

# Now is the time for the right investment in maize and sunflower cultivation

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Оторизиран дилър за Амалгерол Есенс и Амалгерол за България, Румъния и Молдова

[www.mediplusr.com](http://www.mediplusr.com)

**With „Medi+R” – ready for the „Green Deal” and the CAP!**

Recently, in the emblematic for Plovdiv hotel „Trimontium“, the Medi+R team gathered its partners and clients from across the country for a seminar in order to expand their knowledge of the profitable technology based on a biostimulant and nitrogen-fixing bacteria.

Farmers shared that they are facing the challenges of the „Green Deal“ and the conditions for transitioning to a more sustainable agricultural production system. The specialists from „Medi+R” emphasized the possibility of

achieving the same yields with reduced rates of nitrogen fertilizers as with treatment at the full nitrogen fertilization rate.

### **How does the technology work and what benefits does it bring to farmers in maize and sunflower?**

The secret lies in the double application of Amalgerol Essence (2x200 ml/da) and the single application of the nitrogen-fixing bacteria Nutribio N (5 g/da).

The combination of the two products causes the root system to increase manifold, enabling the plant to reach the hard-to-access nutrients in the soil.

Amalgerol Essence is a high-quality biostimulant that promotes water retention in the soil thanks to the algae and dry matter it contains. It contains antioxidants that have a positive effect on plants under biotic and abiotic stress.

Amalgerol or Amalgerol Essence are effective both after herbicide stress and after hail. Their use is recommended in all situations, and not only after the occurrence of adverse conditions and stress.

Nutribio N is a unique organic microbial foliar fertilizer, developed on the basis of mycorrhizal fungi, nitrogen-fixing bacteria (CERES Azotobacter salinestris) and others, which enables plants to fix nitrogen from the atmosphere, thereby supplying themselves with one third of the required nitrogen rate. The bacteria in the product remain alive for 4 years when not activated, due to the innovative bacterial drying technology.

### **WHAT SCIENTIFIC RESEARCH SHOWS ABOUT THE TECHNOLOGY**

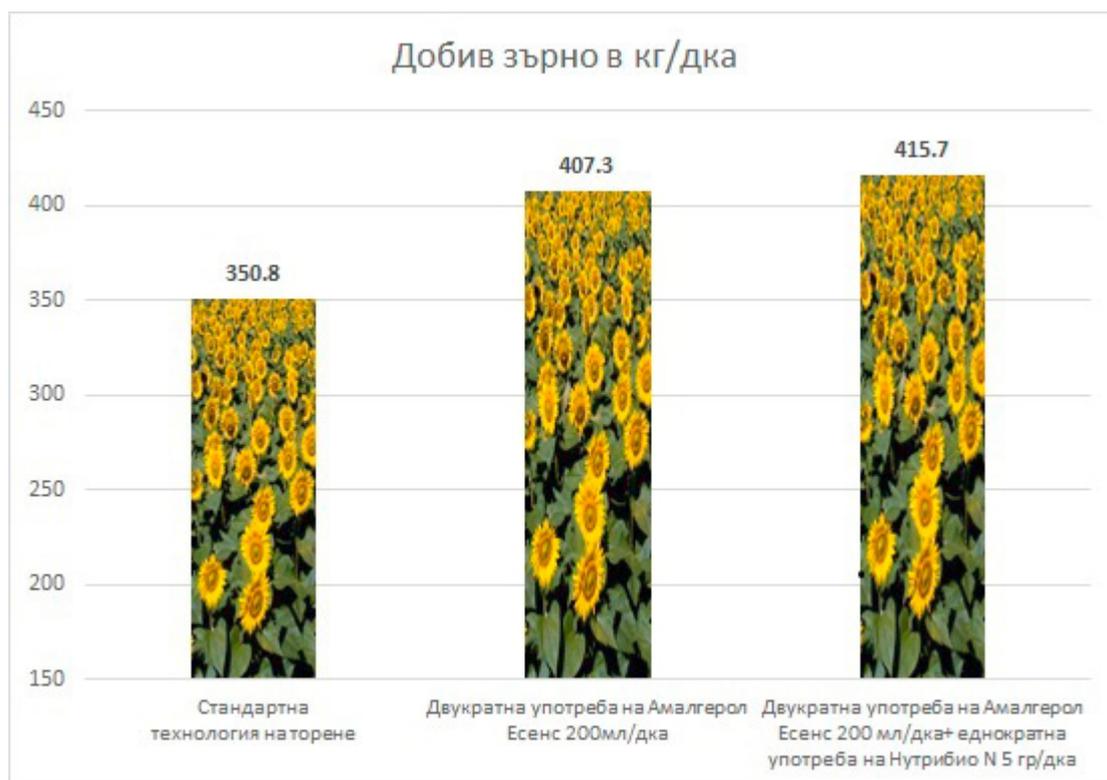
To demonstrate the application and benefits of the products Amalgerol Essence and Nutribio N, a trial was conducted in 2022 at the Maize Research Institute in Kneja. The trial covered two crops – sunflower and maize – and showed the effect of the application of the biostimulant and the nitrogen-fixing bacteria.



## **SUNFLOWER TRIAL 2022**

Due to the failure of the main crop to emerge, sunflower was sown as a second crop within the optimal period – at the end of June. The rainfall that occurred immediately after sowing contributed to uniform and rapid emergence of the plants in the stand.

The relatively high yields obtained as a second crop were strongly influenced by the recorded rainfall at the end of August and the beginning of September.



Assoc. Prof. Emil Vasilev, PhD, shares that the results for this indicator, presented in the table, demonstrate the substantial impact of the applied biostimulants at the 4/6-leaf stage and at budding of the crop. The increases in the tested variants (2,3) are significant – from 56.5 to 64.9 kg/da, or from 16.1 to 18.5%.

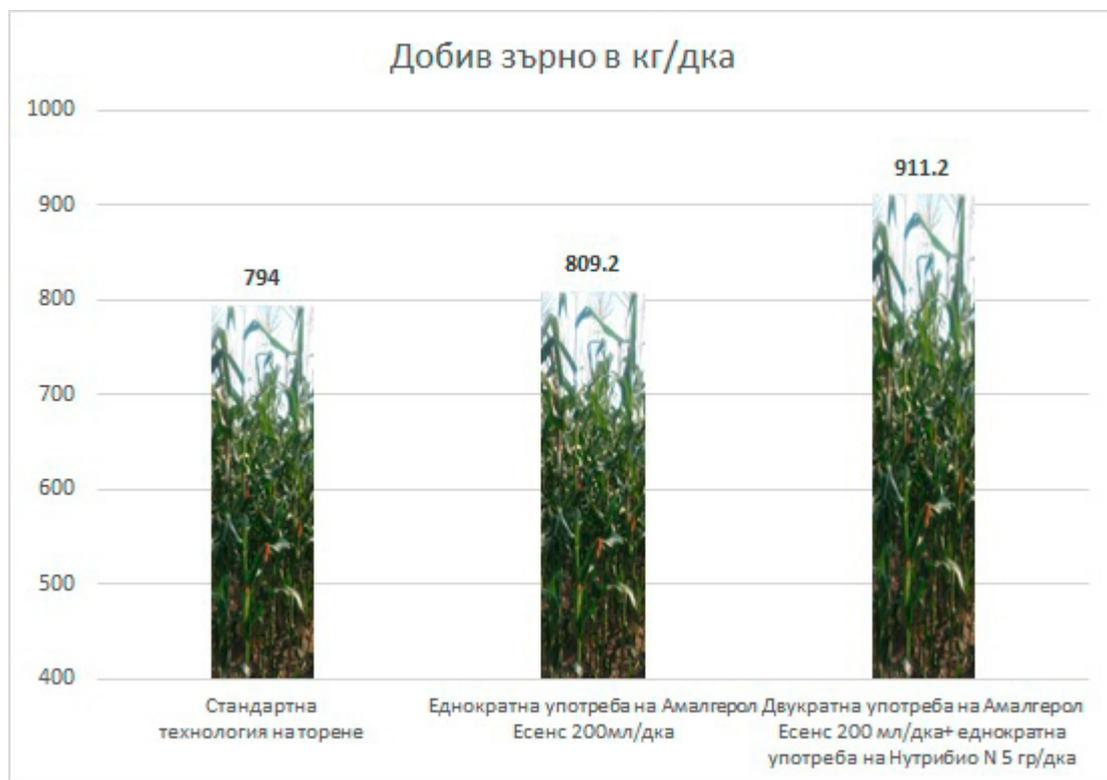
ВАРИАНТ	СХЕМИ НА ПРИЛОЖЕНИЕ	ФАЗА НА ПРИЛОЖЕНИЕ	ДОБИВ кг/дка	ДОБИВ %
1	Контрола	-	350.8	100%
2	Първо пръскане: <b>Амалгерол Есенс</b> 200 мл/дка Второ пръскане: <b>Амалгерол Есенс</b> 200 мл/дка	4 <sup>та</sup> - 6 <sup>та</sup> двойка листа бутонизация	407.3	116.1%
3	Първо пръскане: <b>Амалгерол Есенс</b> 200 мл/дка + <b>Нутрибио N</b> 5 г/дка Второ пръскане: <b>Амалгерол Есенс</b> 200 мл/дка	4 <sup>та</sup> - 6 <sup>та</sup> двойка листа бутонизация	415.7	118.5%

A considerable increase compared to the control of 117.2 kg (14.8%) was recorded in Variant 3, with double treatment with Amalgerol Essence at a rate of 200 ml/da in combination with Nutribio N at 5 g/da.

The highest yield (415.7 kg/da) was produced by Variant 3. It most clearly demonstrates the advantage of the double application of the product Amalgerol Essence at a rate of 200 ml/da and the single application of Nutribio N at a rate of 5 g/da at the 4/6-leaf stage.

The study was conducted on the experimental field of the MRI – Kneja, on soil type „Typical Chernozem“, with the aim of establishing the effect of the bioproducts Amalgerol Essence and Nutribio N in grain maize. Maize was treated with the bioproducts at the 7/8-leaf stage and at the beginning of tasseling with the recommended application rates, using a spray solution of 20 l/da.

To determine the grain yield, representative samples were taken from the harvested cobs in each plot in order to establish the grain-to-cob ratio as well as grain moisture content.



The yield obtained in the control was 794 kg/da. A single treatment with 200 ml/da at the 7/8-leaf stage led to a minimal yield increase of 15.2 kg/da (Variant 2).

ВАРИАНТ	СХЕМИ НА ПРИЛОЖЕНИЕ	ФАЗА НА ПРИЛОЖЕНИЕ	ДОБИВ кг/дка	ДОБИВ %
1	Контрола Азотно торене с Амониева селитра 20 кг/дка	-	794	100%
2	Азотно торене с Амониева селитра 10 кг/дка Първо пръскане: <b>Амалгерол Есенс</b> 200 мл/дка	7ми - 8ми лист	809.2	101.9%
3	Азотно торене с Амониева селитра 10 кг/дка Първо пръскане: <b>Амалгерол Есенс</b> 200 мл/дка Второ пръскане: <b>Амалгерол Есенс</b> 200 мл/дка + <b>Нутрибио N</b> 5 г/дка	3ти – 4ти лист 7ми - 8ми лист	911.2	114.8%

A considerable increase compared to the control of 117.2 kg (14.8%) was recorded in Variant 3, with double treatment with Amalgerol Essence at a rate of 200 ml/da in combination with Nutribio N at 5 g/da.



In summary, the results from the trials conducted at MRI Kneja show high effectiveness of the products even at reduced mineral nitrogen rates. We attribute this to the excellent combination and symbiosis between Amalgerol Essence at a rate of 200 ml/da (or Amalgerol at a rate of 300 ml/da) and Nutribio N at 5 g/da, which provides a natural nutrient medium for the development of the bacteria.

Long-standing clients who have been convinced by the production results from the application of the biostimulants Amalgerol and Amalgerol Essence and the nitrogen-fixing bacteria Nutribio N know how to proceed. Those who have trusted the technology in wheat and have carried out the first spraying are currently performing the second treatment with the products. All the others who have not done so yet should hurry! Now is the time for treatment in sunflower and maize.

The two products can successfully be applied not only in maize and sunflower, but also in other spring crops, winter crops, soft fruit, vegetables, essential oil crops and perennial plantations.

The application of biostimulants and nitrogen-fixing bacteria is environmentally friendly and helps improve the uptake of nutrients by the roots in the soil. Adhering to the application stages in maize and sunflower is essential for their effectiveness.

**THE TECHNOLOGY SAVES 6-8 KG NITROGEN ACTIVE SUBSTANCE OR UP TO 30-35% OF NITROGEN FERTILIZER USE**

Practice has proven that the products Amalgerol, Amalgerol Essence and Nutribio N are necessary and beneficial for Bulgarian farmers, and as they are certified for organic farming in the EU, they fully comply with the requirements for promoting green manuring and organic plant nutrition. Their application secures at least 10% of the nitrogen requirements of the crops from the maximum nitrogen rate (applied with granular fertilizer) of up to 15 kg/da, as stipulated by the Eco-scheme for the preservation and restoration of soil potential under the new Common Agricultural Policy (CAP).

**BECAUSE INVESTMENT IN THE RIGHT TECHNOLOGY AND IN QUALITY PRODUCTS IS NOT A COST! IT BRINGS ONLY BENEFITS!**

For more information regarding the technology and the advantageous package\* offers, please contact our [sales representatives](#).



\*One package for 150 da contains: 60 l Amalgerol Essence and 0.750 kg Nutribio N