

REPORT
on verification of BIO-GEL product in soybean cultivation in Freedom Farm International company

1. Enterprise name: Magistral-service association (Zaporizhzhya Region, Melitopol district, Romashki), Freedom Farm International company.

2. Verification area: 13.5 ha.

3. Persons in charge of conducting the BIO-GEL verification: V.I. Knish and V.A. Marchuk exploring agronomists of BIO-GEL company; B.A. Orlov, chief agronomist, A.M. Tensin, director of Magistral-service association.

4. Time of verification: April – August, 2018

5. Conditions of verification: Magistral-service association soils are typical of the zone (southern loamy black earth), the average humus content in the arable layer being 2.7%. The farm is engaged in winter wheat, soybean and sunflower cultivation.

6. Technology of soybean cultivation. Soybean variety – K-4. Irrigation by spraying. Fertilizers were applied in autumn together with soil loosening, the rate being 100 kg/ha of compound NPK fertilizer and 50 kg/ha of anhydrous ammonia. During the vegetation period soybean plants were sprayed twice:

The first spraying was carried out on May, 18 at the stage of full sprouts with Roundup herbicide (2.2 l/ha).

The second spraying was carried out on June, 20 at the stage of soybean stem elongation with the tank mixture of Navolon (1 kg/ha), Powerfall (1 l/ha) and Speedfall (1 kg/ha) microfertilizers as well as Abacus fungicide (1.5 l/ha).

7. Soybean cultivation technology as recommended by BIO-GEL fertilizer According to the BIO-GEL application technology the product was applied twice for spraying plants, the technology used on the farm remaining without changes. Thus, 2.0 l BIO-gel was just added to the tank mixture.

The first spraying was carried out on May, 18 at the stage of full soybean sprouts. BIO-GEL product, the dose being 2.2 l/ha, was introduced into the tank mixture with Roundup herbicide (2.2 l/ha).

The second spraying was carried out on June, 20 at the stage of soybean stem elongation. BIO-GEL product, the dose being 2.0 l/ha, was introduced in to the tank mixture of Navolon (1 kg/ha), Powerfall (1 l/ha) and Speedfall (1 kg/ha) microfertilizers as well as Abacus fungicide (1.5 l/ha).

8. BIO-GEL product effectiveness compared to the control. Soybean yield in the control (basic technology) was 3.85 t/ha. The yield with BIO-GEL applied was 4.06 t/ha. Soybean yield gain due to BIO-GEL application was 0.21 t/ha, or 5.45%.

The economic effect due to BIO-GEL application was 1906 UAH/ha. (The rice of 4 l/ha of BIO-GEL is 320 UAH. Proceeds from selling 0.21 t soybeans is 2226 UAH/ha as the soybean cost was 10600 UAH/t). BIO-GEL effectiveness: 1 UAH invested in buying BIO-GEL brought 6.95 UAH profit.

9. Persons in charge of verification:

Magistral-service association

Chief agronomist A.B. Orlov

BIO-GEL company

Agronomist

V.I. Knish

Agronomist

V.A. Marchuk

APPROVED BY

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