



ALGAE PHARM

Growing with the Market



As of today the Algae Pharm team are continuing their work towards growing a drought resistant algae based crop while utilising land to the highest of their ability. We have successfully established crops and trials are well underway as well as forming partnerships with plant based nutrition production specialists.

At the end of last season we were producing up to 20kg/day which met the demand of current trials of plant based Omega 3. This powder is proving to be a high value essential ingredient with both human and animal nutritional benefits such as assisting with inflammatory diseases, cardiovascular health and cholesterol. In addition, our research team have identified a food grade oil extraction process that allows Algae Pharm to produce both brown and green crude oil that is currently being tested for food ingredient and cosmetics. We have currently finished the season for the summer period due to the temperature and will recommence in the coming months.

We are also progressing with developing other strains of algae that we can grow and harvest at our facility including Spirulina and Duckweed. Spirulina is an edible, photosynthetic and spiral-shaped algae that grows in warmer climates. Their biomass is a rich source of proteins (up to 70%), vitamins, minerals, carotenoids, and Omega-3 fatty acids. Spirulina is a biomass that is categorised as a "superfood" and by utilising our 700m³ raceway pond we expect to produce 70kg of dried Spirulina daily. During the summer we will focus our energy on harvesting the spirulina. Duckweed on the other hand is one of the smallest flowering plants that is relatively high in beta carotenes, protein and fats. It is fast growing, hardy and easy to harvest while producing a high protein yield - 22 times higher than soybeans. It can be grown on non-arable land and can recover nutrients from polluted water.



As market demand grows so too will the production volumes at Algae Pharm without causing any impact on the environment as algae is an environmentally sustainable crop that utilises four key natural resources: non-arable land, non-potable water, CO₂ and sunlight. Our sustainability message is always of interest for any customer. Growing Microalgae is an excellent viable and sustainable solution for the environment. Today it is considered that Microalgae produces more than half of the earth's oxygen and consumes nearly half of the CO₂. Approximately 1.8kg of CO₂ consumed by algae results in 1kg of oxygen being released to the environment. The next phase for Algae Pharm is to develop a CO₂ solution that utilises community waste to produce CO₂ in a circular economy model with a number of technologies being considered for this.



At Algae Pharm we are now looking to the future. Once we expand our current site and utilise it to its full potential, we will be harvesting freshly grown algae from 10 full size ponds on a daily basis. We are confident that the foundations we have laid over the past few years are strong and that with time and continuous improvements the Goondiwindi site will be exceeding expectations and performance capabilities in no time.

Thought for the day: On a recent radio interview I heard a doctor comment that farm grown fish do not have the high amount of Omega 3 required for a healthy diet. What if we feed these fish with our algae powder?