



NEW GENERATION ORGANIC FERTILIZER

USER'S GUIDE

THE DATA IN THE MANUAL IS GIVEN FOR AVERAGED SOIL PARAMETERS AND CROPS

NOVAPEAT®



HUMAX

CONTENTS

1. Use in agriculture

2. Recommendations for using NOVAPEAT® for various crops:

- Cereals;
- Leguminous crops;
- Cotton;
- Sugar beet;
- Sunflower;
- Vegetables & Fruit.



USING THE NOVAPEAT HUMIC ACID FERTILIZER IN AGRICULTURE

NOVAPEAT IN CROP PRODUCTION:

- increases the yield of various crops: from 10% to 30% for cereals, cotton and from 40% to 50% or more for vegetables, various types of melons;
- reduces the agrochemicals consumption rates, including consumption rate of the carbamide, ammonium nitrate by 30%-70%, consumption rate of the phosphorus fertilizers by 20%-60%, consumption rate of the pesticides by 15%-20%, while relieving stress from their effects;
- increases the resistance of plants to bacterial and fungal diseases;
- increases the resistance of plants to adverse environmental conditions (drought, excessive humidity, frost, etc.);
- activates the development of the root system of plants and their respiration;
- improves the quality of products: increases the content of vitamins, sugars, proteins in it;
- reduces the content of nitrates, radionuclides and residual chemicals in products;
- improves the survival rate of seedlings, nurslings and saplings during transplantation;
- accelerates the ripening of the crop for 10-12 days;
- increases the water-holding capacity of soils by 20%-30%;
- increases soil fertility by renewing and activating the complex of microorganisms in soil;
- binds residual pesticides, heavy metals and other toxicants in soils, preventing them from getting into plants, groundwater and the atmosphere.
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NOVAPEAT'S DIFFERENCE FROM THE COMPETITORS:

NOVAPEAT is a highly concentrated humic acid fertilizer with long-term effect. It effects the plant during the entire period of its growth and development - from seed germination to the very harvest. Humic acid fertilizers from oxidized coal (lignite) have associates of humic substance molecules of very large size, they cannot penetrate immediately into the plant cell, it takes time for their decomposition into smaller ones (under the influence of water, light, heat), so they can begin to provide effect only during the blossoming period and fruit ovaries or even later, but by this time the plant may become weakened or just die from drought or frost.

In contrast to the above, humic substance molecules in peat are much smaller in size, and some of them (fulvic acids and a number of other compounds, which the **NOVAPEAT** contains in large amounts) are able to penetrate into the plant cell immediately at the seed germination stage, giving it growth energy and increasing the root system. Thus, the plant tolerates both drought and frost better during the most vulnerable period - at the initial stage of growth, which is very important for countries with arid climate. Later, at the blossoming stage, humic acid molecules are included in the process, having already decomposed to a size capable of penetrating into the plant cell and the effect of the fertilizer continues until harvest.

NOVAPEAT is a safe product both for the environment and for the human as well.

INCREASING SOIL FERTILITY IS THE BASIS FOR HIGH-YIELD HARVEST

- Pre-sowing soil tillage is carried out no later than 2 weeks before sowing. The consumption of NOVAPPEAT fertilizer during the pre-sowing tillage is **from 10 liters to 35 liters per 1 hectare**.
- It is allowed to use the NOVAPPEAT fertilizer together with CAM (carbamide-ammonia mixture) and other mineral and organic fertilizers. In this case, the amount of these fertilizers can be reduced by 30%-70% of the usual amount. It is allowed to use the NOVAPPEAT fertilizer together with crop protection chemicals.
- If it is necessary to use depleted and degraded areas for agriculture, or polluted areas (polluted with pesticides, heavy metals, organic pollutants, etc.), the dose of the NOVAPPEAT fertilizer during pre-sowing treatment is, based on the characteristics of the area, **from 25 liters to 50 liters per 1 hectare**.

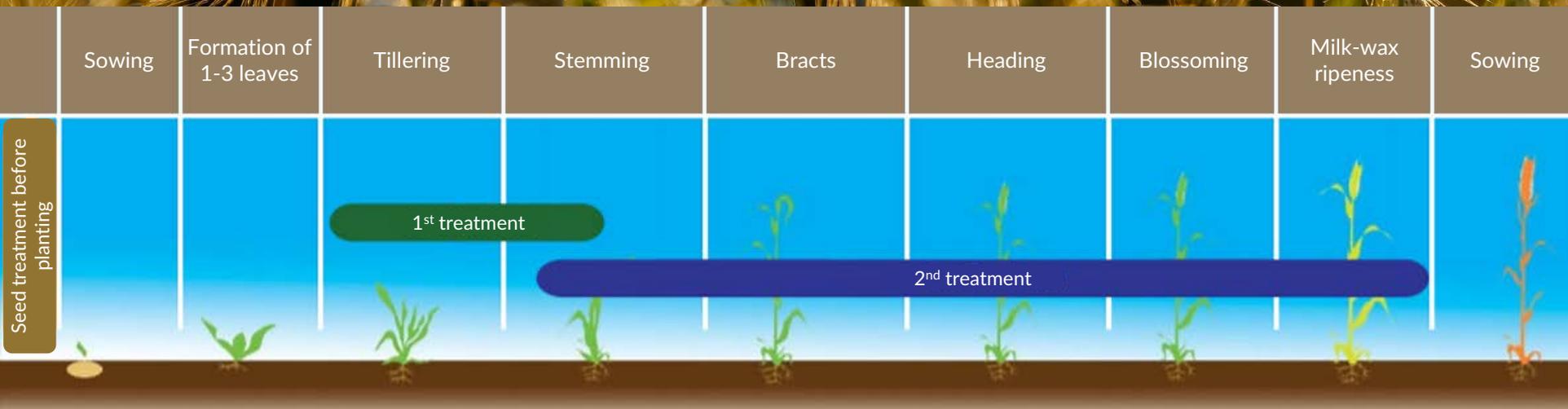


USING THE NOVAPEAT® FERTILIZER

CEREALS, LEGUMINOUS CROPS, SUNFLOWER

WHEAT, BARLEY, OATS, RYE

1. Seed treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p><u>Soaking seeds</u> before planting together with a seed protectant (herbicide).</p> <p><u>Active solution:</u> 450-500 ml of the NOVAPEAT per 10 liters of water for 1 000 kg of seeds.</p>	<p>The 1st treatment is the tillering phase - the beginning of getting into the tube.</p> <p><u>The active solution should be prepared at the rate of:</u> 25-30 liters of the NOVAPEAT per 1 hectare .</p>	<p><u>Double treatment:</u> 1st treatment - tillering phase; 2nd treatment - heading phase.</p> <p><u>Fertilizer consumption rate:</u> 18-20 liters of the NOVAPEAT per 1 hectare. <i>Preparation of the active solution: the recommended amount of fertilizer is diluted in the irrigation norm (determined by the climatic conditions of the region and the technical features of irrigation systems).</i></p>



RICE

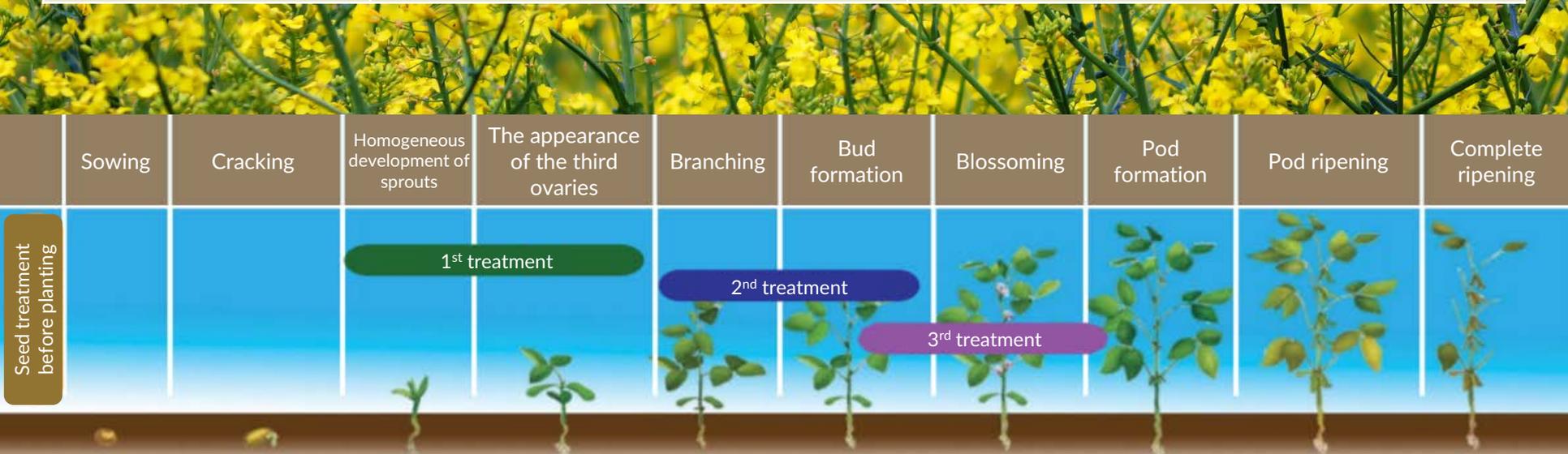


1. Seed treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p><u>Soaking seeds</u> before planting together with a seed protectant.</p> <p><u>Active solution:</u> 400-500 ml of the NOVAPEAT fertilizer per 10 liters of water for 1 000 kg of seeds.</p>	<p><u>Single treatment:</u> 1st treatment - tillering phase - the beginning of getting into the tube.</p> <p><u>Active solution:</u> 30-40 liters of the NOVAPEAT diluted in 400-500 liters of soft water (the volume of the active solution depends on the type of seed protectants) per 1 hectare.</p>	<p><u>Double treatment:</u> 1st treatment - tillering phase; 2nd treatment - shoot formation phase.</p> <p><u>Consumption of the fertilizer:</u> 35-45 liters of the NOVAPEAT per 1 hectare. <i>Preparation of the active solution: the recommended amount of fertilizer is diluted in the irrigation norm (determined by the climatic conditions of the region and the technical features of irrigation systems).</i></p>



SOY, RAPESEED, LENTIL, BEANS

1. Seed treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p><u>Soaking seeds</u> before planting together with a seed protectant.</p> <p><u>Active solution:</u> 500-600 ml of the NOVAPEAT per 10 liters of water for 1000 kg of seeds.</p>	<p><u>Triple treatment:</u> 1st treatment - germination phase - formation of 2-3 real leaves; 2nd treatment - the phase of stemming - budding; 3rd treatment - phase of the beginning of blossoming.</p> <p><u>The active solution should be prepared at the rate of:</u> 35-45 liters of the NOVAPEAT per 1 hectare.</p>	<p><u>Double treatment:</u> 1st treatment - branching; 2nd treatment - the pod formation phase.</p> <p><u>Consumption of the fertilizer:</u> 35-45 liters of the NOVAPEAT per 1 hectare. <i>Preparation of the active solution: the recommended amount of fertilizer is diluted in the irrigation norm (determined by the climatic conditions of the region and the technical features of irrigation systems).</i></p>



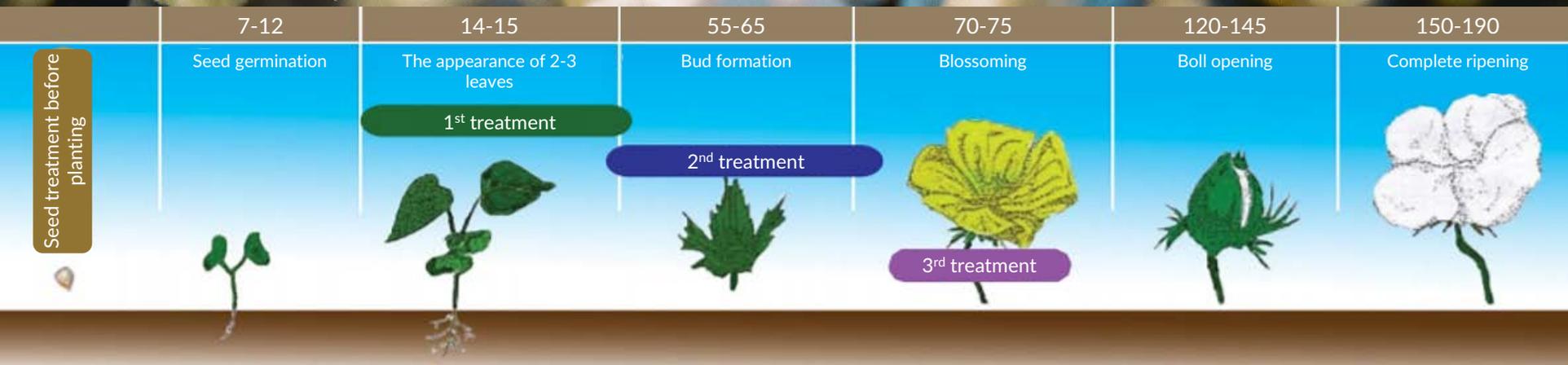
PEAS

1. Seed treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p><u>Soaking seeds</u> before planting together with a seed protectant.</p> <p><u>Active solution:</u> 450-500 ml of the NOVAPEAT per 10 liters of water for 1000 kg of seeds.</p>	<p><u>Triple treatment:</u> 1st treatment - the phase from seeds to leaves; 2nd treatment - stemming phase -2-3 real leaves; 3rd treatment - the budding phase.</p> <p><u>Prepare the active solution at the rate of:</u> 25-35 liters of the NOVAPEAT per 1 hectare.</p>	<p><u>Double treatment:</u> 1st treatment - the phase of the appearance of 3-5 leaves; 2nd treatment - the pod formation phase.</p> <p><u>Consumption of the fertilizer:</u> 35-45 liters of the NOVAPEAT per 1 hectare. <i>Preparation of the active solution: the recommended amount of fertilizer is diluted in the irrigation norm (determined by the climatic conditions of the region and the technical features of irrigation systems).</i></p>



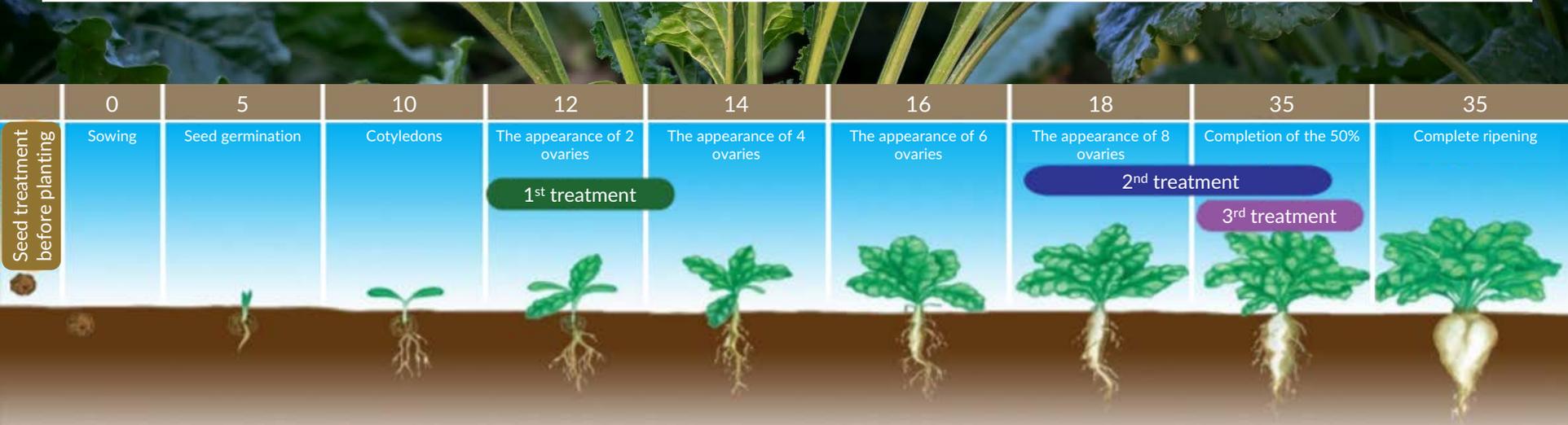
COTTON

<p>1. Seed treatment</p> <p><u>Soaking seeds</u> before planting together with a seed protectant.</p> <p><u>Active solution:</u> 450-500 ml of the NOVAPEAT per 10 liters of water for 1 000 kg of seeds.</p>	<p>2. Treatment during the vegetation period (spraying)</p> <p><u>Triple treatment:</u> 1st treatment - the phase of the appearance of 2-3 leaves; 2nd treatment - bud formation.</p> <p><u>Prepare the active solution at the rate of:</u> 10-15 liters of the NOVAPEAT in 500 liters per 1 hectare.</p>	<p>3. Near-root tillage during the vegetation period</p> <p>1st treatment - the phase of the appearance of 3-5 leaves; 2nd treatment in 12-15 days; 3rd treatment - blossoming phase.</p> <p><u>Fertilizer consumption rate:</u> 30-40 liters of the NOVAPEAT per 1 hectare for each treatment.</p> <p><i>Preparation of the active solution: the recommended amount of fertilizer is diluted in the irrigation norm (determined by the climatic conditions of the region and the technical features of irrigation systems).</i></p>
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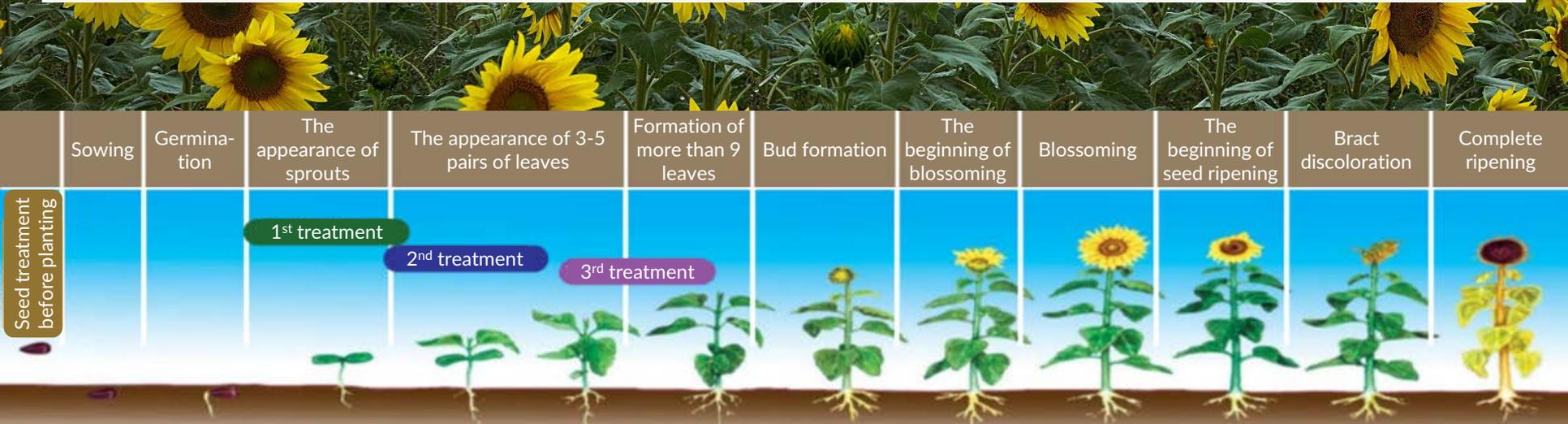
SUGAR BEET

1. Seed treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p><u>Soaking seeds</u> before planting together with a seed protectant.</p> <p><u>Active solution:</u> 400-500 ml of the NOVAPEAT per 10 liters of water for 1000 kg of seeds.</p>	<p><u>Double treatment:</u> 1st treatment - germination phase - formation of 2-3 pairs of real leaves; 2nd treatment - the phase of 2 pairs of real leaves- plants closing in rows.</p> <p><u>Prepare the active solution at the rate of:</u> 25-35 liters of the NOVAPEAT per 1 hectare.</p>	<p><u>Double treatment:</u> 1st treatment - the phase of the appearance of 2-3 leaves; 2nd treatment - the appearance of 8 ovaries; 3rd treatment - completion of the 50%.</p> <p><u>Consumption of the fertilizer:</u> 35-45 liters of the NOVAPEAT per 1 hectare. <i>Preparation of the active solution: the recommended amount of fertilizer is diluted in the irrigation norm (determined by the climatic conditions of the region and the technical features of irrigation systems).</i></p>



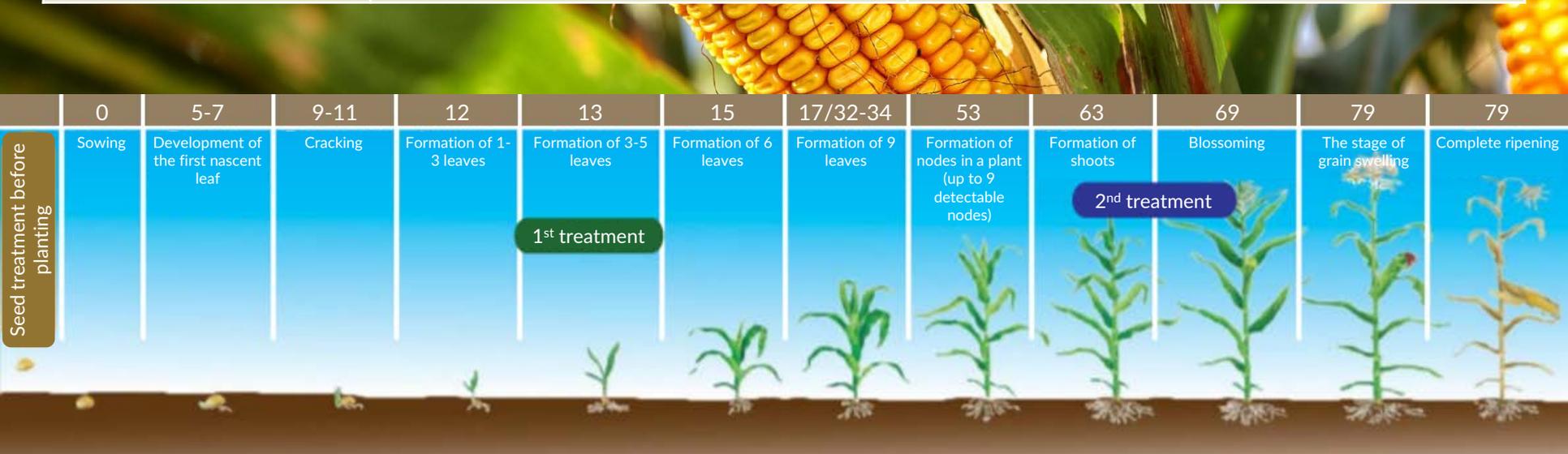
SUNFLOWER

<p>1. Seed treatment</p> <p><u>Soaking seeds</u> before planting together with a seed protectant.</p> <p><u>Active solution:</u> 350-500 ml of the NOVAPEAT per 10 liters of water for 1000 kg of seeds.</p>	<p>2. Treatment during the vegetation period (spraying)</p> <p><u>Triple treatment:</u> 1st treatment - germination phase - formation of 2-3 real leaves; 2nd treatment - the phase of stemming - budding.</p> <p><u>Prepare the active solution at the rate of:</u> 50-60 liters of the NOVAPEAT per 1 hectare.</p>	<p>3. Near-root tillage during the vegetation period</p> <p><u>Double treatment:</u> 1st treatment - the phase of appearance of 3-5 pairs of leaves; 2nd treatment - the phase of 9 leaves. 3rd treatment - the phase of bud formation.</p> <p><u>Consumption of the fertilizer:</u> 35-45 liters of the NOVAPEAT per 1 hectare.</p> <p><i>Preparation of the active solution: the recommended amount of fertilizer is diluted in the irrigation norm (determined by the climatic conditions of the region and the technical features of irrigation systems).</i></p>
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CORN

1. Seed treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p><u>Soaking seeds</u> before planting together with a seed protectant.</p> <p><u>Active solution:</u> 500-600 ml of the NOVAPEAT per 10 liters of water for 1000 kg of seeds.</p>	<p><u>Double treatment:</u> 1st treatment - germination phase - appearance of 3-5 leaves; 2nd treatment - the phase of the panicle formation-blossoming. <u>Prepare the active solution at the rate of:</u> 35-40 liters of the NOVAPEAT per 1 hectare.</p>	<p><u>Double treatment:</u> 1st treatment - the phase of the appearance of 3-5 leaves; 2nd treatment - the phase of shoots.</p> <p><u>Consumption of the fertilizer:</u> 35-40 liters of the NOVAPEAT per 1 hectare. <i>Preparation of the active solution: the recommended amount of fertilizer is diluted in the irrigation norm (determined by the climatic conditions of the region and the technical features of irrigation systems).</i></p>



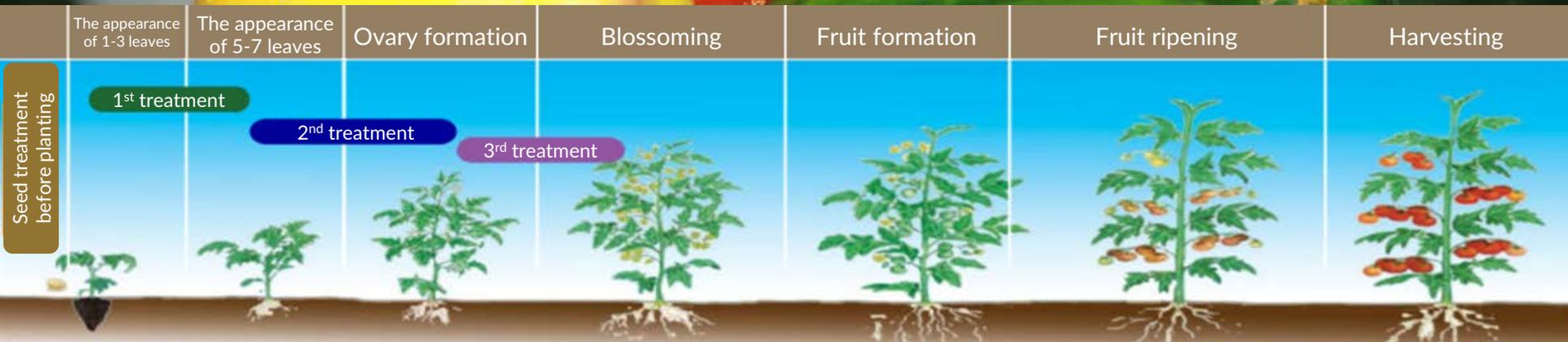


USING THE NOVAPEAT® FERTILIZER

Vegetables

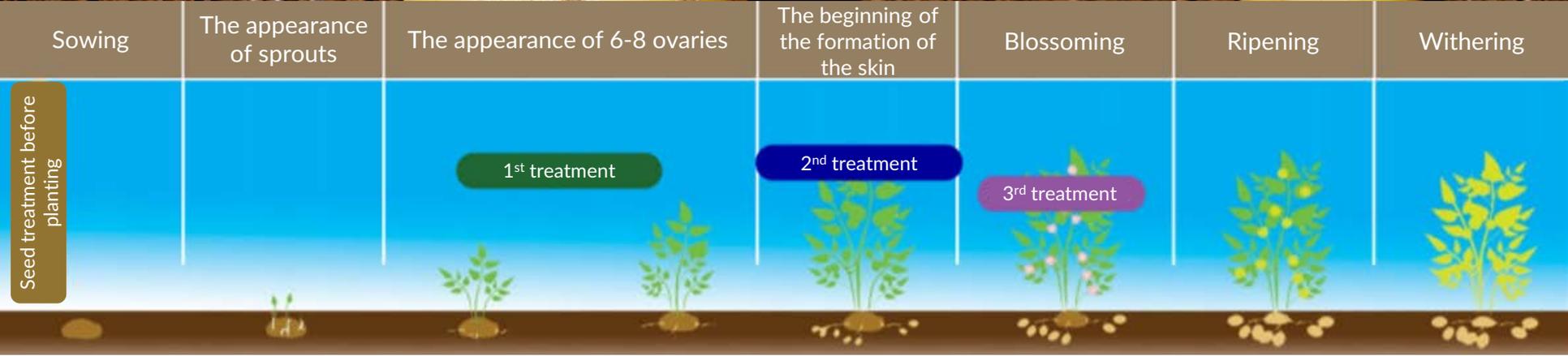
TOMATOES AND CUCUMBERS

1. Seed treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p><u>Soaking seeds</u> before planting together with a seed protectant.</p> <p><u>Active solution:</u> 500-550 ml of the NOVAPEAT per 10 liters of water for 1000 kg of seeds.</p>	<p><u>Double treatment:</u> 1st treatment - the phase of the appearance of 2-2 leaves; Subsequent treatments with an interval of 10-15 days.</p> <p><u>Prepare the active solution at the rate of:</u> 25-30 liters of the NOVAPEAT per 1 hectare.</p>	<p><u>Double treatment:</u> 1st treatment - the phase of the appearance of 3-5 leaves; 2nd treatment - the blossoming phase; 3rd treatment - formation of the fruit.</p> <p><u>Consumption of the fertilizer:</u> 35-40 liters of the NOVAPEAT per 1 hectare for each treatment.</p>



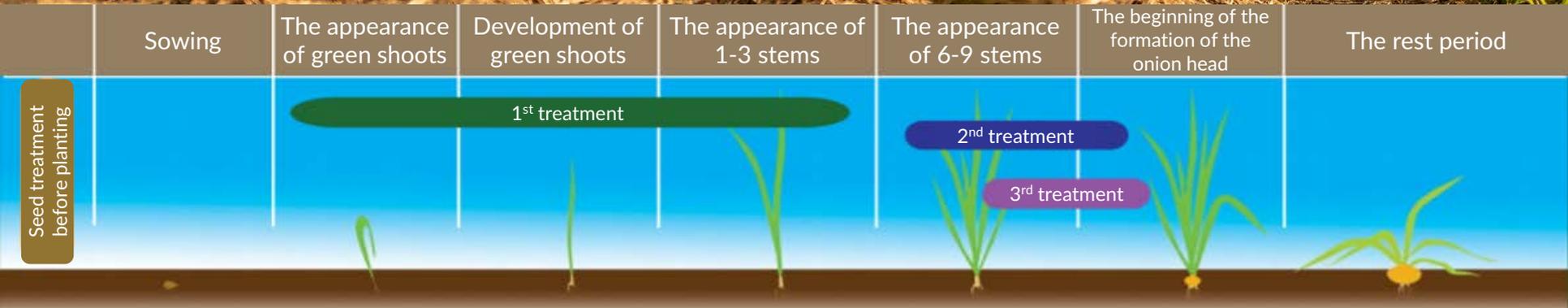
POTATO

1. Seed treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p><u>Soaking the tubers</u> before planting.</p> <p><u>Active solution:</u> 500-600 ml of the NOVAPEAT per 10 liters of water for 1000 kg of tubers.</p>	<p><u>Double treatment:</u> 1st treatment - the phase of appearance of 5-7 leaves; 2nd treatment - budding phase.</p> <p><u>Prepare the active solution at the rate of:</u> 25-30 liters of the NOVAPEAT per 1 hectare.</p>	<p><u>Double treatment:</u> 1st treatment - the phase of the appearance of 6-8 ovaries; 2nd treatment - the ripening phase.</p> <p><u>Consumption of the fertilizer:</u> 40-45 liters of the NOVAPEAT per 1 hectare for each treatment.</p>



ONION

1. Seed treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p><u>Soaking the bulbs</u> for 3 hours before sowing.</p> <p><u>Active solution:</u> 400-500 ml of the NOVAPEAT per 12 liters of water for 1000 kg of the bulbs.</p>	<p><u>Triple treatment:</u> 1st treatment - the phase of the appearance of 2-2 leaves; 2 subsequent treatments with an interval of 10-15 days. <u>Prepare the active solution considering the rate:</u> 15-20 liter of the NOVAPEAT per 1 hectare.</p>	<p><u>Double treatment:</u> 1st treatment - the phase of the appearance of 3-5 leaves; 2nd treatment – onion head formation phase.</p> <p><u>Consumption of the fertilizer:</u> 25-30 liters of the NOVAPEAT per 1 hectare for each treatment.</p>





USING THE NOVAPEAT® FERTILIZER

Fruits and berries

APPLES AND PEARS

1. Cuttings and seedlings treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p>Treatment of cuttings can be carried out together with fertilizers and biological products and allows to increase the survival rate of plants and accelerate their growth.</p> <p><u>Soaking the cuttings for 24 hours.</u> The consumption of the active solution is 18-20 liters per 1000 cuttings.</p>	<p><u>4-time treatment:</u> 1st treatment - 5-7 days after blossoming; 2nd treatment - at the beginning of the physiological drop of the ovaries; 3rd treatment - the period of flower buds appearing; 4th treatment - period of intensive fruit growth.</p> <p><u>The active solution should be prepared at the rate of:</u> 25-30 liters of the NOVAPEAT per 1 hectare.</p>	<p><u>5-time treatment:</u> Watering should be carried out with an aqueous solution of the "NOVAPEAT" fertilizer. The first watering is during the period of intensive growth of shoots. The last watering is during the period of intensive fruit growth. <u>Consumption of the fertilizer:</u> 45-50 liters of the NOVAPEAT per 1 hectare for each treatment.</p>



MELONS: WATERMELON

1. Seed treatment	2. Treatment during the vegetation period (spraying)	3. Near-root tillage during the vegetation period
<p><u>Soaking seeds</u> before planting together with a seed protectant.</p> <p><u>Active solution:</u> 500-600 ml of the NOVAPEAT per 12 liters of water for 100 kg of seeds.</p>	<p><u>Double treatment:</u> 1st treatment - in the phase of formation of the vines; 2nd treatment - in 10-15 days.</p> <p><u>The active solution should be prepared at the rate of:</u> 25-30 liters of the NOVAPEAT per 1 hectares.</p>	<p><u>Triple treatment:</u> 1st treatment - the phase of the appearance of 3-5 leaves; 2nd treatment - blossoming phase; 3rd treatment - ripening.</p> <p><u>Consumption of the fertilizer:</u> 35-45 liters of the NOVAPEAT per 1 hectare for each treatment.</p>

