basafer® / Basafer® Plus can be used both as a protectant and curatively against iron deficiency symptoms (e.g. chlorosis at young leaves).
- The product can be applied to the soil surface or used by fertigation systems like drip irrigation.
- Iron deficiency can be induced by alkaline soil conditions (pH > 7).

## Iron chlorosis in citrus



## Basafer® / Basafer® Plus application per crop cycle\*

	Planting until maturity grams / plant**	% Concentration	First years of production grams / plant**	% Concentration	Mature trees grams / plant**	% Concentration
Citrus	10 to 30	0.3	10 to 60	0.4	75 to 100	0.5
Table grapes	5 to 10	0.2	5 to 10	0.25	15 to 20	0.3
Apple, pear	15 to 25	0.15	20 to 40	0.2	20 to 40	0.25
Stone fruits	10 to 30	0.15	20 to 40	0.2	30 to 60	0.25
Peach	10 to 60	0.15	40 to 60	0.15	60 to 100	0.2
Avocado	5 to 10	0.15	5 to 10	0.15	15 to 20	0.2
Strawberry	200 to 400	0.15 to 0.3	200 to 400	0.15 to 0.3	200 to 400	0.15 to 0.3
Soft fruits	75 to 150	0.25 to 0.4	100 to 200	0.25 to 0.4	150 to 300	0.25 to 0.4

\* product is recommended for soil application or fertigation (due to the intense colour the product is not recommended for foliar spray)

\*\* preventive application require low volumes of Basafer; Fe deficient and high pH soils require higher quantities

## Trial results

### Peaches, Spain: Influence on iron chlorosis at "Early Maycrest"



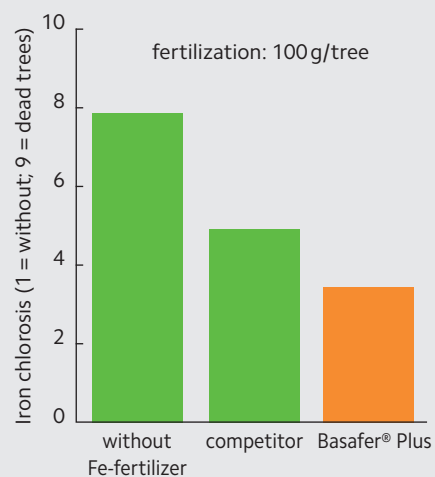
Control



Competitor

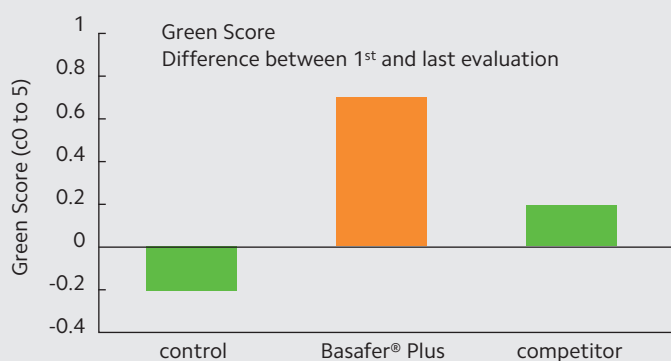
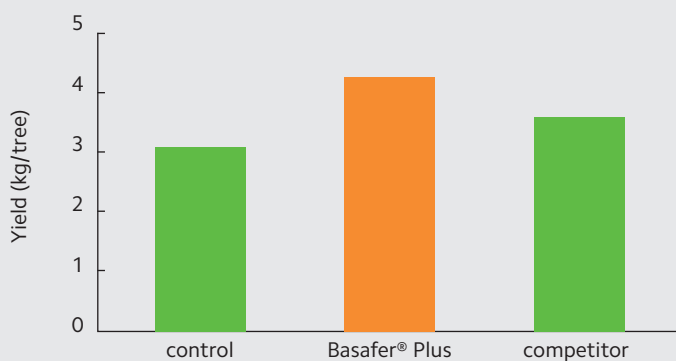


Basafer® Plus



### Mandarins, Spain

Mandarine var. arrufatina (Clementina), Finca Mont-Ros (Agro-Estelles) Naquera.-Valencia





## Primroses, Germany



Control

Basafer® Plus

Competitor



## Vine Grapes, Ringsheim, Germany



Untreated



Basafer® Plus (20g/plant)

	Product	Composition	Characteristics	Packing	Use
	Basafer® Plus	6.0% total Iron (Fe) 5.0% Iron (Fe) chelated by ortho-ortho EDDHA	Chelated iron fertilizer (EDDHA) with 6% Fe. For the preventive and curative treatment of iron deficiency (chlorosis) in agricultural and horticultural crops.	1 kg (10 x 1 kg) 5 kg (3 x 5 kg) 20 kg  1 kg: 640 kg per pallet 6.4 mt per 20" FCC 12.8 mt per 40" FCC	For detailed recommendations please contact your local COMPO EXPERT dealer / agent.
	Basafer®	6.0% total Iron (Fe) 3.5% Iron (Fe) chelated by ortho-ortho EDDHA		1 kg (10 x 1 kg) 5 kg (3 x 5 kg) 20 kg  1 kg: 640 kg per pallet 6.4 mt per 20" FCC 12.8 mt per 40" FCC	