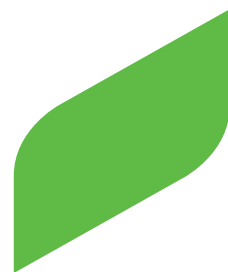


EXPERTS FOR GROWTH



**COMPO  
EXPERT®**

**Nutrimix®**  
**Nutribor®**

Foliar micronutrients for broad acre crops

## Nutrimix® / Nutribor®

### The importance of micronutrient availability

According to Liebig's Law of the minimum, any essential plant nutrient which is not in sufficient supply limits crop yield.

### Law of minimum

The element which is in shortest supply (in this case K) limits the yield. (J. v. Liebig 1803–1873)



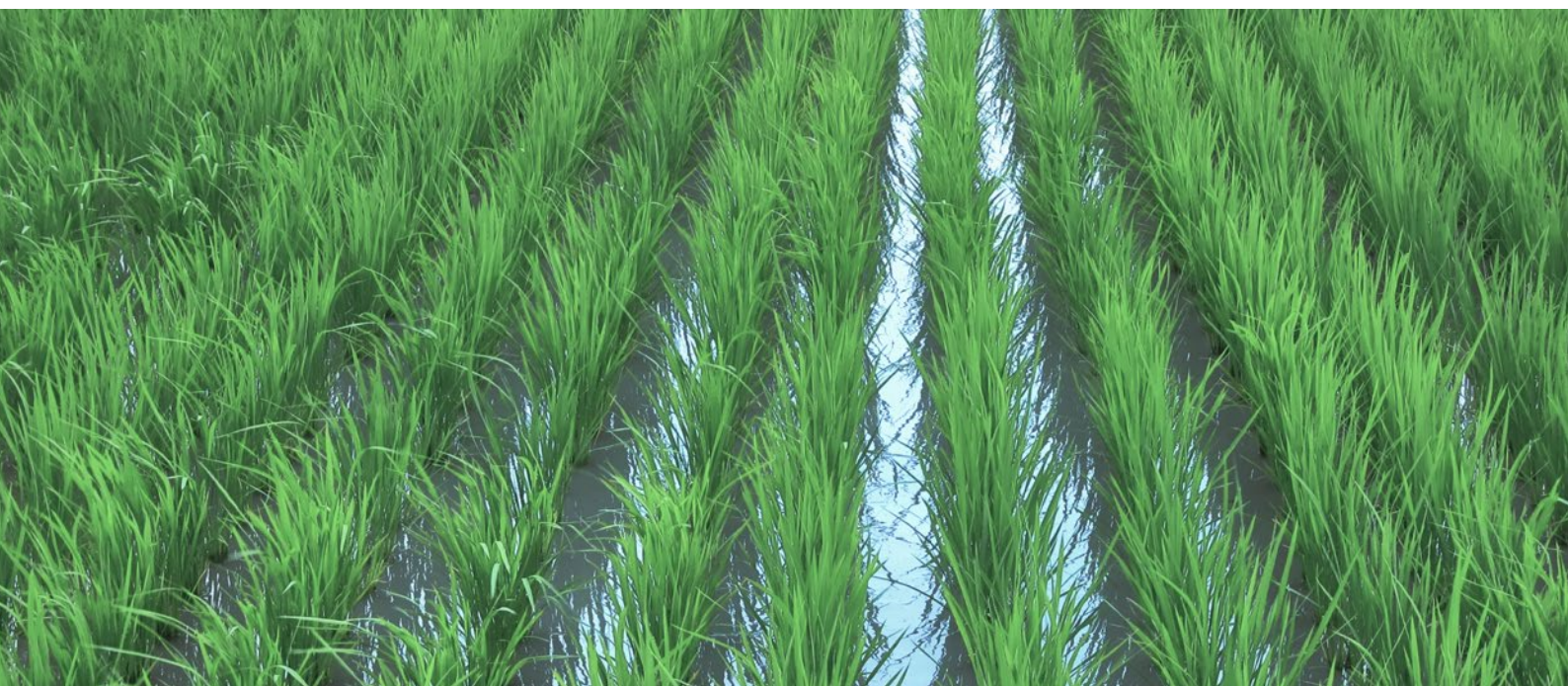
### Soil conditions for micronutrient availability

#### General benefits of foliar plant nutrition

- Highly efficient nutrient application under adverse soil conditions (high or low pH, drought, wet conditions, light soils, low nutrients, etc.)
- Maximum exploitation of yield potential
- Optimal supplement to traditional soil fertilization
- Crop strengthening under stress situation (pest & diseases, extreme climatic conditions, etc.)

Soil conditions	Manganese	Zinc	Boron	Copper	Molybdenum
pH > 7.0	--	---	--	---	++
pH < 5.5	+++	+	+	++	--
very wet	+	+	---	+	---
very dry	---	++	---	---	--
high content of org. matter	++	---	++	---	-
clay content > 20%	--	---	---	-	---
sandy soils	--	---	--	---	---

---: very high deficiency --: high deficiency -: deficiency  
 +++: very high availability ++: high availability +: availability  
 Knittel et al, 1999



## Micronutrient facts

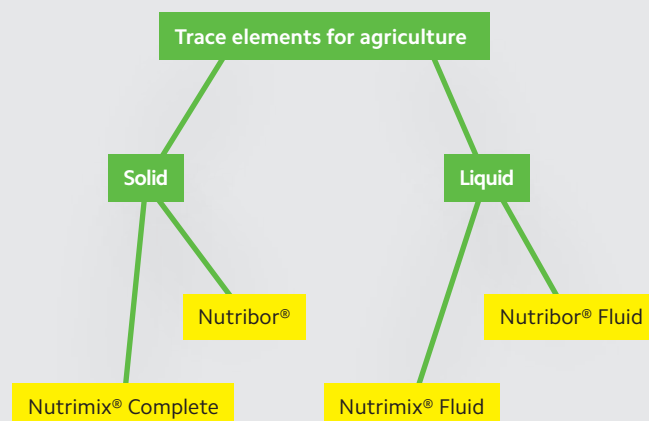
### Brief key to deficiency symptoms

Symptoms	Deficiency
Symptoms appearing first on older leaves: Chlorosis starting from leaf tips Chlorosis mainly between veins (which remain green) Brownish, greyish, whitish spots (e.g. on cereals)	N Mg Mn
Symptoms appearing first on younger leaves: Mottled yellow-green leaves with yellowish veins Mottled yellow-green leaves with yellowish veins Brownish black spots (e.g. on legumes, potatoes) Youngest leaf has white tip Youngest leaf is brownish or dead (e.g. on beet)	S Fe Mn Cu B

### The COMPO EXPERT solution

- Nutrimix® Complete and NutriBOR® are fully water soluble micro element fertilizers with special emphasis on Cu, Mn, Zn and B
- As a liquid solution COMPO EXPERT offers Nutrimix® Fluid and NutriBOR® Fluid for more convenience
- To improve foliar uptake the micronutrients are chelated in solution with EDTA

### Trace elements for agriculture



## Nutrimix® Complete

Nutrimix® Complete is especially designed for a balanced nutrition of cereals.

### Product composition

Nutrient	Nutrimix® Complete %
Copper*	3.0
Manganese	4.0
Molybdenum	0.04
Zinc	3.0
Nitrogen	3.5
Magnesium (MgO)	3.0
Sulfur trioxide (SO <sub>3</sub> )	39

\* chelated by EDTA

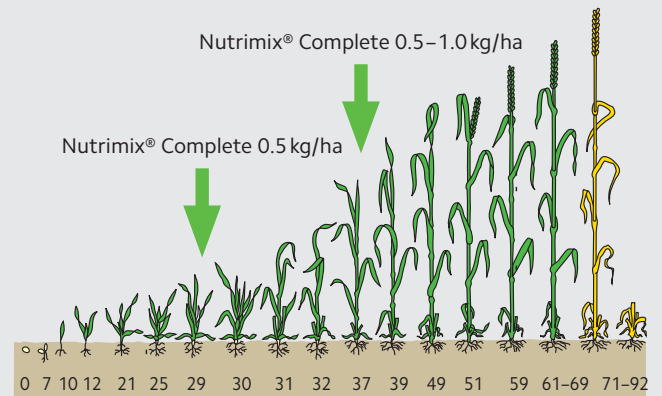
- Tillering: improvement of tillers per plant and spikelets per spike = more yield
- Flag leaf: improvement of grain filling = more yield

### Foliar application recommendations\*

Crop	Number of applications per growing period	Application rate kg/ha
Field Crops	2–3	follow regional recommendation
Vegetables	2–4	
Fruits	2–3	
Nursery & Ornamentals	2–3	

\* These are general recommendations. Please adjust according local advice.

### Time of application\*



Stages of development according BBCH

\* example



## Nutribor®

For boron demanding crops (oil crops, sugar beets, cotton, etc.) and boron deficient growing conditions (sandy soils, high pH, etc.)

### Product composition

Nutrient	Nutribor® %
Boron	8.0
Manganese	1.0
Molybdenum	0.04
Zinc*	0.1
Magnesium	5.0
Sulfur trioxide	25.5
Nitrogen	6.0

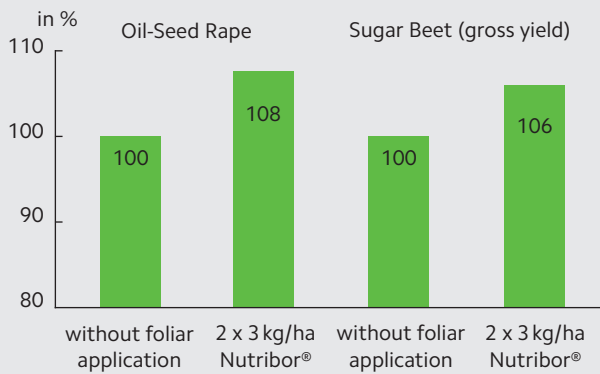
\* chelated by EDTA

### Foliar application recommendations \*

Crop	Number of applications per growing period	Application rate kg/ha
Oil-Seed Rape	2-3	3.0-4.0
Sugar Beets	1-2	3.0-4.0
Sun-Flower	2-3	2.0-4.0
Maize	3-4	3.0-4.0
Potatoe	2-3	2.0-4.0
Cotton	3-4	1.0-2.0
Tobacco	3-4	1.0-2.0
Sugar Cane	3-4	2.0-4.0

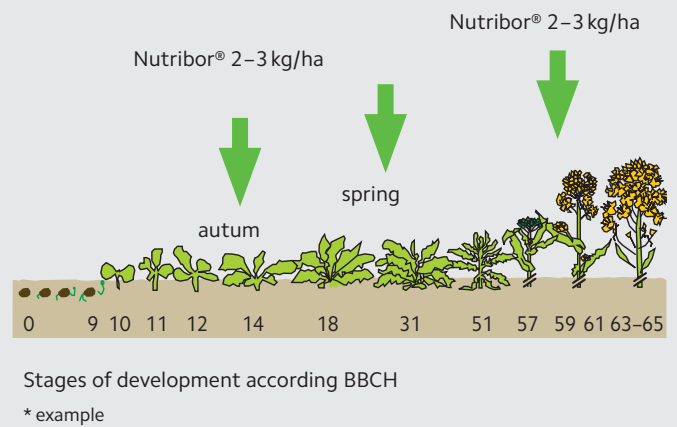
\* These are general recommendations. Please adjust according local advice.

### Trial results – Nutribor® in all results

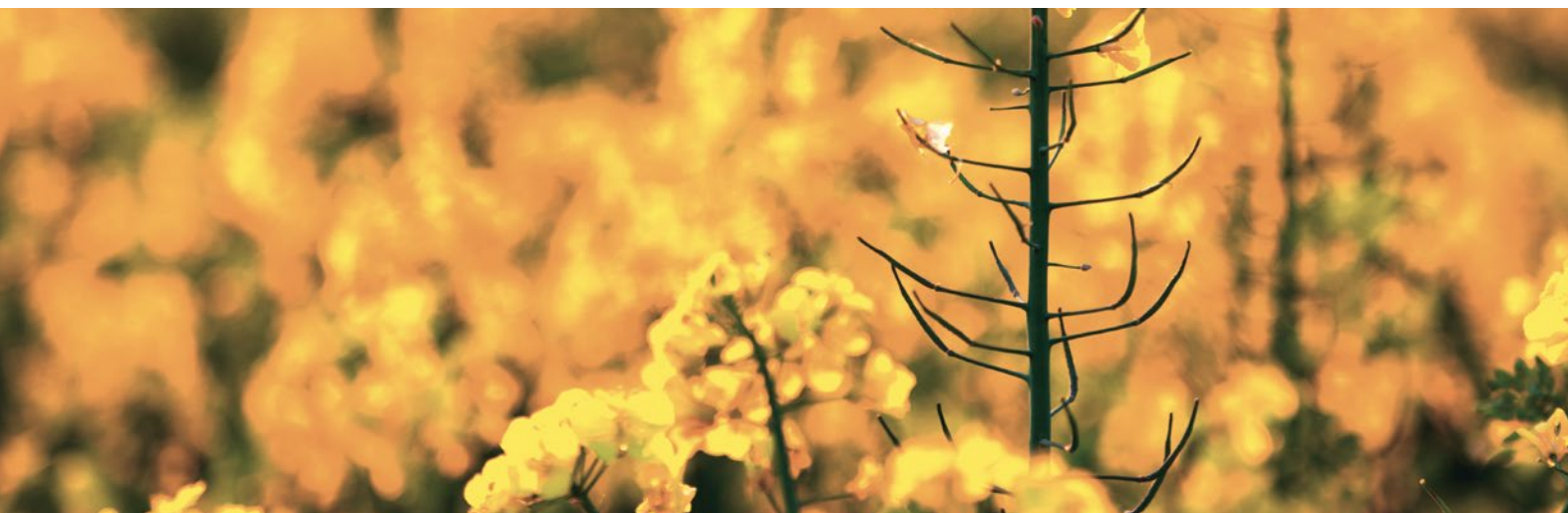


- Significant yield increases in various scientific trials
- Also better quality of oil seed rape and sugar beets
- Nutribor® also prevents crops from latent deficiencies

### Time of application\*



- In winter oil seed rape 2-3 applications are required
- Excellent compatibility with common plant protection products



## Nutrimix® / Nutribor® product range



Product	Composition	Characteristics	Packaging	Use*
Nutrimix® Complete	3.5% N 39% SO <sub>3</sub> 3% MgO 3% Cu* 3% Fe 4% Mn 0.04% Mo 3% Zn  * Cu chelated by EDTA.	- highly concentrated multi micro-nutrient fertilizer with N, S and Fe - homogenous powder: 95% < 1.0mm - for cereals - foliar application	1 kg bags 15 kg bags  Pallet size: 40 x (16 x 1 kg) = 640 kg 60 x 15 kg = 900 kg	Spray application in most crops: 1.0 – 3.0 kg/ha
Nutrimix® Fluid	8% K <sub>2</sub> O 2% Cu* 3% Mn* 0.033% Mo 2% Zn*  * Cu, Mn, Zn fully chelated by EDTA.	- liquid multi micronutrient fertilizer - for various crops (e.g. potatoes) - foliar application - liquid formulation for more convenience	Can: 10 l  Pallet size: 60 x 10 l IBC	Spray application in cereals: 1–2 litres/ha
Nutribor®	6% N 5% MgO 25.5% SO <sub>3</sub> 8% B 1% Mn 0.04% Mo 0.1% Zn*  * Zn chelated by EDTA.	- highly concentrated multi micro-nutrient Boron fertilizer with N, Mg and S - homogenous powder: 95% < 1.0mm - for various crops (e.g. canola, maize, cotton, tobacco) - foliar application	1 kg bags 5 kg bags 15 kg bags  Pallet size: 40 x (16 x 1 kg) = 640 kg 48 x (3 x 5 kg) = 720 kg 60 x 15 kg = 900 kg	Spray application in most crops: 2.0–4.0 kg/ha
Nutribor® Fluid	8% B 0.1% Mn* 0.04% Mo 0.1% Zn*  * Mn, Zn fully chelated by EDTA.	- liquid multi micronutrient fertilizer - for various crops - foliar application - liquid formulation for more convenience	Can: 10l  Pallet size: 60 x 10l IBC	Spray application in cereals: 1–3 litres/ha

For detailed information on application data please get in touch with your local supplier.