Green gold

WUR and the Algae PARC

The AlgaePARC is a research facility at WUR aiming to unleash the full potential of algae. This facility is the result of an investment made by a consortium of 19 companies interested in what is considered the "green gold of the future". Much of the research of the Bioprocess Engineering Group takes place in this facility, aiming to produce high-value products from water, CO2, and sunlight.



AlgaePARC scientists seek to advance the state-of-the-art by optimising algae cultivation, improving algae strains, and scaling up processes.

The advances in algae cultivation and strain development are sky-rocketing. Scientists at AlgaePARC have developed a strain that produced twice the amount of lipids than its wild counterpart. This strain improvement has been achieved in just two years by selecting the algae that had larger lipid bodies in its cellular matrix. Because of the microscopic size of the algae, the selection of the best algae has not been child's play and required a great deal of time and labour. However, the outcome is more than satisfactory and is a great leap towards sustainable algae lipid production.

The AlgaePARC has done an economic analysis to monitor the economic improvement in algae cultivation. According to this study, in 2010, the cost production ratio of algae production was 5 to 6 Euros, while in 2015, this ratio decreased to 2.5 Euros. This reduction is the result of scientific advances thanks to the efforts of scientists from the AlgaePARC. The aim is to reduce the cost production ratio to 1 to 0.5 Euros so that algae production can compete on the market.

Want to know more about the AlgaePARC? Contact WUR's algae expert, Rene Wijffels, rene.wijffels@wur.nl