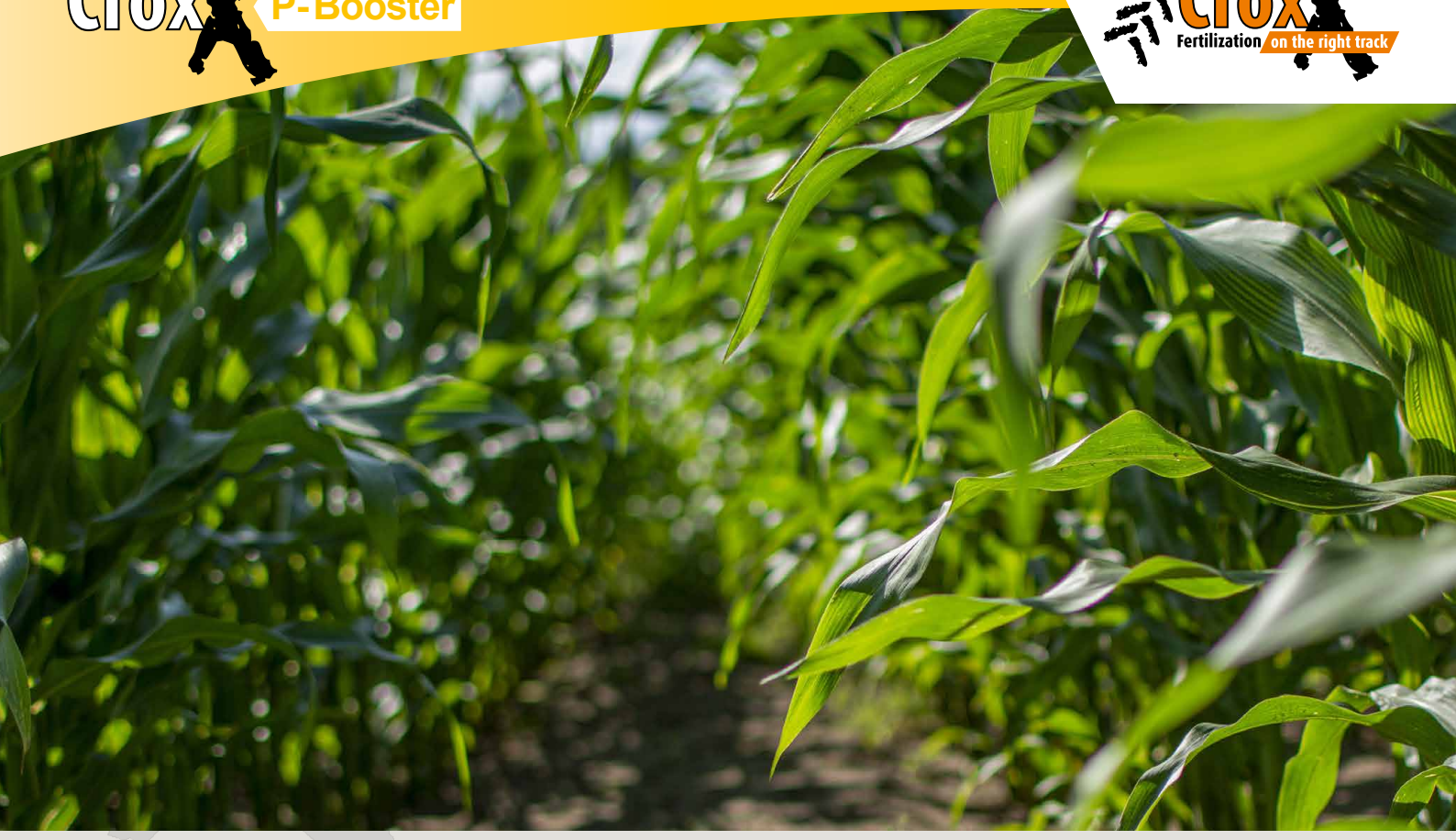
CroxX P-Booster

CroxX Fertilization on the right track



P-Booster

Phosphate Enhancer for P-Fertilizer

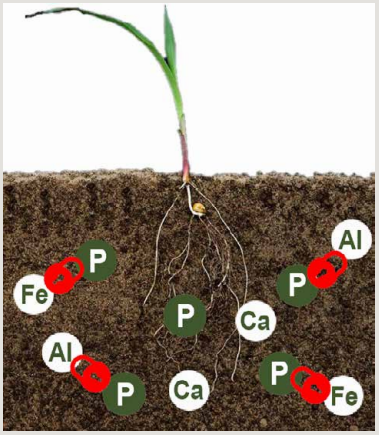
CroxX P-Booster

Phosphate Booster - ready to use solution for Phosphate fertilizers

- Higher efficiency of all Phosphate fertilizers.
- Convenient liquid formulation for all common Phosphate fertilizers.
- Reduced Phosphate precipitation by Ca, Fe or Al
- Increases Phosphate availability of organic fertilizers such as slurry.
- Fertilizer synergist for better uptake of macro and micronutrients.

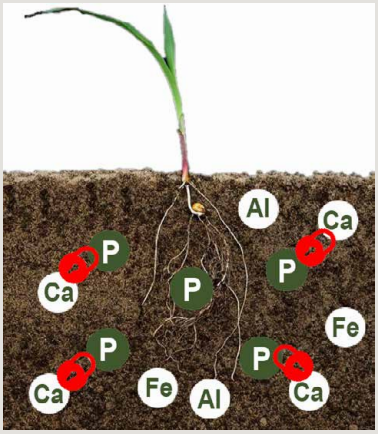
Mode of action

Acid soils (low pH)



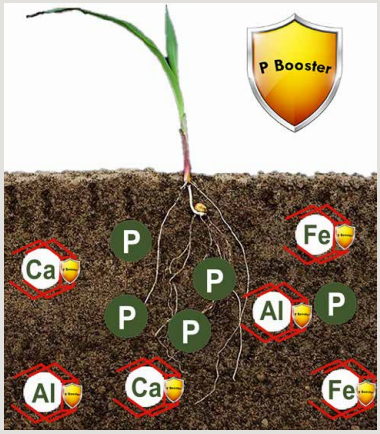
The phosphate fertilizer is locked by aluminum and iron

Alkaline soils (high pH)



The phosphate fertilizer is locked by calcium.

Phosphate Booster



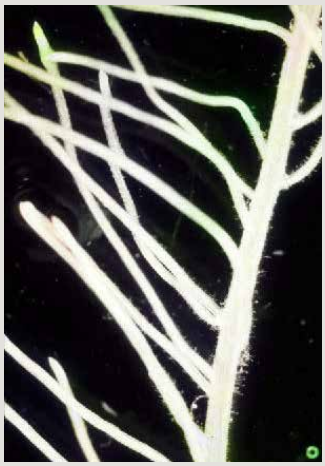
The phosphate fertilizer remains available.

- Most of the Phosphate fertilizer applied to the soil is quickly precipitated as Calcium-, Iron- or Aluminumphosphates. This Phosphate is no longer available for the plant.
- P-Booster absorbs positively charged Calcium, Iron or Aluminum ions and acts like a protective shield. Subsequently, applied Phosphate remains available for the plant, regardless of soil pH.

Results and advantages at a glance

- **Enhanced root growth, especially of root hairs**

Trial results in wheat and soybean



F.E. Below, University of Illinois, 1995

The enlarged view shows the root hairs of young wheat plants with P Booster (left) and without treatment (right).

F.E. Below, University of Illinois, 1995

Young soybean plants with P Booster (left) and without treatment (right).

- **Increased uptake of Phosphorous**

Trial results in corn

Effect of P Booster on phosphorus absorption in corn (Variety: Early sung-low) with initial fertilization without additional fertilization

Dosage of P Booster	% Phosphorus in maize plant	% Increase in phosphorus in maize crop
0 ppm	0,3	–
1 ppm	0,36	20,0
10 ppm	0,34	13,3
100 ppm	0,38	26,7
1.000 ppm	0,44	46,7

- **Higher uptake of Macro and Microelements**
- **Increased yield**

Additional advantages in Fertigation

- **Increase of solubility**
  P-Booster inhibits the deposition of Ca/$MgCO_3$, Ca/$MgSO_4$ or Ca/$MgPO_4$ by preventing crystal growth between ions in solution (scale inhibitor). Therefore clogging of pipes and nozzles is avoided.
  P-Booster solves solubility or dispersion problems in fertigation systems by stabilization of weakly soluble salts such as carbonates, sulphates, or phosphates. It also allows supersaturated solutions where despite a considerable excess of the salt, the solutions remains clear in the presence of P-Booster.

- **Increase nutrient uptake**
  Besides promoted P-uptake P-Booster is a complexing agent and highly capable chelator of trace elements such as Fe, Mn, Zn and Cu but also of Ca and Mg. The uptake, especially of trace elements is increased.

- **P-Booster is a corrosion inhibitor.**

- **Biostimulant effect**
  P-Booster increases roots growth significantly and elevates yield potential.

- **100% biodegradable**

Application

Granular Fertilizer / Water Soluble Fertilizer:

> 50% P_2O_5 = 4,0 l/mt
40-50% P_2O_5 = 3,5 l/mt
< 40% P_2O_5 = 3,0 l/mt

Liquid Fertilizer

0,5% in the solution(= 5l / 1000 l)

Slurry / Organic Fertilizer:

4-5 l/ha
5 l/ha on heavy soils
4 l/ha on sandy soils

Fertigation

0,6 – 0,8 % v/v in stock solution
(6-8 l / 1000 l)

CroxX P-Booster

Product properties

CroxX P-Booster

P-Booster solution for self application of Fertilizers

- Simple application in a fertilizer mixing system or in a screw conveyer with a dosing device
- For granulated, crystalline and liquid High-P-Fertilizers such as DAP, MAP, 20-20, 13-40-13 and Slurry
- Easy mixing in fertigation, stock solutions or liquids

Benefits

- Better Phosphorus uptake
- Reduces Phosphate Fixation in the soil
- Stimulates root growth

Technical Data

Organic Complex:	40 %
Physical appearance:	liquid
Colour:	light brown
Density (g/l):	1,3 (kg/l)
pH (1:10 in water):	9,5

Packaging sizes

IBC (1.000 l)
Barrel (200 l)
Can (20 l)

Instructions for use

- For all common phosphate fertilizers such as: (DAP, MAP, SSP, TSP, 20-20, 40-13, liquid manure etc.) by either spraying or injecting.
- Simple application in a fertilizer mixing system (batch mixer or continuous mixer) or in a screw conveyor with a dosage device.
- Simple mixing in fertigation, mother solutions or liquids

Storage

- Storage between 5 - 40 ° C. (optimum 10 - 20 ° C).
- Shelf life in sealed tanks: min. 2 years

CroxX Fertilization on the right track

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