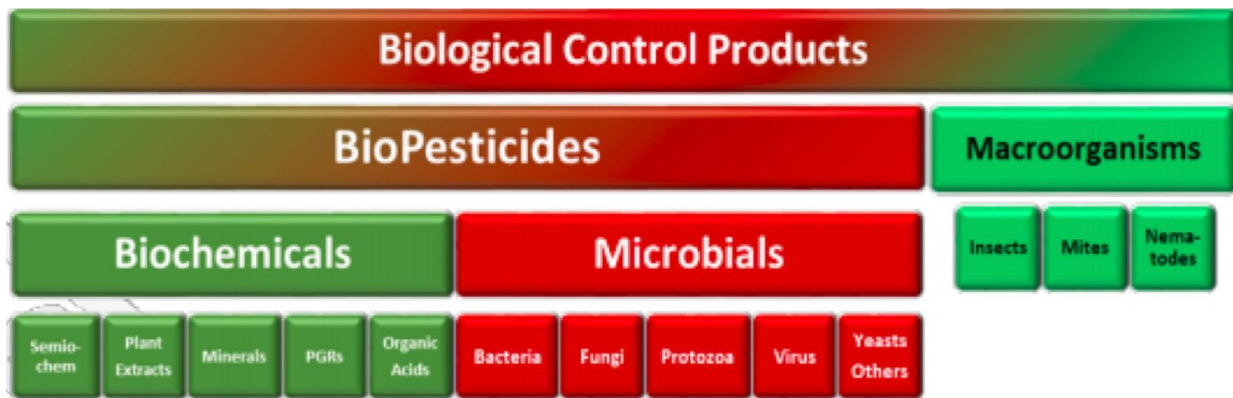


Market:

Our product is designed to target the the biological control industry. A market analysis of the Dunham Trimmer International Bio Intelligence showed a global biological control market in 2017 of \$2.8 Bn of dollars and forecasted a growth to \$11 Bn of dollars by 2025. The compound annual growth rate (CAGR) was calculated to be 16% between 2015 and 2025. Our product can be considered into the biocontrol agents in agriculture, the most important market of the biocontrol agents, that was valued in \$1,680 million in 2015. The market of biological control products can be segmented in different ways by type, target pest, crop application or geographical area. When speaking of type segmentation, our product is part of the biopesticides, specifically in the microbial-bacteria part. This segment is the one with most demand in the world: biocontrol of microbial market is growing faster as both small and large companies, and it is expected to represent 60% of the market by 2025, approximately 6.6 Bn dollars.



Classified by geographic area, we are in the latin american region. According to the Dunham Trimmer analysis, the Latin American region is experiencing the fastest growth in the biological control market, however, nowadays the strongest region in the biocontrol market is North America, having 38% of the global share in 2016. Finally, the crop application in our product will be in the section of vegetable and fruits, and our target is a microorganism.

The current growth of this market is attributed to high cost of agrochemicals and their negative impact on food quality and environment compared to biological control products, considered as crop-safe solutions that are also ecologically sustainable.

As it was mentioned before, the microbial market share is growing faster as both small companies and large companies investing in microbial biocontrol discovery and development. Investors see a great opportunity in backing up these companies because of the rapid growth and reliability of this market.

Marketing competitors

Although no significant events are projected to impact market growth, development of new technologies, especially in the area of microbial products could stimulate market growth.

These new technologies are being implemented in order to get better and more efficient biocontrol products, this means that the market is going to evolve quickly. Our product not only aims to fulfill all the gaps that those products from our competitors can't achieve but also to improve those results from the ones that are currently being used. Since our product is a biocontrol, it can be fitted into the bactericide market, a market that has strong and experienced competitors that keep improving their products in order to keep the sales high. The impact of regulatory changes in the EU, USA or other leading countries could be an upside factor to promote the market growth.

We analyzed our direct competitors based on the characteristics of the products they offer, with special attention in the unmet customer needs. Our product has the objective to fulfil this needs, having the most advantages as possible as compared to the competence.

The first product analyzed was the bordeaux mixture, a mixture of copper(II) sulfate (CuSO_4) and slaked lime (Ca(OH)_2) used as a fungicide and bactericide. The environmental impact lasts longer than other similar products. In terms of phytotoxicity, the bordeaux mixture leaves a salty deposit, has a high pH and the phytotoxicity, which increases in cold and wet environments, is higher than the one of other products. It is important to mention that this mixture is not compatible with most pesticides which makes its preparation difficult because of the longer time it takes to prepare and also requires more knowledge and safety equipment.

Agri-Mycin is a protectant bactericide designed to combat difficult diseases, such as fire blight, in apples, pears, tomatoes, peppers, celery and tobacco. The main disadvantage of Agri-Mycin is that it needs to get mixed with other chemical products, rising in a considerable way the investment of the agricultor.

Blossom Protect is a biocontrol product used for the prevention of fire blight. Beneficial microorganisms outcompete the fire blight pathogen for space and nutrients, blocking the site for fire blight infection. This product could be considered one of our main competitors, but it is sold only in the United States.

CUPRIMICÍN 500 HYPER is a fungicide, bactericide, and mycoplasmicide, to be used as a prevention measure along with antibiotics. This product has a great distribution in Mexico, but has some disadvantages, such as a high level of toxicity to fishes and bees, and short-term effect.

SERENADE® MAX is a natural biological fungicide, based on *Bacillus subtilis* strain QST 713, formulated as a wettable powder, for the control of diseases caused by fungi or bacteria in crops. This fungicide works better as a preventive product, it can be used in presence of the disease but only when combined with antibiotics or other chemicals. SERENADE® MAX can't be applied when raining, against wind or during periods of strong wind. It is phytotoxic in some crops and should not be mixed with other fungicides.

Some of these products work better than others but lack on certain aspects, the goal is for our product is to become the best biocontrol option in the market, fulfilling all the needs and being environmentally friendly with a long-term effectiveness, that all the agricultors want.