

MADE IN
UKRAINE



Quantum[®]
Plant nutrition innovations

EVERY DROP
TO GROW
YOUR CROP





WE ARE PROUD OF:

- Our 10-years successful experience in production and sales of agrochemical products;
- Our highly experienced and competent staff;
- Our manufacturing process and quality of our products that meet world standards;
- Our authority and recognition in Ukrainian market.



Research and production Company (RPC) KVADRAT conducts business at the Ukrainian market since 2010. It is a modern fast growing company, the leader of Ukrainian agrochemical industry.

The basic principles of our Company are high professionalism, responsibility to each Customer and reliability of the result on the field.

The main activities of the Company are production and sales of specialty fertilizers, biostimulants and adjuvants.

PC KVADRAT was the first in Ukraine to produce high quality liquid starter fertilizer (In-furrow&Pop-up) and microgranulated starter fertilizers. In order to exchange experience and increase the starter fertilizers use efficiency, the company launched an information project "In-Furrow in Ukraine".

Along with starter fertilizers, RPC KVADRAT is one of the biggest producers of chelate micronutrient fertilizers, biostimulants for foliar application, seed treatment and fertigation.

OUR TEAM

The strength of RPC KVADRAT lies in a team of experienced experts who support our customers and partners with their knowledge and experience.

Our professional management team combined with knowledge, rich experience and expertise, the company's management leads to the success of our customers, business partners and employees.

We are proud of our employees, including many people with higher education including PhD holders.

Our staff includes agronomists-consultants, managers, engineers, chemists, laboratory assistants, accountants, production department managers, and many other specialties.



INTERNATIONAL COOPERATION

The research and production company "KVADRAT" has registered the Quantum© trademark in the European Union as "EU Fertilizer". Also, our products have been registered in the Republic of Belarus and Moldova. The process of registering our product line in the USA has begun, where an international representative office has been opened.

Our goal is to build a developed network of distribution partners in order to provide quality services in the USA, Europe and Latin America.

We use high quality raw materials to manufacture our products and we have a great partnership with leading suppliers around the world such as seaweed company Acadian Seaplants, precision liquid fertilizer placement tools producer's AgXcel and many others.



OUR PLACE IN THE UKRAINIAN MARKET

The company "KVADRAT" is one of the Ukraine's top crop nutrition companies and providers of farming solutions both on production volume and innovative development with new product introduction, many of which have no analogues.

The company's main products are:

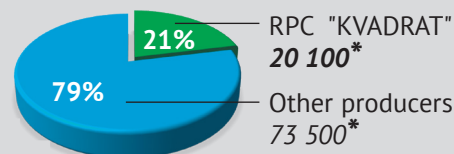
- Chelate micronutrients and non-microbial plant biostimulants Quantum©
- Premium liquid starter fertilizers produced under the brand name Quantum© Diafan ACTion
- High technology adjuvants Quantum© Assistant
- Suspension fertilizer Quantum© S
- Proventus© water soluble fertilizers and UltraStart micro granular fertilizers

OUR SERVICES AND CONSULTATIONS

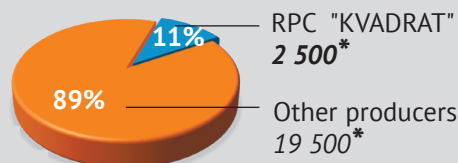
We provide the most innovative precision liquid fertilizer application tools. We specialize in the design, manufacture and installation of unique solutions and components for In-Furrow placement of our liquid pop-up fertilizers Quantum© DIAFAN Action.

Our laboratory provides soil testing and plant tissue analysis for our Customers. Based on test results, we provide them with highly precise recommendations for fertilizers application. Tissue analysis allows us rapid reaction on nutrient deficiencies in-season.

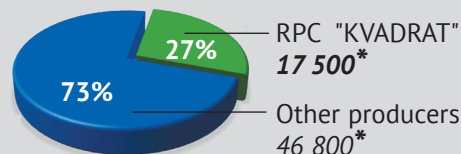
Specialty fertilizers common market share of RPC "KVADRAT" in Ukraine in 2021



Liquid foliar fertilizers market share of RPC "KVADRAT" in Ukraine in 2021



Liquid starter fertilizers market share of RPC "KVADRAT" in Ukraine in 2021



* Sales volume is in thousand liters or tons



OUR PRODUCTION FACILITIES



Presently the "Quantum" factory (Kharkiv region) is the modern, dynamically developing enterprise specialty fertilizers production under the own Trademarks and Private Labels.

The total production capacity makes up 500 MT/day. Storages for raw materials and market products - about 10,000 square meters.

A distinctive feature of the TM Quantum® products is the high quality of ingredients and raw materials, the use of advanced technologies, and strict quality control in production. We use only top-quality components and raw materials from the world's leading suppliers including pharmaceutical and food purity. The geography of our suppliers is wide and covers more than 15 countries.

We carefully monitor each batch of raw materials for compliance with quality indicators and the content of impurities.

Our laboratories are equipped with modern equipment for quality control of raw materials, obtained products and conducting agronomic research, these are elemental analyzers - inductively coupled plasma spectrometers (ICP) by Thermo and Agilent, UV-Vis spectrometer by Thermo, x-ray fluorescence analyzer (XRF) by Hitachi and others.

Our manufacturing process is managed by highly qualified employees with detailed knowledge of chemistry and fertilizer production.

Thanks to investment in new machinery, laboratories and production technologies, we have been able to achieve improvements in efficiency and productivity at all stages of the production process.

OUR PRODUCTS



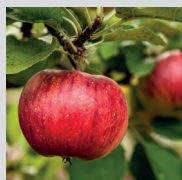
Premium starter fertilizers



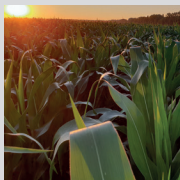
Liquid deficiency correctors



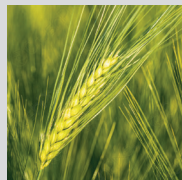
Liquid multicomponent formulations



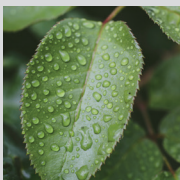
Liquid plant growth biostimulants



Liquid functional fertilizers



Suspension fertilizers



Adjuvants



Water-soluble fertilizers

R&D DEPARTMENT

KVADRAT's objective is a long-term development, so it is important for us to invest in research and development. Modern equipment and instruments in the laboratory and a team of experienced, educated professionals, full of commitment and passion for the search and discovery of new solutions, bring the astonishing results of innovative products on the market.

R&D department pays great attention to modern scientific research and monitors the trends in the development of innovative technologies in search of effective means to improve the efficiency of their products.

In the field and laboratory conditions, we study the effect of various compositions of nutrients and biologically active substances on the growth and development of plants, constantly adding new successful products and improving existing ones.

Our in-depth knowledge of the physiological characteristics of crops, biological and chemical characteristics of raw materials allows us to create products with high bioavailability and agronomic efficiency.

As a result of close interactions between science and practice, a number of innovative solutions have been created to improve the efficiency of assimilation of nutrients, increase plant stress resistance and improve product quality.

Innovative technologies of RPC KVADRAT



EXTRA CHELATE TECHNOLOGY

Advanced technologies require complex tank mixes for preparing a foliar feeding solution, seed treatment, IN-FURROW™ application or fertigation. **Extra chelate Technology** protects trace elements from interaction with other fertilizers, biostimulants and plant protection agents in tank mixes or soil in a wide pH range.

INNOVATIVE TECHNOLOGIES

- ◆ 100% chelated form of trace elements for maximum stability and effectiveness;
- ◆ excellent compatibility in tank mix compatible with liquid starters (orthophosphates) and other highly concentrated fertilizers, biostimulants and plant protection products;
- ◆ a wide range of agrochemicals compatibility makes it possible to considerably decrease expenses by reducing the number of fertilization process;
- ◆ special formulations provide a high concentration of trace elements, excellent bioavailability and improve the penetration of all components of the tank mix.

APT technology

APT technology. Active Phloem Transport is the technology for increasing the phloem mobility of nutrients. All this provides rapid movement of elements from the application area up to young plant tissues.

Most trace elements and Calcium are not mobile in the phloem, that is, they have a low ability to move from one part of the plant to another. A special complex of ART technology polyols ensures the formation of compounds in the plant with high transport capacity. Low-molecular transport forms of elements contribute to a better penetration of compounds into the leaf and unimpeded movement of elements with low mobility through the plant vascular system.

APT technology



High mobility



Common Boron solution

Limited mobility

RX Technology

RX Technology is the innovative technology to Improve plant stress tolerance. Resistance eXtreme Technology is based on the action of a number of organic compounds with high biostimulation activity and anti-stress action.

Bioactive components of RX Technology regulate a wide range of cellular processes:

- ◆ stimulate the natural mechanisms of plant resistance to abiotic stresses (drought, heat and salt) and pathogens;
- ◆ perform the functions of an endogenous stress-related signal, activating a synthesis of anti-stress proteins and antioxidant enzymes;
- ◆ take part in the regulation of transpiration, increasing the water-use efficiency and drought resistance;
- ◆ contribute cell membrane stability;
- ◆ increase photosynthetic activity;
- ◆ stimulate growth and plant roots absorb nutrients.

INNOVATIVE TECHNOLOGIES



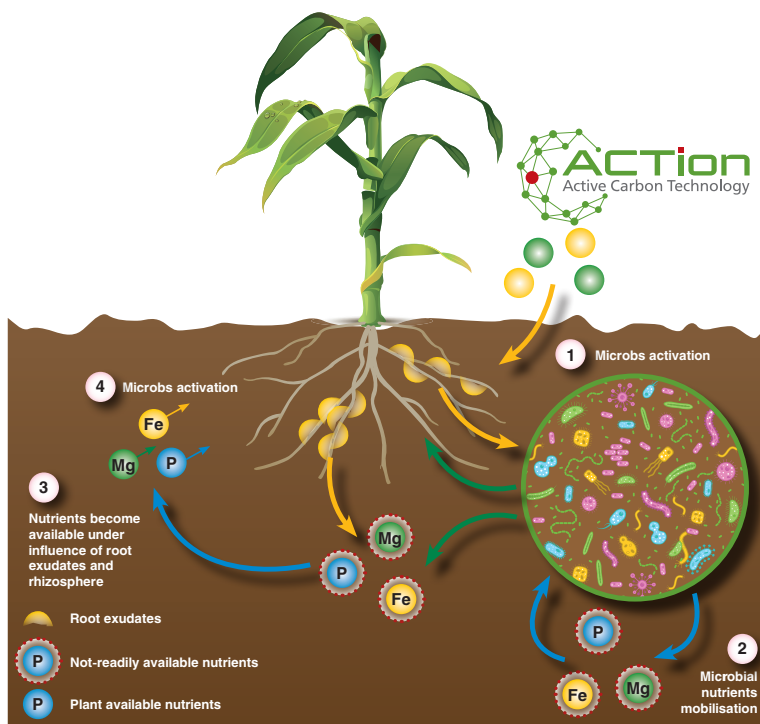
Active Carbon Technology is a technology for rhizosphere processes intensification (rhizosphere management).

Rhizosphere management is based on maximizing the efficiency of root and rhizosphere processes in nutrient acquisition and use by crops rather than solely depending on excessive application of chemical fertilizers.

Management of the rhizosphere of the plant – a zone of soil that surrounds and is influenced by plant roots (exudates) and soil microflora (bacteria, fungi and other organisms).

According to the biological activity ACTION complex has a similar effect to Root exudation which stimulate rhizosphere activity:

- ◆ increase soil microbial activity and improve nutrient absorption from;
- ◆ provide an available source of energy (carbon) for the soil, microbiota and agricultural crops;
- ◆ stimulate the root system development;
- ◆ activates stress resistance at the initial stages of development;
- ◆ ACTION's buffer agents contribute phosphorus mobilization and other elements from the soil and applied fertilizers.



The root-rhizosphere microflora system is formed immediately after seed germination. The application of Quantum Diafan starter fertilizers with ACTION technology during a time of sowing seeds contributes to:

- ◆ active settlement of the root zone prior to seed germination and stimulation of microflora reproduction even before unfavorable growth conditions;
- ◆ increasing nutrient availability as the direct effect of ACTION components on the mobility of not readily available elements, and indirectly through the stimulation of the rhizosphere microflora.

Note! This information is for promotional purposes only. These products may not yet be available or approved for sale or use in your area.

PREMIUM LIQUID STARTER FERTILIZERS

Liquid starter fertilizers specially developed for seed-placement application during planting of crops using IN-FURROW® technology

Fertilizer Recommendations	Chemical composition (% w/w) and properties
<p>Quantum Diafan ACTION Special starter liquid fertilizer. Fertilizer is applied IN-FURROW (soil application) with the seed and also for foliar application to provide mineral plant nutrition and fertigation. It contains phosphorus in the form of orthophosphate. It's the fertilizer with a low salt index and low crystallization temperature. It has a neutral pH effect on the soils. No ballast salts (chlorides, etc.), no toxic impurities</p>	<p>Diafan ACTION 5-20-5 Diafan ACTION 8-24-0 Diafan ACTION 9-18-9 Diafan ACTION 3-18-18 Diafan ACTION 10-10-10</p>

LIQUID MULTICOMPONENT FORMULATIONS

The specialized subgroup includes multinutrient fertilizers for foliar treatment of a wide range of crops with specially selected macro- and trace elements and biologically active substances

Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>Quantum PLATINUM The complex of chelated EDTA trace elements is enriched with nitrogen, magnesium, calcium, sulfur to activate photosynthesis and amino acids to increase plant stress resistance. Intended for foliar application of a wide range of crops, seed treatment and application in combination with starter fertilizers</p>	<p>N – 9,5% (95 g/l); CaO – 2,0% (20 g/l); MgO – 1,5% (15 g/l); Fe – 1,2% (12 g/l); Zn – 1,2% (12 g/l); Cu – 0,7% (7 g/l); SO₃ – 1,8% (18 g/l); Mn – 0,7% (7 g/l); B – 0,5% (5 g/l); Mo – 0,01% (0,1 g/l); Amino acids – 5% (50 g/l); pH – 7,0-8,5; Density – 1,28-1,38 kg/l</p>
<p>Quantum GOLD Complex fertilizer for foliar nutrition of vegetable, fruit and berry, ornamental and other crops. Contains the necessary macro- and trace elements, as well as a complex of biologically active substances, in particular, a stimulator of root formation and stress resistance of plants</p>	<p>N – 9,0% (90 g/l); K₂O – 9,0% (90 g/l); P₂O₅ – 9,0% (90 g/l); SO₃ – 1,75% (17,5 g/l); Fe – 0,6% (6 g/l); Zn – 0,7% (7 g/l); Cu – 0,7% (7 g/l); Mn – 0,6% (6 g/l); B – 0,35% (3,5 g/l); Mo – 0,01% (0,1 g/l); Ni – 0,01% (0,1 g/l); Co – 0,003% (0,03 g/l); Plant hormone Auxin – 0,2% (2 g/l); additionally contains a complex of biologically active substances; pH – 7,0-8,0; Density – 1,20-1,28 kg/l</p>
<p>Quantum SILVER Multicomponent fertilizer for foliar application and seed treatment of grain (wheat, corn), legumes and technical (sunflower, rapeseed, sugar beet) crops. Its composition contains a complex of chelated trace elements, it is characterized by an increased content of zinc and biologically active substances to stimulate the development of the root system</p>	<p>N – 7,0% (70 g/l); P₂O₅ – 6,0% (59 g/l); K₂O – 9,0% (90 g/l); SO₃ – 3,0% (30 g/l); B – 0,5% (5 g/l); Zn – 1,6% (15,8 g/l); Cu – 1,6% (15,7 g/l); Mn – 0,7% (7 g/l); Mo – 0,015% (0,15 g/l); Ni – 0,01% (0,1 g/l); Co – 0,003% (0,03 g/l); additionally contains a complex of biologically active substances; pH – 7,5-8,5; Density – 1,20-1,25 kg/l</p>
<p>Quantum Ultra Complex (EC fertilizer) Foliar fertilizer with micronutrients, contains a balanced ratio of nitrogen, phosphorus and potassium and a mixture of a complex of important trace elements in a chelated and water-soluble form. Designed to handle a wide range of crops</p>	<p>N – 9,9%; P₂O₅ – 9,9%; K₂O – 8,7%; B – 0,019%; Fe – 0,062%; Mn – 0,037%; Zn – 0,031%; Cu – 0,031%; Mo – 0,006%</p>

Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>Quantum TRIO Complex of 100% EDTA chelated micronutrients with Zinc, Manganese, Copper that Nitrogen- and Sulfur-enriched. Fertilizer is applied IN-FURROW (soil application) with the seed and also for foliar application to provide mineral plant nutrition of winter and spring sown crops. Fully compatible in a tank mix with concentrated liquid NPK fertilizer, biostimulants and plant protection products due to the Extra-chelation technology</p>	<p>N – 10% (100 g/l); Zn – 3% (30 g/l); Mn – 3% (30 g/l); Cu – 2% (20 g/l); SO₃ – 6,5% (65 g/l); Amino acids – 4% (40 g/l); pH – 8,0-8,5; Density – 1,30-1,35 kg/l</p>

LIQUID DEFICIENCY CORRECTORS

Liquid concentrated fertilizers for the correction or elimination of macro- and micronutrients deficiencies refer to this subgroup

Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>Quantum BORON ACTIVE (EC Fertilizer) Highly effective fertilizer based on readily available biologically active Boron compounds. Amino acids in the fertilizer composition improve Boron uptake, boost metabolism and improve plant resistance to stress. This fertilizer with Boron-Polyol complexes can affect Boron remobilization via phloem to growth points</p>	<p>B – 14,0% (140 g/l); N – 5,5 % (55 g/l); Cu – 0,005% (0,05 g/l); Mo – 0,02% (0,2 g/l); pH – 6,5-8,5; Density – 1,30-1,36 kg/l; additionally Amino acids (1,5%) and polyol complexes to increase B mobility</p>
<p>Quantum BORON ACTIVE+Mo (B+Mo) Special type of Boron fertilizer with high molybdenum content with addition of cobalt. This fertilizer successfully used for foliar nutrition of beans and other molybdenum-demanding crops</p>	<p>B – 12,0% (120 g/l); N – 4,7% (47 g/l); Mo – 0,6% (6 g/l); Co – 0,04% (0,4 g/l); pH – 7,0-8,0; Density – 1,23-1,28 kg/l</p>
<p>Quantum BORON CLASSIC (B) Classic fertilizer based on boron complex with ethanolamine with an optimally selected concentration of Boron</p>	<p>B – 15,0% (150 g/l); N – 6,0% (60 g/l); pH – 7,0-8,0; Density – 1,34-1,37 kg/l</p>
<p>Quantum ZINC CHELATE (Zn) Complex Zinc fertilizer with high concentrations of phosphorus, Potassium and Zinc in chelated form. It is used to provide nutrition for agricultural crops sensitive to Zinc deficiency (corn, grapes, fruit and berry crops and others)</p>	<p>Zn – 6,5% (65 g/l); P₂O₅ – 10,0% (100 g/l); K₂O – 10,0% (102 g/l); pH – 7,5-8,5; Density – 1,20-1,30 kg/l</p>
<p>Quantum UltraZinc 117 (EC Fertilizer) A highly concentrated Zinc microfertilizer in the chelated form (EDTA). It is used for the correction or elimination of Zinc deficiencies. Fully compatible in a tank mix due to the Extra-chelation technology.</p>	<p>Zn – 11,7% (117 g/l); pH – 6,0-7,5; Density – 1,28-1,35 kg/l</p>
<p>Quantum IRON CHELATE (Fe) EDTA Concentrated chelated Iron fertilizer which is used to provide nutrition for agricultural crops sensitive to Iron deficiency (vegetables, fruits, grapes, conifers, lawn grasses and others)</p>	<p>Fe – 6,5% (65 g/l); pH – 6,5-8,8; Density – 1,25-1,35 kg/l</p>

Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>Quantum COPPER CHELATE (Cu) Concentrated chelated Copper fertilizer which is used to provide nutrition for agricultural crops sensitive to Copper deficiency (especially grain crops)</p>	<p>Cu – 6,5% (65 g/l); Additionally contains amino acids; pH – 5,5-7,5; Density – 1,18-1,25 kg/l</p>
<p>Quantum MANGANESE CHELATE (Mn) EDTA A highly concentrated Manganese microfertilizer in the chelated form (EDTA). It is used for the correction or elimination of Manganese deficiencies. Fully compatible in a tank mix with liquid starter fertilizers, biostimulants and plant protection products due to the Extra-chelation technology</p>	<p>Mn – 6,5% (65 g/l); pH – 6,5-8,0; Density – 1,26-1,32 kg/l</p>
<p>Quantum MOLYBDENUM (Mo) Concentrated Molybdenum fertilizer which is used to provide all crops nutrition for the correction or elimination of Molybdenum deficiency. It is especially effective for growing crops on acidic soils (pH<5.5) and leguminous crops (soy, peas, alfalfa, others)</p>	<p>Mo – 4,0% (40 g/l); N – 0,5% (5 g/l); P₂O₅ – 6% (60 g/l); K₂O – 7% (70 g/l); pH – 7,5-8,5; Density – 1,10-1,20 kg/l</p>
<p>Quantum K36 (premium source of Potassium fertilizer combined with an organic acids) Concentrated Potassium fertilizer with a high level of Potassium combined with an organic acids, which provides better leaves absorb as compared to other forms</p>	<p>K₂O – 36,0% (360 g/l); pH – 6,5-8,0; Density – 1,40-1,47 kg/l</p>
<p>Quantum CALCIUM (Ca) Concentrated liquid Calcium fertilizer with a high level of biologically active form of Calcium. This fertilizer is also enriched with Magnesium, Boron and other components to improve the better efficiency</p>	<p>N – 12,6 % (126 g/l); CaO – 20,9 % (209 g/l); MgO – 3 % (30 g/l); B – 0,2% (2 g/l); pH – 4,0-7,0; Density – 1,40-1,50 kg/l</p>
<p>Quantum CALCIUM (Ca) Pro Concentrated liquid Calcium fertilizer with magnesium and plant-derived Amino Acids to improve nutrient absorption and increase stress resistance. Nitrogen is not included that would eliminate the possibility of the stimulation of secondary growth in shoots</p>	<p>CaO – 20,2% (202 g/l); MgO – 2,5% (25 g/l); Amino acids – 5,0% (50 g/l); pH – 6,0-7,8; Density – 1,3- 1,4 kg/l</p>
<p>Quantum SLOW RELEASE NITROGEN Concentrated liquid Nitrogen fertilizer. It is the slow-release fertilizer for providing a controlled and gradual Nitrogen inputs during foliar and root application</p>	<p>N general – 28,0% (360 g/l); slow-release N – 15,0% (190 g/l); pH – 8,0-10,5; Density – 1,24-1,28 kg/l</p>

LIQUID FUNCTIONAL FERTILIZERS OF SPECIFICALLY DIRECTED ACTION

The subgroup of functional fertilizers includes microfertilizers with direct specific action to plant nutrition and seed treatment of certain crops

Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>Quantum PhytoPhos Concentrated Phosphorus&Potassium fertilizer with a fungicidal activity. Contains phosphorus in two forms of phosphate and phosphite. It is used for crop foliar feeding, as well as to provide plants better protection and prevention of fungal and bacterial infections</p>	<p>P₂O₅ – 25% (250 g/l); K₂O – 25% (250 g/l); Additionally contains complex of organic compounds with anti-stress action; pH – 6,5-8,0; Density – 1,30-1,40 kg/l</p>
<p>Quantum COPPERFIELD Concentrated Copper fertilizer with pronounced antibacterial and fungicidal activity</p>	<p>Cu – 9,3 % (93 g/l); pH – 7,0-7,7; Density – 1,23-1,28 kg/l; special bioactive organic complex of Copper</p>

Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>Quantum ExtraPhos Super Concentrated liquid fertilizer-stimulator with a pronounced fungicidal effect and a high concentration of Phosphorus in the form of Phosphite, Potassium and Nitrogen. This fertilizer has an active stimulating effect on the root hair growth, due to which there is the increase in moisture absorption and nutrients from the soil</p>	<p>N – 8,0% (80 g/l); P₂O₅ – 58,0% (580 g/l); K₂O – 22,5% (225 g/l); pH – 5,5-7,0; Density – 1,40-1,45 kg/l</p>
<p>Quantum Root Maker Fertilizer and root development stimulator for cereals, legumes and oil crops. It contains the plant hormone auxin, Zinc in chelated form, Phosphorus and Potassium in a special formulation for maximum efficiency. It is used to treat seeds for the purpose of better root development</p>	<p>Zn – 4,5% (45 g/l); P₂O₅ – 15,0% (150 g/l); K₂O – 15,0% (150 g/l); plant hormone Auxin and Phosphorus in the form of Phosphite – 1,5% (15 g/l); pH – 6,0-7,5; Density – 1,27-1,32 kg/l</p>
<p>Quantum Root Maker Extra A new, more effective formulation for an efficient of seed treatment. it combines products with different benefits: fertilizers that stimulate root growth and a complex of nutrients to increase the energy of seeds germination</p>	<p>P₂O₅ – 12,0% (120 g/l); K₂O – 12,0% (120 g/l); Zn – 3,0% (30 g/l); Mn – 0,3% (3 g/l); SO₃ – 1,3% (13 g/l); Cu – 0,7% (7 g/l); B – 0,26 % (2,6 g/l); Mo – 0,01% (0,1 g/l); Co – 0,001% (0,01 g/l); plant hormone Auxin and Phosphorus in the form of Phosphite – 0,5% (5 g/l); pH – 6,0-8,0; Density – 1,20-1,30 kg/l</p>

LIQUID PLANT GROWTH BIOSTIMULANTS

A group of stimulating products for foliar application and seed treatment. It is used to increase resistance to stress, stimulate the absorption of nutrients and improve product quality


Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>Quantum SeaAmine (registration in EU) Complex seaweed-based fertilizers enriched with nutrients. It is a complex of biologically active components for plant stimulating effect. It is used to maintain a hormonal balance in critical phases of plant growth stages, to increase stress resistance and improve the plant's absorption of nutrients</p>	<p>N – 7% (70 g/l); K₂O – 7% (70 g/l); P₂O₅ – 7% (70 g/l); seaweed extract – 21% (210 g/l); carbohydrates (poly- and oligosaccharides), macro- and trace elements, Amino acids, phytohormones and hormone-like substances, vitamins; pH – 7,2-7,6; Density – 1,23-1,28 kg/l</p>
<p>Quantum AminoMax 200 (registration in EU) Complex foliar fertilizer with powerful anti-stress effect which contains a balanced combination of macro- & microelement and a high concentration of plant-based L-amino acids</p>	<p>Amino acids – 20,0% (200 g/l); N – 2,4% (24 g/l); P₂O₅ – 2,2% (22 g/l); K₂O – 2,3% (23 g/l); B – 0,03% (0,3 g/l); Fe – 0,06% (0,6 g/l); Zn – 0,05% (0,5 g/l); Cu – 0,06% (0,6 g/l); Mn – 0,06% (0,6 g/l); Mo – 0,012% (0,12 g/l); Co – 0,006% (0,06 g/l); enriched with a complex of biologically active compounds; pH – 4,0-5,5; Density – 1,10-1,15 kg/l</p>
<p>Quantum AminoFrost Anti-stress complex to increasing crop resistance and helping them to overcome plant stress caused by cold temperatures. It is used as a cryoprotectant shortly before freezing for protection and rapid recovery after stress</p>	<p>N – 0,5 % (5 g/l); Zn – 0,5% (5 g/l); B – 1,0% (10 g/l); Cryoprotectors – 30,0% (300 g/l); Amino acids – 9,0% (90 g/l); Organic acids – 1,5% (15 g/l); pH – 6,5-7,5; Density – 1,05-1,12 kg/l</p>

Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>Quantum Fort Knox Complex fertilizer is based on a special formulation of Amino acids and Seaweed extracts as well as additionally enriched in trace elements. It is used to stimulate fruiting, ripening and improving fruits color intensity</p>	<p>Amino acids – 10% (100 g/l); Seaweed extract – 10% (100 g/l); N – 1,5 % (15 g/l); Zn – 1% (10 g/l); B – 1,0 % (10 g/l); Mn – 1% (10 g/l); Mo – 0,1% (1 g/l); pH – 5,5-7,5; Density – 1,15-1,20 kg/l</p>
<p>Quantum AquaSil (registration in EU) Complex Silicon fertilizer for foliar application of grain, technical, fruit, vegetable and ornamental crops. Fertilizer consists of a special formulation of Silicon and Potassium with the added humic substances to increase the uptake of nutrients</p>	<p>SiO₂ – 20% (200 g/l); K₂O – 10% (100 g/l); Humic substances</p>
<p>Quantum HUMAT Liquid and highly concentrated source of Potassium Humate was processed from high-quality leonardite via a unique extraction method and enriched with soluble forms of Silicon to protect plants from stresses and enhance immunity</p>	<p>K₂O – 5-6% (50-60 g/l); SiO₂ – 1% (10 g/l); Potassium Humate with a high level of Fulvic acids – 15-18% (150-180 g/l); Density – 1,05-1,17 kg/l</p>

PHYTOHORMONAL PRODUCTS

Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>Quantum WinPlant A powerful fertilizer and biostimulant which contains a balanced combination of phytohormones. It increases crop yield, promotes cell division, growth of the vegetative mass and root system development, substantially improves the immunity of plants to adverse environmental conditions. It is used for seed treatment, foliar application and compatible with starter fertilizers (In-furrow Technology)</p>	<p>N – 0,25 % (2,5 g/l); cytokinin – 0,9 % (9 g/l); auxin – 0,45 % (4,5 g/l); gibberellin (GA4 + GA7) – 0,3 % (3 g/l); Organic acids – 0,5 % (5 g/l)</p>
<p>Quantum Gibbon Fertilizer and growth stimulator based on gibberellic acid for the activation of parthenocarp and berry, vegetable and pome set fruit</p>	<p>N – 0,25 % (2,5 g/l); gibberellin – 2,0 % (20 g/l)</p>
<p>Quantum Moderator NAA Fertilizer and plant growth Regulator based on Naphthylacetic acid (NAA), belongs to a class of auxins. It is designed for the premature flowers and fruits dropping, thinning of fruits on apple trees and rooting of other crops during vegetative propagation by stem or leaf cuttings</p>	<p>K₂O – 1,0 % (10 g/l); NAA (α-Naphthaleneacetic acid) – 5% (50 g/l); Organic acids – 0,3 % (2,5 g/l); pH – 6,5-8,0; Density – 1,00-1,10 kg/l</p>
<p>Quantum Moderator BA Plant growth regulator based on Benzylaminopurine (BA), cytokinin class. It is designed for the stimulation growing and thinning of fruits on apple and pear trees</p>	<p>N – 0,2% (2 g/l); BA (6-benzylaminopurine) – 2% (20 g/l); Organic acids – 1,0 (10 g/l); Density – 1,00-1,10 kg/l</p>

WATER-SOLUBLE DRY FERTILIZERS FOR FERTIGATION

Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>PROVENTUS (Dry special fertilizer) </p> <p>Water-soluble NPK fertilizer with micronutrients for fertigation and foliar application. It contains complexes of chelated minerals (Fe, Mn, Zn, Cu, B, Mo) and biologically-active substances. This fertilizer is applied on all crops at different growth stages and added to fertigation systems and greenhouse irrigation</p>	<p>Ultra-BORON 21% Balance 01 (NRK 19-19-19 + ME + BR) Ultra P (NPK 13-40-13 + ME + BR) Ultra K (NPK 3-8-38 + ME + BR) Ultra P(K) (NPK 3-37-37 + ME + BR)</p>

SUSPENSION FERTILIZER

Fertilizer Recommendations	Chemical composition (% w/v) and properties
<p>Quantum S Zn 700+Ti</p> <p>Concentrated suspension fertilizer containing 700 g/L zinc, for seed treatment and foliar application to prevent and treat zinc deficiency in crops sensitive to zinc deficiency (corn, grapes, fruit and other crops). Additionally, enriched with titanium (Ti), which performs a stimulating function by activating the basic physiological processes of plants</p>	<p>Zn – 70 % (700 g/L); Ti – 0,3 % (3 g/L); pH – 6,0 - 10,0; Density – 1,6 – 1,8 kg/l</p>
<p>Quantum S Boron</p> <p>Suspension fertilizer with high content of boron, sulfur and manganese. The product is additionally enriched with copper and molybdenum, which stimulate nitrogen assimilation and increase nutrient use efficiency of crop with high boron requirement. It buffers the pH of the tank-mix solution to a slightly acidic level</p>	<p>B – 10% (100 g/L); N – 2.5% (25 g/L); SO₃ – 4% (40 g/L); Cu – 1% (10 g/L); Mn – 2% (20 g/L); Mo – 0.35% (3,5 g/L). It contains a complex of adjuvants; pH – 3,5-5,0; Density – 1,25-1,45 kg/l</p>
<p>Quantum S MicroComplex</p> <p>Multicomponent universal suspension fertilizer with high content of fully EDTA-chelated micronutrients, nitrogen, potassium and sulfur, additionally enriched with magnesium. It is designed for seed treatment and foliar treatment of a wide range of crops</p>	<p>N – 10% (100 g/L); K₂O – 12% (120 g/L); SO₃ – 17% (170 g/L); MgO – 4,2% (42 g/L); Mn – 2,4% (24 g/L); Zn – 1,6% (16 g/L); Fe – 1,5% (15 g/L); B – 0,5% (5 g/L); Cu – 0,8% (8 g/L); Mo – 0,02% (0,2 g/L); pH – 5,0-7,0; Density – 1,35-1,50 kg/l</p>

HIGH TECHNOLOGY ADJUVANTS Quantum® ASSISTANT

This line of adjuvants was developed to improve the application of plant protection products, fertilizers and fertilizer solutions correction

<p>CHAMELEON</p> <p>Conditioner, buffer agent with pronounced acidifying effect. It is used to correct the pH of the tank-mix and soften water. Contains wetting and moisture-retaining agents</p>	<p>TRITON</p> <p>Multifunctional adjuvant, penetrant. Improves the penetration of active substances into the leaf, acidifies the working solution, aligns the spray cone and reduces droplet drift</p>
<p>GEKKON</p> <p>Organosilicon wetting adjuvant reduces the surface tension of solutions, ensures uniform distribution of solutions and excellent wetting of the leaf surface</p>	<p>SOFTENER</p> <p>Conditioner, water softener based on compounds of carboxylic acids and phosphorus-containing compounds. Binds cations hardness (Ca and Mg) and other metals in tank solutions of pesticides to prevent the interaction of active substances</p>
<p>TANK CLEANER</p> <p>Alkaline detergent for neutralization and removal of pesticide residues from sprayer tanks and nozzles</p>	<p>FOAM DESTROY</p> <p>An effective adjuvant of the organosilicon group to prevent excessive foaming as a result of preparing a working solution with pesticides</p>



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