

Nitro-Combi

Liquid Organo-Chemical Nitrogen Fertilizer with Micronutrients

Nitro-Combi contains the whole range of the available forms of nitrogen which are used in the plant nutrition. In specific, **Nitro-Combi** contains:

◆ **Ammonium nitrogen (NH_4^+):** Ammonium nitrogen is contained in the ammonium ion which is positively charged. The ammonium ion is bound by the ions of clay which are contained in the soil and are negatively charged. Ammonium nitrogen is attached by the soil colloids, is not easily leached and is retained in the soil for a long time.

◆ **Nitrate nitrogen (NO_3^-):** Nitrate nitrogen is contained in the nitrate ion which is negatively charged and thereby it is not bound by the clay colloids because of the homonymous load. Nitrate nitrogen appears in the soil in the soluble form and is readily available to the plants.

◆ **Urea nitrogen (NH_2CONH_2):** Urea nitrogen is contained in the urea molecule. Urea is the most abundant source of nitrogen for the crops after ammonia gas. Urea nitrogen is gradually converted into ammonium nitrogen firstly and then to nitrate nitrogen and after that it can be absorbed by the plants.

◆ **Organic nitrogen:** Organic nitrogen is contained in the molecules of amino acids that derive from the enzymatic hydrolysis of proteins. Organic nitrogen is readily available and gradually assimilable by the plants. As a result, organic nitrogen is fully utilized by the plants.

◆ **Polymethylenic nitrogen.** Polymethylenic nitrogen is contained in a long chain of carbon atoms of the polymethylenic urea molecule. Carbon bonds in the polymethylenic urea molecule are gradually broken down due to the microbial activity, temperature, humidity and UV radiation. Therefore, nitrogen of the polymethylenic urea is released in small quantities that are easily assimilable by the plants. Polymethylenic nitrogen is neither leached, nor vaporized.

Furthermore, **Nitro-Combi** contains Manganese and Zinc in a form that is readily available to the plants. Manganese acts as a stimulant of enzymes that participate in the nitrogen uptake process. Zinc assists in the utilization of the nitrogen by the plants.



SYNTHESIS (w/w)

Total Nitrogen (N)	22.0 %
Urea	9.7 %
Ammonium	1.5 %
Nitrate	1.5 %
Polymethylenic	7.8 %
Organic	1.5 %
Zinc (Zn)	0.1 %
Manganese (Mn).....	0.1 %
Amino acids	9.0 %



PROPERTIES

- ⊙ Promotes the growth of the above ground part of the plants.
- ⊙ Covers fully the plant needs in nitrogen with low application rates due to the reduced losses caused by evaporation and leaching.
- ⊙ Provides normal and stable growth in all crops due to the gradual release of nitrogen.
- ⊙ Offers a powerful start's growth to the plants due to the sufficiently high percentage of organic nitrogen that is contained in the amino acids molecules.
- ⊙ Enhances the productivity of plants resulting in a significant increase of the crop yield.
- ⊙ Improves the nutrient uptake of the plants through their root system.
- ⊙ Promotes the metabolic processes in the plant cells and as a result plants utilize nitrogen of **Nitro-Combi** efficiently. In this way it ensures the maximum efficiency of the fertilizer.

APPLICATIONS - APPLICATION RATE

NITRO-COMBI can be applied by fertigation through the irrigation/fertilization system or foliarly according to the following application rates. The application timing and the number of the applications is determined by the plant needs and the management program of each crop.

CROP	FOLIAR APPLICATIONS	SOIL APPLICATIONS
Vegetables	1.5-5 l/ha	10-15 l/ha
Open field horticulture	1.5-5 l/ha	10-15 l/ha
Greenhouse horticulture	10 l/ha	20-30 l/ha
Strawberry	6-6.5 l/ha	10-15 l/ha
Citrus	6-6.5 l/ha	10-20 l/ha
Trees	6.5-15 l/ha	10-20 l/ha
Vineyard	6-12 l/ha	10-20 l/ha
Cotton, Tobacco	5-7.5 l/ha	10 l/ha
Potatoes, Onions, Beets	2.5-3 l/ha	10-15 l/ha
Cereals, Corn	1.5-6 l/ha	
Fodders	5-7.5 l/ha	10 l/ha
Ornamental plants	0.5-1 l/200 l of water	10-15 l/ha
Ornamental trees	1 l/200 l of water	10-15 l/ha
Urban green	1-1.5 l/200 l of water	20-40 l/ha
Aromatic crops	1 l/200 l of water	10 l/ha



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