



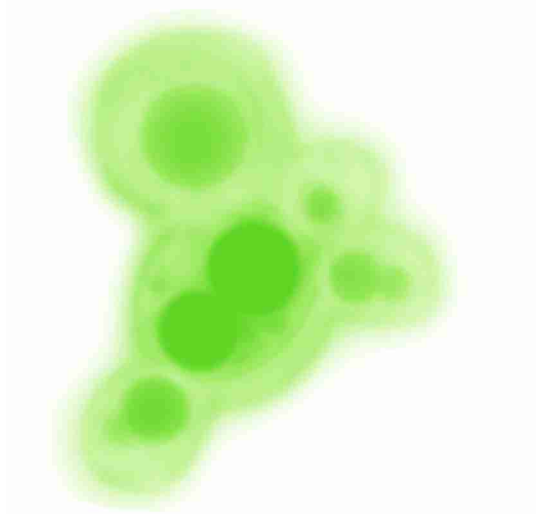
New technology for the production of biodiesel from crude glycerine

Iterative process that increases by 2-3% the overall productivity of a biodiesel plant

Background

During the production of 1 tonne of biodiesel, 110 kg of crude glycerine is generated as by-product. The high growth rate of biodiesel market has brought about a concomitant increase the glycerine leading to an overflowed market.

The search for new applications for crude glycerine is therefore a priority issue to ensure the profitability of biodiesel plants. These new applications should be able to use the thousands of tonnes of glycerine generated each year.



Technology

Using our proprietary technological platform MICROBIOTOOLS, we have found micro-organisms able to metabolize large quantities of crude glycerine. Under specific growth conditions, these micro-organisms accumulate oils with a fatty acid composition in accordance with the European norm EN 14214 and the ASTM D6751-08 Standards.

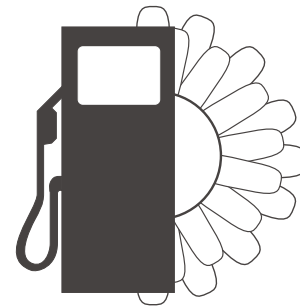
The microbial biomass containing more than 50% of lipids (as dry weight) can be blended with vegetable seeds before the extraction process to increase the amount of oil obtained.

Alternatively, the microbial oil can be extracted using standard procedures and used in the transesterification process. It is also possible to carry out a methanolysis with the microbial biomass to directly obtain the mixture of methyl esters.

The process allows the conversion of a by-product (glycerine) into a raw material (oil) increasing the overall productivity of the plant by 2-3%.

MicroBiOil®
is protected by world-wide patent application





Contact information

Please direct inquiries to:

info@neuronbp.com

Tel. [+34] 958 750 598

Fax [+34] 958 750 459

Neuron BPh, Granada Health-Science Technological Park

PTS-Granada

Edif. BIC-Granada

Av. Innovación 1

Armillar, 18100 Granada [Spain]