

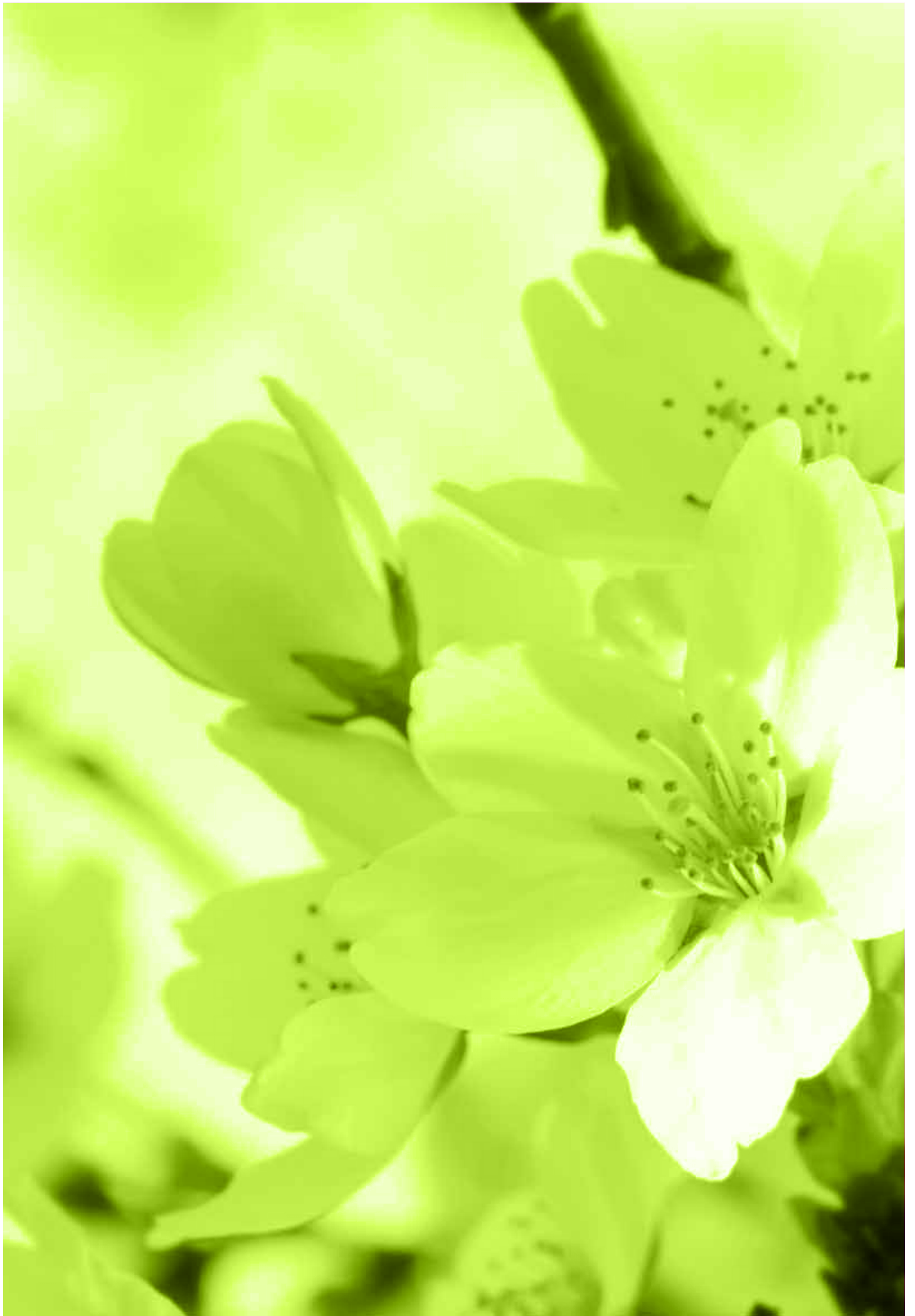
PRODUCT CHARACTERISTICS

ROKOHUMIN

ROKOLAN

ROKOAKTIV





ROKOHUMIN Duplo is universal liquid organomineral fertilizer with content of aminoacids and humic acids for foliar fertilizing and application by watering or drip irrigation system



1L



3L



50L



1000L



25L



10L



5L

ROKOHUMIN

ROKOHUMIN Duplo is universal liquid organomineral fertilizer with content of aminoacids and humic acids for foliar fertilizing and application by watering or drip irrigation system.

ROKOHUMIN Duplo is a universal fertilizer harmless to the environment, intended for treatment of vestures of all arable crops without exception. Composition of the fertilizer is designed in the way to best possibly adapt to the abilities of individual plants to receive nutrients through the leaf surface. Uniform and rapid absorption of the individual components of fertilizer is subject to compliance with good concentration and timing of individual applications. We use fertilizer primarily in open areas under cultivation or in plastic greenhouses.

Humic acids

- Increase the intensity of respiration of plants (in the absence of oxygen makes breathing easier by quinonid structures which at the oxidation in plant cells take in hydrogen)
- Increase the chlorophyll content
- Help to improve photosynthesis at lower light intensity, e.g. in greenhouses or plastic greenhouses (increasing adsorption of photons)
- Affect income and transport of nutrients (it binds macro and micronutrients to the chelate complexes, from which the plants take them in easier)
- Affect positively on the development of root system, increasing the overall germinative capacity and overall viability

Aminoacids

- It is a versatile building material for the formation of enzymes and plant hormones responsible for the development and plant life in different periods of vegetation, including flowering and fruit ripening.
- Contained in the related protein chain form all the necessary plant micro and macro elements, reducing the need for fertilizers.
- Are direct organic catalyst for the formation of chlorophyll and chloroplasts, which provides a more active photosynthesis.
- In maximum simplify the process of generating the root system and enzymes that break down nutrients in the soil.
- Contribute to the development of organic structures responsible for the palatability of plants, allowing to achieve the highest quality protein, carbohydrates, fats, and aromatic hydrocarbons.
- Has anti-stress effect on the body of the plant, increasing its resistance to water shortage and oversupply, disease and pests.
- Provide a full recovery and regeneration of damage caused by weather and mechanical influences.
- Provide the best possible realization of the genetic potential of crops, improving the hereditary and high-quality performance.
- Amino acids derived from animal protein, with the foliar application, are the most absorbable form of plant nutrition.

Application by foliar fertilization:

- Represents a simple and targeted application through which the plant obtains nutrients and deficient components fast and specifically.
 - In the initial phase of vegetation provides vital growth and increased resistance of the treated plants to diseases and adverse weather conditions, because exactly at that time it is necessary to strengthen condition or possible fast recovery.
 - It works in cases where there is a lack of moisture in the soil which leads to physiological blockage of nutrient intake by root system. Similarly, fertilizer helps in conditions of excessive soil moisture, when the physiological and biochemical activity of the root system is limited due to lack of oxygen in the soil environment. Last but not least, in the situations where there is leaching of nutrients into the lower layers away from the roots, or floating into surface waters.
-

Through foliar fertilization by fertilizer ROKOHUMIN Duplo it is possible to improve overall plant health and with relatively low cost to help achieve excellent outcomes in terms of height and quality of harvest of grown crops.

Generally we apply fertilizer during the period of regeneration fertilization together with plant protection against diseases and pests.

Composition:

total nitrogen (N)	min. 14 % in dry matter
phosphor (P ₂ O ₅)	min. 9 % in dry matter
potassium (K ₂ O)	min. 14 % in dry matter

humic acids
18 types of aminoacids
S, B, Fe, Cu, Mn, Zn, Mo

The heavy metal content does not exceed the limits allowed under the valid legislation of the European Union.

Certificate number: 1290 Issued by: Central Controlling and Testing Institute in Agriculture (ÚKSÚP) on 27 september 2017.

Classification of fertilizers: 3101 00 00 00 - Animal or vegetable fertilizers, whether or not mixed together or chemically treated; fertilizers produced by the mixing or chemical treatment of animal or vegetable products.

Application and dosing:

It is applied by spraying on the leaves starting at 40 to 50% land coverage by leaves so that the surface of leaves is sufficient for efficient nutrient intake from fertilizer. The application is optimal at this time, since there is the best utilization of the components stimulating the growth of the root system and aboveground mass production. In general, it is necessary to focus on a crucial phase of the vegetation of a particular crop. Recommended dosage ranges from 2,5 to 5 liters of ROKOHUMIN per hectare, depending on the specific crop. Fertilizer can be mixed with commonly used pesticides. In the event that the miscibility of pesticides allows it, miscibility can also be combined with highly enriched liquid nitrogen fertilizer - (by tank-mix).

When combined with highly enriched liquid nitrogen fertilizer by tank-mix, we recommend to replace the proportion of highly enriched nitrogen fertilizer by fertilizer ROKOHUMIN Duplo, to prevent unilateral fertilization by nitrogen and deliver to crop also other important basic nutrients and micronutrients.

In the event that there is a risk that it will not be possible to get with mechanization during the season to the growth more than once (for example wet soil in extremely wet year), it is possible to apply the full dose of leaf fertilizer at once, without splitting (without more repetitions). When applying fertilizer at once without splitting, it is necessary to adjust the dilution by water in the tank-mix with batch of +50 liters per every hectare.

Preparation for application:

- Mix fertilizer in the container thoroughly before each use
- Pour into sprayer about 3 / 4 the amount of water and switch on the mixing
- Add the selected quantity of fertilizer according to application table
- In the case compound application we can add additional agents (e.g. pesticides)
- Complete the sprayer tank until the full volume with the rest of the water and apply
- The entire volume of the prepared spray must be applied immediately after preparation

Safety at work:

When using the fertilizer it is necessary to follow basic hygiene, do not eat, drink or smoke. After the completion of work it is necessary to carry out hygienic cleaning by washing with soap and warm water. Fertilizer should be protected from unauthorized persons and children.

First aid:

After contact with skin, rinse and wash it with soap. At the contact with eye it is necessary to cleanse the eye with running water and seek medical advice. If accidentally swallowed, spit it out or induce vomiting, rinse mouth with water and seek medical advice. Provide doctor with information on performed first aid and on fertilizer with which affected worked.

Storage:

In sealed plastic containers, in closed, dry and ventilated storages at temperature 5 to +35 °C, away from food, feed, disinfectants and their packaging. Protect from frost and direct sunlight.

Warranty period:

36 months from the date of production at observing the prescribed requirements for storage.

Packaging:

HDPE canister 1 lit. / 5 lit. / 10 lit. / 25 lit. / 1000 lit.

Foliar fertilization / Application Table

Crop	Dose in liters / hectare	Repeating	Term of application	Accompanying effect	Reached effect
Densely sown grains (wheat, barley, oat, rye, triticale)	2.5 liters ROKOHUMIN 150 liters of water	2 - 3 times / combination with - protection against diseases - protection against pests - highly enriched liquid nitrogen fertilizer with high content of ammonium N, nitrate N and amidic N (tank-mix)	1st time: end of tillering 2nd time: stage of extending growth 3rd time: before flowering beginning (at food wheat we recommend also fourth time and that is after flowering – with aim to achieve the best possible quality)	- improvement of growth condition - optimization of root system growth - optimization of nitrogen intake	- increase of baking and malting value of grain - higher amount of grains in spike and higher TSW (thousand seed weight)
Oil flax Fiber flax	2.5 liters ROKOHUMIN 200 liters of water (it is recommended to use wetting agent)	1 - 2 times / combination with - protection against diseases - protection against pests - protection against weed etc.	1st time: in the stage of fast growth (until 40th day after accrue) 2nd time: 10 - 14 after first application latest within 40th day after accrue)	- increase of drought resistance - growth stimulation at normal moisture conditions	- survival of plants at long term drought - increase of plant resistance against lying
Oil cole seed (winter, spring)	2.5 liters ROKOHUMIN 150 liters of water (it is recommended to use wetting agent)	2 - 3 times / combination with - protection against diseases - protection against pests - highly enriched liquid nitrogen fertilizer with high content of ammonium N, nitrate N and amidic N (tank-mix)	1st time: in spring at coverage of soil by leaves at least 40 - 50 % 2nd time: in stage of butonization 3rd time: before flowering	- improvement of growth condition - optimization of root system growth - optimization of nitrogen intake - increase of cold and drought resistance - strengthening of growth	- preservation of TSW (thousand seed weight) at lack of moisture - increase of TSW (thousand seed weight) at normal moisture
Sun flower	option 1: 2 x 2.5 liters ROKOHUMIN 150 liters of water option 2: 5 liters ROKOHUMIN 150 liters of water	1 - 2 times / combination with - protection against diseases - protection against pests - highly enriched liquid nitrogen fertilizer with high content of ammonium N, nitrate N and amidic N (tank-mix)	1st time: in stage of 6 – 8 leaves 2nd time: at growth height cca 1 meter (combination with spraying against diseases / pests) * never in bloom!	- optimization of roots creation - good condition of growth - support of flora deployment - preservation of growths at lack of moisture respectively at moisture excess - optimization of nitrogen intake	- increase grains amount and TSW (thousand seed weight) a thus total harvest - increase of oiliness
Corn (for grain / for silage)	option 1: 2 x 2.5 liters ROKOHUMIN 150 liters of water option 2: 5 liters ROKOHUMIN 150 liters of water	1 - 2 times / combination with - protection against diseases - protection against pests - highly enriched liquid nitrogen fertilizer with high content of ammonium N, nitrate N and amidic N (tank-mix)	1st time: in stage of 6 – 8 leaves 2nd time: at growth height cca 1 meter (combination with spraying against diseases / pests) * never in bloom!	- optimization of roots creation - good condition of growth - support of flora deployment - preservation of growths at lack of moisture respectively at moisture excess - optimization of nitrogen intake	- increase grains amount and TSW (thousand seed weight) a thus total harvest
Mustard Poppy seed	2.5 liters ROKOHUMIN 150 liters of water	2 - 3 times / combination with - protection against diseases - protection against pests (tank-mix)	1st time: in spring at coverage of soil by leaves at least 40 - 50 % 2nd time: in stage – lengthening growth – creation of buds 3rd time: before flowering	- optimization of roots creation - good condition of growth - support of virgation - increase of flowers amount - optimization of nitrogen intake	- assumption of increase of and TSW (thousand seed weight) - preservation of TSW (thousand seed weight) at lack of moisture - TSW increase at normal moisture conditions

Crop	Dose in liters / hectare	Repeating	Term of application	Accompanying effect	Reached effect
Pulses (pea, soy, haricot, bean)	2.5 liters ROKOHUMIN 150 - 200 liters of water	2 - 3 times / combination with - protection against diseases - protection against pests	1st time: in stage of young plants up to 7 leaves 2nd time: in period from main growth to the beginning of flowering 3rd time: in period of flowering – shells creation	- higher establishment of lower level of boughs - increase of assimilates flow to the seeds - increase of drought resistance - support of root system creation - improvement of growth condition	- increase of nitrogen intake - preservation of TSW (thousand seed weight) at lack of moisture - TSW increase at normal moisture conditions
Potatoes (consumer, starch, planting)	5 liters ROKOHUMIN 200 liters of water	3 times / combination with - protection against diseases - protection against pests (tank-mix)	1st time: in spring at coverage of soil by leaves at least 40 - 50 % (combination with protection against diseases, pests) 2nd and 3rd time: at the need of application of products for plants protection (e.g. against moulds, Colorado beetles and so – applied in the form of tank-mix)	- support of creation of root system - support of stolons growth - increase of amount of middle and smaller bulbs at planting potatoes - increase of starch content in industrial potatoes - increase of amount of bulbs at consumer potatoes	- increase of nitrogen intake and its effective use for harvest creation - optimal condition of plants - increase of chlorophyll concentration - enlargements of leaves and their slower aging
Sugar beet	2.5 liters ROKOHUMIN 150 liters of water	3 - 4 times according to state of growth and course of weather conditions 4th time – late summer (July)	1st time: in spring at coverage of soil at least 40 - 50 % 2 a 3rd time: in two – three week intervals - option to apply separately or in combination with protection against diseases / pests (tank-mix)	- increase of nitrogen intake and its effective use - optimal growth condition - enlargement of bulbs, root	- late summer application (July) may increase sugar content of bulbs up to 2%
Hop	2.5 liters ROKOHUMIN 200 liters of water	2 - 3rd time- combination with - protection against diseases - protection against pests	1st time: end of May – beginning of June 2nd time: from second half of June until 10th July 3rd time: from second half until the end of July	- plants greening (green effect) - enlargement of leaves surface and their amount - increase of nitrogen intake (creating a condition for harvest increase)	- support of growth and processes leading to creation of better harvest - increase of qualitative parameters - increase of content of alpha bitter acids in hop heads
Grape vine	2.5 liters ROKOHUMIN 200 liters of water	5 - 6 times - combination with - protection against diseases - protection against pests (tank-mix)	1st time: application at young growing sprouts – following application after blossoming and then in 2-3 weeks intervals with combination with protection against diseases / pests	- increase of assimilates flow to berries - immediate effect on sugar and acid biosynthesis	- increase of sugar content and extract at modest harvest increase - significant improvement of health condition - growth strengthening and creation of conditions for harvest increase
Vegetables (transplants / Young plants)	2.5 liters ROKOHUMIN 200 liters of water (it is recommended to use wetting agent)	1st time after creation of first proper leaves and then according to need every 10 – 14 days in combination with protection against diseases / pests	Application on plants until 10 proper leaves	- intensive creation of root system - higher resistance to weather changes	- increase of nitrogen intake - creation of conditions for higher and quality harvest

Crop	Dose in liters / hectare	Repeating	Term of application	Accompanying effect	Reached effect
Roots (carrot, parsley, celery, beetroot, radish, horse radish)	2.5 liters ROKOHUMIN 150 liters of water	2 - 3rd time according to state of growth and course of weather conditions	1st time: in spring at coverage of soil by plants at least 40 - 50 % 2nd and 3rd time: in two – three week intervals - option to apply separately of in combination with protection against diseases / pests (tank-mix)	- optimal condition of growth - enlargement of bulbs, root	- increase of nitrogen intake and its effective use - creation of conditions for higher and quality harvest
Vegetable - bulb (onion, garlic, chive, leek)	2.5 liters ROKOHUMIN 200 liters of water (it is necessary to use wetting agent on onion, garlic and chive)	every 10 - 14 days	during the period of main growth	- intensive creation of root system - higher resistance to weather changes	- increase of nitrogen intake - creation of conditions for higher and quality harvest
Vegetable - fruiting (tomato, capsicum, hot peppers, cucumber, zucchini, eggplant, patissons, pumpkin)	2.5 liters ROKOHUMIN 200 liters of water (it is recommended to use wetting agent)	every 10 - 14 days	during the period of main growth	- intensive creation of root system - higher resistance to weather changes	- increase of nitrogen intake - creation of conditions for higher and quality harvest
Vegetable - cabbage (cabbage, tusk, cole, cauliflower)	2.5 liters ROKOHUMIN 200 liters of water (it is recommended to use wetting agent)	1st time - at coverage of soil by leaves at least 40% and then every 10-14 days	during whole vegetation period	- intensive creation of root system - higher resistance to weather changes	- increase of nitrogen intake - creation of conditions for higher and quality harvest
Vegetable - lettuce (salad, spinach)	2.5 liters ROKOHUMIN 200 liters of water (it is recommended to use wetting agent)	1st time - at coverage of soil by leaves at least 40% and then every 10-14 days	during whole vegetation period	- intensive creation of root system - higher resistance to weather changes	- increase of nitrogen intake - creation of conditions for higher and quality harvest
Strawberries	2.5 liters ROKOHUMIN 150 liters of water	2 - 3rd times protection against diseases, pests	1st time: for regeneration of growth after winter 2nd time: from 1st decade of June until the end of 1st decade of September in combination with phosphor (P) and potassium (K) nutrition	- better creation of root hair - better plant condition (assumption of high and quality harvest) - increase of drought resistance	- bigger fruits with higher sugar content - higher sugar content also at lower sunlight intensity - increase of flowers amount on plant
Small fruit (currants, raspberries, gooseberries, blackberries, jost, blueberries)	2.5 liters ROKOHUMIN 150 liters of water	3rd times protection against diseases / pests	1st time: after blossoming on young growing twigs 2nd time: 14 - 21 days after first application 3rd time: 2 - 3 weeks after second application	- increase of chlorophyll content in leaves (green effect) - increase of amount of leaves - increase of assimilates flow to fruits - significant health condition improvement	- better trees condition (assumption for higher fruit harvest in good quality) - increase of sugar content - bigger fruits

Crop	Dose in liters / hectare	Repeating	Term of application	Accompanying effect	Reached effect
Stone fruit (apricot, peach, plum, cherry) Heart fruit (pear, apple, quince)	2.5 liters ROKOHUMIN 150 liters of water	3rd times protection against diseases / pests	1st time: after blossoming on young growing twigs 2nd time: 14 - 21 days after first application 3rd time: 2 - 3 weeks after second application	- increase of chlorophyll content in leaves (green effect) - increase of amount of leaves - increase of assimilates flow to fruits - significant health condition improvement	- better trees condition (assumption for higher fruit harvest in good quality) - increase of sugar content - bigger fruits
Citrus fruit (lemon, lime, kiwi, tangerine, orange, grapefruit)	2.5 liters ROKOHUMIN 150 liters of water	3rd times protection against diseases / pests	1st time: after blossoming on young growing twigs 2nd time: 14 - 21 days after first application 3rd time: 2 - 3 weeks after second application	- increase of chlorophyll content in leaves (green effect) - increase of amount of leaves - increase of assimilates flow to fruits - significant health condition improvement	- better trees condition (assumption for higher fruit harvest in good quality) - increase of sugar content - bigger fruits
Cotton	2,5 litres ROKOHUMIN 150 litres of water	3-4 times according to the crop conditions and weather conditions during the season	First time after creattion of sufficient leaf area, before flowering. 2-3 times after flowering in 2-3 weeks intervals in combination with protection against diseases / pests	- optimization of root formation - Good condition of the coppice - Support of flowering - Maintaining the plantations during lack of moisture respectively with excess moisture - Optimization of nitrogen intake	- Increased intake of nitrogen - Creating the conditions for higher and better yield
Rise	2,5 litres ROKOHUMIN 150 litres of water	3 times according to the crop conditions and weather conditions during the season	1. time after transplanting 2. time in the phase of tillering 3. time before flowering	- optimization of root formation - Good condition of the coppice - Support deployment of tillers - Improve the process of photosynthesis - Optimization of nitrogen intake	- Increased intake of nitrogen - Creating the conditions for higher and better yield

CAUTION

ROKOHUMIN Duplo can be applied alone or in combination with commonly used pesticides in the form of tank-mix. In any case, we recommend preparing a small amount of spray substance at the desired concentration, respectively combination and try it on a small area. This is particularly recommended for applications for transplants, in the treatment of fruit trees and grape vines (varietal sensitivity). Also please note this process in terms of the tropics (citrus fruits), where are high temperatures and very strong direct sunlight. If there is no damage to the crop within 24 respectively within 48 hours - tested tank mix may be applied to the entire area.

In the event that there is a risk that it will not be possible to get with mechanization during the season to the growth more than once (for example wet soil in extremely wet year), it is possible to apply the full dose of leaf fertilizer at once, without splitting (without more repetitions). When applying fertilizer at once without splitting, **it is necessary to adjust the dilution by water in the tank-mix with batch of +50 liters per every hectare.**



ÚSTREDNÝ KONTROLNÝ A SKÚŠOBNÝ ÚSTAV
POĽNOHOSPODÁRSKY V BRATISLAVE



Č. j. OPHOZE/1619/2017

Certifikát č. 1290

z 27. septembra 2017

ÚKSÚP Bratislava v konaní o certifikácii hnojív podľa § 5 zákona č. 136/2000 Z. z. o hnojivách v znení neskorších predpisov (ďalej len „zákon“)

- | | |
|--|--|
| 1. Výrobok (typ): | ROKOHUMÍN - DUPLO |
| 2. Číselný kód colného sadzovníka (HS/CN): | 3101 00 |
| 3. Žiadateľ (obchodný názov a sídlo): | ROKOSAN s.r.o.,
Kollárova 446
078 01 Sečovce |
| 4. IČO: | 36 191 116 |
| 5. Výrobca (obchodný názov a sídlo): | ROKOSAN s.r.o.,
Kollárova 446
078 01 Sečovce |

certifikuje

tento typ výrobku, nakoľko vyhovuje podmienkam podľa ustanovenia § 5 ods. 5 zákona.

Platnosť rozhodnutia podľa ustanovenia § 6 ods. 2 zákona do: 31. 10. 2022

Platnosť rozhodnutia je ďalej obmedzená:

Certifikované výrobky môžu byť uvádzané do obehu.

Odôvodnenie: Výrobok vyhovel podmienkam certifikácie č. 53/2017, stanovených v zmysle zákona. Výsledky skúšok sú uvedené v záverečnom protokole č. 64/2017 zo dňa 27. 9. 2017.

Pred ukončením platnosti certifikátu (minimálne 6 mesiacov) je žiadateľ povinný prihlásiť výrobok k opakovanej certifikácii.



Ing. Peter Rusňák, PhD.
generálny riaditeľ

Matúškova 21, 833 16 Bratislava

tel.: + 421 2 59 880 339.

E-mail: hnojiva@uksup.sk

058913


UKSÚP Central Controlling and Testing Institute In Agriculture BRATISLAVA

 | CENTRAL CONTROLLING AND TESTING INSTITUTE IN AGRICULTURE |
 DEPARTMENT OF ENVIRONMENT AND ORGANIC FARMING

 ROKOSAN s.r.o.
 (Ltd.)
 Kollárova 446
 078 01 Sečovce

Your Letter No. / from	Our No.	Responsible /Contact	Bratislava
	OŽP / 3039/2015	Ing. Roman Hamaj / 312	13. Nov. 2015

Subject:
Permission

Based on your request, registered by the Department of Environment and Organic Farming from the 20th of October 2015 with the reference No. OZP/ 2881/2015, to enroll the product **Rokohumín - liquid** into the List of Fertilizers and Soil Conditioners allowed in Organic Farming, the Department of Environment and Organic Farming, as competent authority, in accordance with valid Commission Regulation (EC) No. 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No. 834/2007 on organic production and labeling of organic products with regard to organic production, labeling and control, as lately amended, therefore, confers

the permission

to use the above product as a fertilizer in organic farming system until **the 30th of November 2020**.

Explanatory statement

The product, by its characteristics and composition, suits the requirements stipulated in Annex I to Regulation (EC) No. 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No. 834/2007 on organic production and labeling of organic products with regard to organic production, labeling and control, as lately amended.

Product Rokohumín - liquid will be enrolled into the List of Fertilizers and Soil Conditioners allowed in Organic Farming published on the website www.uksup.sk in the section "Organic Farming", subsection "Department of Environment and Organic Farming" and subsection "Registers and Lists". Subsequently, it is going to be included on the new List of Fertilizers and Soil Conditioners allowed in Organic Farming published in the Journal of MPRV SR.

Best regards



Ing. Juliana Schlosserová, CSc.

Director of Department

ÚKSÚP, DEPARTMENT OF ENVIRONMENT AND ORGANIC FARMING
 Matúškova 21, 833 16 Bratislava tel: +421 2 59 880 312 e-mail: roman.hama@uksup.sk

Safety data sheet

Status: June 2017

1. Product and manufacturer identification:

Product:	ROKOHUMIN Duplo - liquid organic-mineral fertilizer
Manufacturer and supplier:	ROKOSAN s.r.o. 446 Kolárova st., SK-07801 Sečovce, Slovak Republic ID No. 36191116 / VAT ID No. SK2020220081 tel. +421 56 652 4780 / fax +421 56 6782108 e-mail: export@rokosan.sk
Emergency link:	Slovak Medical University in Bratislava Toxicology department 12 Limbova st., SK-83303 Bratislava, Slovak Republic tel. +421 2 59370 394 (Mrs. Dr. Jana Szokolayova)

2. Information on product hazardousness:

In direct contact with product may cause irritation of mucous membranes. Harmful if swallowed. It is not a danger to the environment.

3. Product composition:

Product type:	18.1.2
Code KP/HS/CN:	24.15.80 / 3101 00 00
Classification:	3101 00 00 - animal or vegetable fertilizers, whether or not mixed together or chemically treated; fertilizers produced by the mixing or chemical treatment of animal or vegetable products.
Composition:	total nitrogen (N) - min. 14 % in dry matter phosphorus (P ₂ O ₅) - min. 9 % in dry matter potassium (K ₂ O) - min. 14 % in dry matter humic acids 18 types of amino acids (fertilizer further contains S, Cu, Fe, Zn, Mn, B, Mo)

4. First aid measures:

Generally:	When using this product, it is necessary to observe basic safety health and safety principles. Use suitable protective gloves, do not eat, drink, and smoke at work! Observe personal hygiene! After treatment of soil with these agents, the soil must be prevented from access of livestock to so treated area for at least 21 days.
If swallowed:	If swallowed, drink about half a liter of lukewarm water. Do not induce vomiting. Consult a physician.
Eye contact:	After eye contact - flush eyes for about 5 minutes with water. Then consult a doctor.
Contact with respiratory system:	After inhalation interrupt exposure, provide air intake and physical rest on bed, no smoking! In severe cases, provide to affected medical assistance.

5. Fire-fighting measures:

Generally:	Product is unflammable.
Special danger:	Not known.

6. Measures at accidental release:

People's protection:	Prevent ingress into eyes, mouths and nose.
Environmental protection:	Product is not dangerous to environment.

7. Storage:

Store in original container in a dry, ventilated and closed storage away from children, away from stores, fodder, medicines, disinfectants and their packaging. Protect from frost and direct sunlight. Store at the temperature from +5 to +35 °C.

8. Expositional restrictions and personal protective equipment:

Breathing protection:	Not required
Work hygiene:	Follow the general principles of safety required for handling chemicals. Do not eat, drink or smoke.
Personal protective equipment:	Work clothes without specification

9. Physical and chemical attributes:

Physical attributes:	3101 00 00 – Animal or vegetable fertilizers, whether or not mixed together or chemically treated; fertilizers produced by the mixing or chemical treatment of animal or vegetable products.
Form:	dark liquid with a characteristic odor

10. Stability and reactivity:

Instability conditions:	Contact of solution with strong alkali. Warming above +35 °C, e.g. when exposed to strong sun light
Decomposition Products:	Ammonia gas oxides of nitrogen.
Other information:	Corrosive effects other than stainless steel and aluminum.

11. Toxicological information:

Acute toxicity:	Not determined
Effect on skin:	Irritant
Effect on mucous membrane:	Irritant
Effect at ingestion:	Irritant

12. Ecological information:

Organic-mineral liquid fertilizer ROKOHUMIN is environmentally friendly, stimulating preparation with fertilizing effects of the plants. It is made from safely processed animal waste. The heavy metal content does not exceed the limits allowed under the valid legislation of the European Union.

13. Information on disposal:

PVC containers of fertilizer should be submitted to the nearest collection point for recycling materials.

14. Transport information:

Special rules do not exist. There is no special marking required.

15. Information on legal regulations:

S2-Keep out of reach of children S13-Keep out of reach of food, drinks, S20-If swallowed, do not eat, drink, S21-don't smoke at use, S25-Avoid contact with eyes, S49-store in the original packaging.

16. Other information:

Declaration:	<p>A safety data sheet contains data on safety and health at work with the product and also environmental protection. This information corresponds to the current state of knowledge and experience of the manufacturer of liquid fertilizer ROKOHUMIN and is in accordance with applicable regulations. This information cannot be a guarantee of the suitability and applicability of product use outside the recommended range.</p> <p>Therefore, the manufacturer is not liable for any loss or damage caused by this fact.</p>
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ROKOLAN - basic fertilizer

ROKOLAN - the basic fertilizer on an organic basis designed for root nutrition of industrial crops. The basic building material serves as starting material for the fertilizer manufacturers to develop new product lines with a guarantee of above-standard effect.

Chemical and physical characters of the product:

ROKOLAN is dark brown to black liquid with characteristic odor.

The active ingredient:

Mixture of 20 kinds of amino acids and nutrients needed for the purpose of application. Amino acids are a direct source of energy, which help to maintain the overall viability of plants. Rokolan positively influences photosynthesis and respiration of plants and significantly enriches the soil with organic ingredients, activates mineralization processes and helps to create humus.

Storage conditions:

Store in dry and in undamaged and closed containers away from food, beverages, feed, pesticides, pharmaceuticals and disinfectants out of the reach of children.

After rinsing put the empty packages into a recyclable container. Storage temperature must not fall below +5 °C.

The measure and method of use:

ROKOLAN is designed for root plant nutrition. It can be used as a topping, or with drip irrigation during line weeding. Standard use is 50 liters per hectare.

The second option is useful for the production of various types of organic based fertilizers, or as an addition to the existing fertilizer to increase the efficiency of fertilizer produced.





ÚSTREDNÝ KONTROLNÝ A SKÚŠOBNÝ ÚSTAV
POLNOHOSPODÁRSKY V BRATISLAVE
Odbor pôdy a výživy rastlín, Matúškova 21, 833 16 Bratislava

Č. j. OPaVR/1208/2013



CERTIFIKÁT č. 1109

z 11. decembra 2013

ÚKSÚP Bratislava v konaní o certifikácii hnojív podľa § 5 zákona č. 136/2000 Z. z. o hnojivách v znení neskorších predpisov (ďalej len „zákon“)

- | | |
|--|---|
| 1. Výrobok (typ): | ROKOLAN |
| 2. Číselný kód colného sadzobníka (HS/CN): | 310100 |
| 3. Žiadateľ (obchodný názov a sídlo): | ROKOSAN, s.r.o., Kolárova 446
078 01 Sečovce |
| 4. IČO: | 36191116 |
| 5. Výrobca (obchodný názov a sídlo): | ROKOSAN, s.r.o., Kolárova 446
078 01 Sečovce |

certifikuje

tento typ výrobku, nakoľko vyhovuje podmienkam podľa ustanovenia § 5 ods. 5 zákona.

Platnosť rozhodnutia podľa ustanovenia § 6 ods. 2 zákona do: 31. 12. 2018

Platnosť rozhodnutia je ďalej obmedzená:

Certifikované výrobky môžu byť uvádzané do obehu.

Odôvodnenie: Výrobok vyhovел podmienkam certifikácie č. j. 1983/2013, stanovených v zmysle zákona. Výsledky skúšok sú uvedené v záverečnom protokole č. 70/2013 zo dňa 10. 12. 2013.

Pred ukončením platnosti certifikátu (minimálne 6 mesiacov) je žiadateľ povinný prihlásiť výrobok k opakovanej certifikácii.



mx. J. Moško
Ing. Juraj Moško
generálny riaditeľ

033096


UKSÚP Central Controlling and Testing Institute In Agriculture BRATISLAVA

 | CENTRAL CONTROLLING AND TESTING INSTITUTE IN AGRICULTURE |
 DEPARTMENT OF ENVIRONMENT AND ORGANIC FARMING

 ROKOSAN s.r.o.
 (Ltd.)
 Kollárova 446
 078 01 Sečovce

OŽP / 2420/2014 Ing. Roman Hamaj / 312 26. Nov. 2014

Subject:
Permission

Based on your request, registered by the Department of Environment and Organic Farming from the 24th of November 2014 with the reference No. OZP/ 2420/2014, to enroll the product **ROKOLAN** into the List of Fertilizers and Soil Conditioners allowed in Organic Farming, the Department of Environment and Organic Farming, as competent authority, in accordance with valid Commission Regulation (EC) No. 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No. 834/2007 on organic production and labeling of organic products with regard to organic production, labeling and control, as lately amended, therefore, confers

the permission

to use the above product **ROKOLAN** as a fertilizer in organic farming system until **the 31th of December 2018.**

Explanatory statement

The product, by its characteristics and composition, suits the requirements stipulated in Annex I to Regulation (EC) No. 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No. 834/2007 on organic production and labeling of organic products with regard to organic production, labeling and control, as lately amended.

Product ROKOLAN will be enrolled into the List of Fertilizers and Soil Conditioners allowed in Organic Farming published on the website www.uksup.sk in the section "Organic Farming", subsection "Department of Environment and Organic Farming" and subsection "Registers and Lists ". Subsequently, it is going to be included on the new List of Fertilizers and Soil Conditioners allowed in Organic Farming published in the Journal of MPRV SR.

Best regards

 Ústredný kontrolný a skúšobný ústav
 poľnohospodársky v Bratislave
 833 16 BRATISLAVA, Matúškova 21
 7-1


 Ing. Juliana Schlosserová, CSc.

Director of Department

 ÚKSÚP, DEPARTMENT OF ENVIRONMENT AND ORGANIC FARMING
 Matúškova 21, 833 16 Bratislava tel: +421 2 59 880 312 e-mail: roman.hama@uksup.sk

ROKOAKTIV - stimulating adjuvant

ROKOAKTIV - stimulating adjuvant to the organic activator acting as the germination stimulating effect on rooting and the early stage of plant growth. ROKOAKTIV avoid adverse impacts stains, it increases the percentage of germination of seeds and ensures a better start in the initial phase of growth due to better development of the root system.

Chemical and physical characters of the product:

ROKOAKTIV is dark brown to black liquid with characteristic odor.

The active ingredient:

A mixture of twenty kinds of amino acids, humic and fulvic acids, auxiliary substances and nutrients needed for the purpose of the application. It contains only organic nitrogen.

Storage conditions:

Store in dry and in undamaged and closed containers away from food, beverages, feed, pesticides, pharmaceuticals and disinfectants out of the reach of children. After rinsing put the empty packages into recyclables container. Storage temperature must not fall below +5 °C.

The measure and method of use:

ROKOAKTIV is used for staining seeds by standard pickling substances used for the purpose of application. Before dosing ROKOAKTIV, please, mix thoroughly.

The rate of application is **5 liters of ROKOAKTIV to stain 1 ton of seed**. After thorough homogenization and suspension is possible to use it on a current devices designed for seed staining. It is necessary to ensure uniform stained seed due to maximum effect preparations.



Test of homogeneity, stability, growth, the power of the structure of cells in the leaves, germination



Comparison to competing products used for killing germs



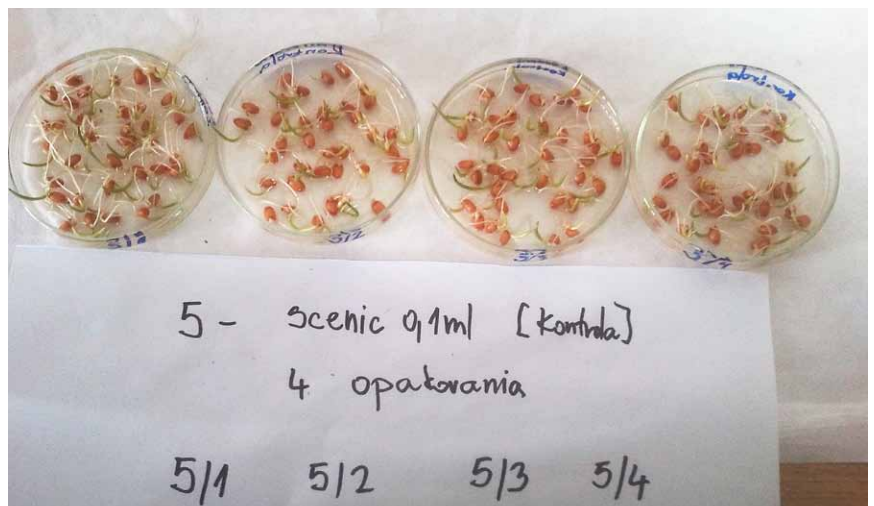
Test for germination and different types and concentrations of killing germs



Example of stained seeds for one experiment and comparison with competing products



Demonstration the germination and growth of seeds without a product with addition of Rokoaktiv



Attempts are marked with numbers of killing germs, zero next to each attempt represents a control, which means that a seed was not stained.

The numbers on the anthers do not correspond to the numbers of experiments because we had made more series, this is just one example.



ÚSTREDNÝ KONTROLNÝ A SKÚŠOBNÝ ÚSTAV POLNOHOSPODÁRSKY V BRATISLAVE
CENTRAL CONTROLLING AND TESTING INSTITUTE IN AGRICULTURE

Č. j. OPaVR/1370/2015



Certifikát č. 1173

z 26. júna 2015

ÚKSÚP Bratislava v konaní o certifikácii hnojív podľa § 5 zákona č. 136/2000 Z. z. o hnojivách v znení neskorších predpisov (ďalej len „zákon“)

- | | |
|--|--|
| 1. Výrobok (typ): | ROKOAKTÍV |
| 2. Číselný kód colného sadzovníka (HS/CN): | 310100 |
| 3. Žiadateľ (obchodný názov a sídlo): | ROKOSAN, s.r.o.
Kollárova 446
078 01 Sečovce |
| 4. IČO: | 36 191 116 |
| 5. Výrobca (obchodný názov a sídlo): | ROKOSAN, s.r.o.
Kollárova 446
078 01 Sečovce |

certifikuje

tento typ výrobku, nakoľko vyhovuje podmienkam podľa ustanovenia § 5 ods. 5 zákona.

Platnosť rozhodnutia podľa ustanovenia § 6 ods. 2 zákona do: 31. 7. 2020


Platnosť rozhodnutia je ďalej obmedzená:

Certifikované výrobky môžu byť uvádzané do obehu.

Odôvodnenie: Výrobok vyhovel podmienkam certifikácie č. j. 1394/2015, stanovených v zmysle zákona. Výsledky skúšok sú uvedené v záverečnom protokole č. 30/2015 zo dňa 22. 6. 2015.

Pred ukončením platnosti certifikátu (minimálne 6 mesiacov) je žiadateľ povinný prihlásiť výrobok k opakovanej certifikácii.




Ing. Bohumil Krajmer
generálny riaditeľ

Matúškova 21 | 833 16 Bratislava | Slovensko +421 2 59 880 200 +421 2 59 880 800 uksup@uksup.sk www.uksup.sk

IČO: 00 156 582 DIČ: 20 210 23 026 Banka: Štátna pokladnica BIC/SWIFT: SPSRSKBAXXX IBAN: SK64 8180 0000 0070 0007 7261
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UKSÚP Central Controlling and Testing Institute In Agriculture BRATISLAVA

| CENTRAL CONTROLLING AND TESTING INSTITUTE IN AGRICULTURE |
DEPARTMENT OF ENVIRONMENT AND ORGANIC FARMING

ROKOSAN
s.r.o. (Ltd.)
Kollárova 446
078 01 Sečovce

Your Letter No. / from **Our No.** **Responsible /Contact** **Bratislava**
OŽP / 2310/2015 Ing. Roman Hamaj / 312 12. Aug. 2015

Subject:
Permission

Based on your request, registered by the Department of Environment and Organic Farming from the 12th of August 2015 with the reference No. OŽP/ 2310/2015, to enroll the product **ROKOAKTÍV** into the List of Fertilizers and Soil Conditioners allowed in Organic Farming, the Department of Environment and Organic Farming, as competent authority, in accordance with valid Commission Regulation (EC) No. 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No. 834/2007 on organic production and labeling of organic products with regard to organic production, labeling and control, as lately amended, therefore, confers

the permission


to use the above product as a fertilizer in organic farming system until **the 31th of July 2020.**

Explanatory statement

The product, by its characteristics and composition, suits the requirements stipulated in Annex I to Regulation (EC) No. 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No. 834/2007 on organic production and labeling of organic products with regard to organic production, labeling and control, as lately amended.

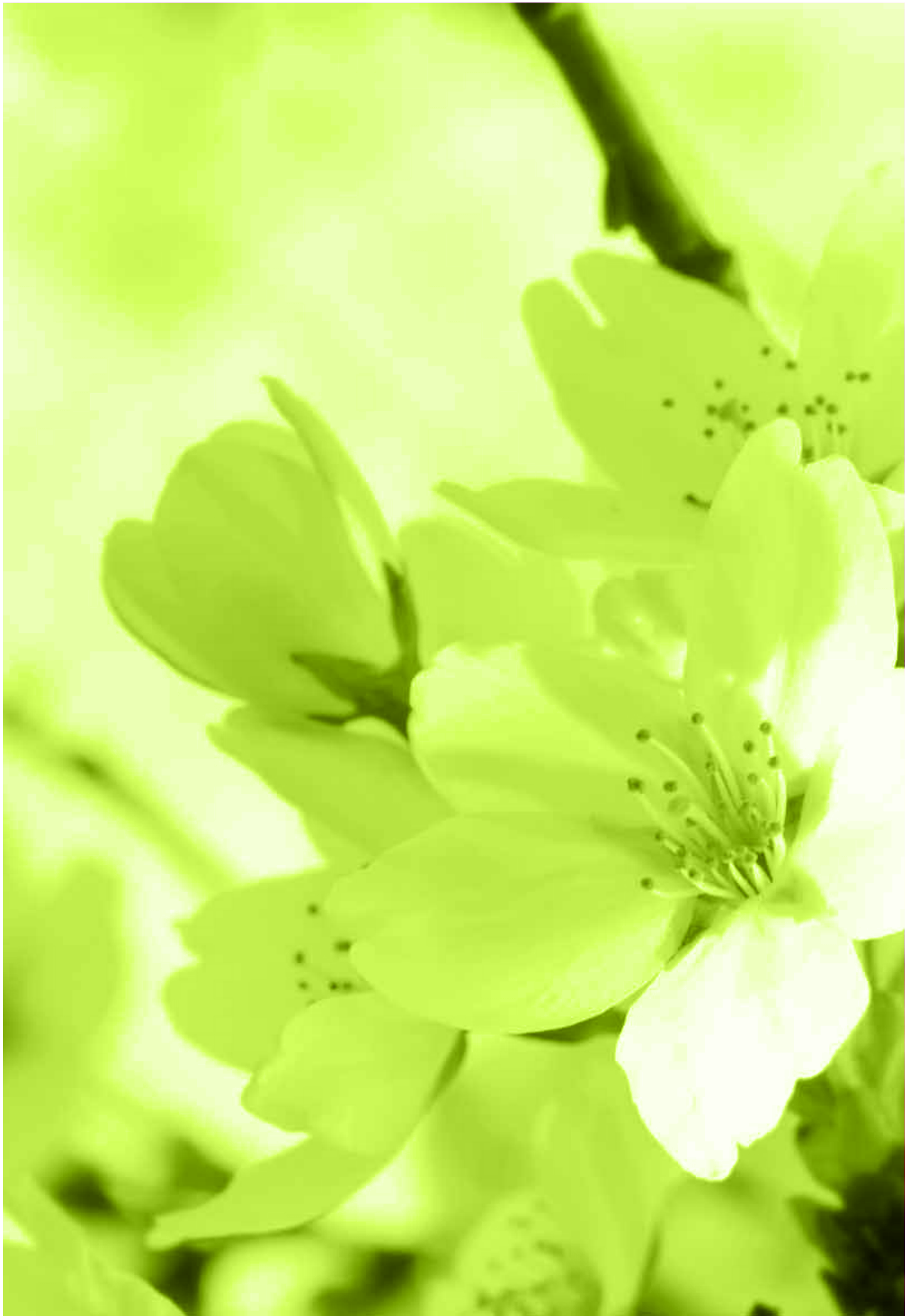
Product ROKOAKTÍV will be enrolled into the List of Fertilizers and Soil Conditioners allowed in Organic Farming published on the website www.uksup.sk in the section "Organic Farming", subsection "Department of Environment and Organic Farming" and subsection "Registers and Lists ". Subsequently, it is going to be included on the new List of Fertilizers and Soil Conditioners allowed in Organic Farming published in the Journal of MPRV SR.

Best regards


Ing. Juliana Schlosserová, CSc.

Director of Department

ÚKSÚP, DEPARTMENT OF ENVIRONMENT AND ORGANIC FARMING
Matúškova 21, 833 16 Bratislava tel: +421 2 59 880 312 e-mail: roman.hama@uksup.sk



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