

Biomass

Executive Summary

Project Subject: A biological process for growing *Blakeslea trispora* biomass

Entrepreneur: Prof. D. Kovalev

Industry: Microbiology

Project Status: Pre-seed

Product Description: We propose a single inexpensive biological process for obtaining a number of different food products, enriched in carotenoid mixture (pro-vitamins A), vitamin B2, and vitamin E. The products obtained will be used as cattle and chicken feed, and food supplements. Similar products exist today, but they are not manufactured in Israel and are expensive. Our product will be competitive primarily because it has the same quality as similar available products but much lower cost price.

The proposed technology represents a process for microbiological growing of *Blakeslea trispora* in half-liquid mycelium media containing cellulose.

Our product is a protein feed which is naturally enriched by vitamins and microelements. It is of a better quality than the products of competitors because in their case, the cattle-feed is a by-product that is not naturally enriched in the course of mycelium growth, and additional expenses are needed in order to enrich the feed with vitamins and other valuable components. Low cost price allows decreasing the sale price without compromising on quality.

The main product is used as basic feed or food supplements for any kinds of cattle and chicken. By-products (vitamins and carotenes) are used accordingly. This is a non-prescription product, and no licenses or special permissions are needed.

The research we have conducted showed that this is new process not used or known previously. We have studied the possibility of patenting, and we believe it is possible because the technology of growing biomass in half-liquid media is completely new.

Market Opportunity: The cost price will be \$152 per ton. Potential clients for the product are cattle-breeding farms, and companies manufacturing and selling vitamins, for example, the LICORED factory. The worldwide sales of B-carotene alone amount to 10,000 tons per year, thus, the profit of the company translates to enormous sums.