



**Solving problems with the productivity and quality of vineyards, olive plantations and other mass crops.**

Use of a stand-alone generator for plantation cultivation and soil restoration

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# General principle and capabilities of Electromagnetic unit «EMB»

- ▶ Using our developed " EMB " to solve problems in the field of agriculture. The technology eliminates the defeat of powdery mildew, fruit moth, aphids, scab, fruit moth, locusts, Colorado beetle, fungal parasites, mold, mildew, Anthracnose, gray rot, oidium, insects and other pests of grapes, olive fruits, apples , peaches, sugar beetles, as pests of bananas, pineapples and other crops available in countries with humid and hot climates.
- ▶ We can cope with various diseases of vineyards and other crops in Europe without the use of pesticides and toxic chemicals without problems and high costs.
- ▶ We also solve the problem of banana plantations disease called "Tropical Rage 4" (TR4), which pose a threat to the varieties of Cavendish bananas - they are the basis of the world production and export of these fruits, the virus of " Panama disease"

# The use of «EMB» in viticulture and winemaking

- ▶ - 80% reduction in costs of pest control;
- ▶ - halving the cost means of controlling weeds;
- ▶ - reduction of energy and labor costs in the absence of the need for agrotechnical measures for the introduction of fertilizers and means of combating diseases and pests;
- ▶ - significant reduction of losses on bushes before harvesting and during long-term storage.
- ▶ Application of technology, taking into account the above reduction in the volume of fertilizers and chemicals. preparations, increases the yield of vineyards by 30-50 % depending on the variety and specific conditions of a particular farm.
- ▶ At the same time there are no diseases of plants. Ensured the safety of the bunches before harvest.
- ▶ The technology makes it possible to extend the shelf life without losing the quality of wine grapes.
- ▶ Treatment of vineyards before harvesting makes it possible to improve all quality indicators and raise the sugar content of not less than one. The complex of works allows to obtain high-quality vines, to preserve the root system, vines and kidneys in the process of overwintering and provide an annual high yield.

# Effectiveness «EMB»

- **In addition to high economic efficiency, the technology has the following advantages:**
- - For the introduction of technology in the existing enterprise there is no need for additional investment in changing the structure and processes in the production, the use of additional equipment, as the introduction of technology is carried out on the existing production base.
- - The increase in production efficiency is achieved without aggregate processing of raw materials and products at its various stages. Processing is carried out remotely parallel connection to the existing process without stopping it.
- - The power consumed by the equipment does not exceed 1.00 kW, which means that the use of the proposed technology does not lead to a significant increase in energy consumption.
- - The equipment is mobile and small, practically does not occupy production areas.
- - The use of technology does not worsen the environmental situation at the enterprise, which is confirmed by the relevant hygienic conclusions.
- The technology allows, if necessary, to reduce the fermentation time of the wine material, to carry out its disinfection from yeast and acid-forming microflora, clarification without the use of additional drugs, the extension of the shelf life of wine materials with the preservation and improvement of quality in containers and glass containers. It is possible at the request of the customer to accelerate the maturation or aging of wine materials. When stored in the case of increased acidity treatment leads to a decrease in acidity and restore quality without the use of heat and cold. You can also give the wine specific taste and aroma.

# Types of use «EMB»

- ▶ Processing of " EMB " territories can be carried out remotely from a drone or contact impact from a car, on stationary installations.
- ▶ You can use the stationary method (pillars) and the Autonomous method (Quadcopters)
- ▶ ) For processing during the year, 500 hectares of plantations need 4 Autonomous units with solar panels mounted on metal poles. In the presence of parasites in the soil + installation with metal rods in the ground for soil treatment.
- ▶ When using" EMB " on Quadcopters, coverage and maintenance of different plantations increase many times.
- ▶ **The technical characteristics of our generator**
- ▶ \* Production in anti-vandal execution is possible.(Posts)
- ▶ \* Range from 10 meters to four kilometers. (adjustable radius of influence)



# Vineyard area of use for «EMB»

- Prospects of technologies in winemaking
- Now in Europe, the vine is grown on an area of 3.5 million hectares.
- Spain. Vineyards plantations occupy more than 1 million hectares.
- France. The total area of vineyards is 792 000 hectares.
- Italy. 720 000 ha.
- The United States of America is the fourth largest producer wine-producing power in the world, second only to France, Italy and Spain.
- California vineyards spread over 224 thousand hectares and annually produce about 2 billion liters of wine (almost 3 billion bottles). 3000 plants produce wine of various kinds.
- Argentina is the fifth largest wine producer in the world. The area occupied by vineyards, twice the vineyards of Bordeaux. 200 000 hectares.
- Increasing its vinicultural production over the past 15 years, China has increased the total area of vineyards to 800,000 hectares. (Wine production volumes on the 8th place)
- On the world market, the volume of export-import operations with wine has grown to 104 million hectoliters. Even 10 years ago, imported wine had 25% of global consumption. Now-43%

- Environmentally friendly – no waste, impact on the environment.
- Technically safe\*
- \* Repairable-quick replacement if necessary.
- \* Easy to operate.
- \* Maintenance-in stationary version-battery replacement once a year.
- - In standalone version (Quadcopter) - replacement of consumable parts according to the schedule once a month (cheap parts)
- \* Service life-a Stationary version of 10 years.
- \* Autonomous 3-4 years

