

Company Name: Aequor Inc.

Project Title: Aequor's Algal Crop Protection Treatment

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Topic Area 2b: Algae Crop Protection - Contract Number: DE-FOA-0002910

ABSTRACT

The global need to lower carbon emissions and growing demand for sustainable aviation fuels and other biofuels requires the urgent development of cost-effective technologies to improve productivity and profitability of renewable feedstocks. Algae cultivated in open ponds at commercial scale is seen as a superior feedstock for its unmatched capacity for carbon capture (300x more than a tree), small land, water and energy footprint compared with land crops without competing with food production and abundant biomass growth capacity. However, various challenges in open pond cultivation systems, including crop protection from the attack of pests, need to be overcome to extend harvest cycles, lower costs and sustain profitability.

The objective of the Project is to demonstrate the efficacy of a treatment that protects the algae crop, increases the biomass, extends the harvest cycle and increases margins for the cultivator. These problems are currently addressed by the use of costly pesticides and biocides that kill the algae, and engineered algae strains that are resistant to the pests, biostimulants, enzymes and mechanical systems intended to increase biomass growth. Aequor proposes using synthesized analogs of natural chemicals that Aequor's Founder discovered. Aequor may also test the use of its natural chemical compounds and compare results.

The overall objective of the work plan is to test Aequor's formulas in open pond cultivation systems, determine optimal formula, and validate crop protection, extension of the harvest cycle and quality of the biomass for conversion into biofuels. The overall savings in production costs (energy, labor, eliminating the need for biocides, etc.) may also be determined. Aequor plans to initiate sales to current pilot customers B2B through a commissioned sales force, including offering subscription service for on-going testing and performance improvement. Aequor also seeks partnerships for accelerating sales under distribution or licensing agreements.

- Key Words: algae, microalgae, SAF, biofuel, biodiesel, bioethanol, renewable, energy, biomass, boost, biostimulant, sustainable, biobased, aquaculture, agriculture, bioeconomy

- For Members of Congress: The cultivation of algae at scale is challenged by pests, short harvest cycles and high costs. This project will demonstrate how Aequor's crop protection treatment can control pests, increase profitability at commercial scale to create jobs, lower emissions and meet the rising demand for sustainable biofuels.