Media based on algae: first tests determining important substrates

Medium based on LB

To first determine whether the extract of *chlorella vulgaris* was a substitute for yeast extract, LB medium and medium containing *chlorella vulgaris* extract instead of yeast extract were produced.

Table 1: Media-components for 1L chlorella vulgaris or yeast medium

Component	amount
NaCl	10 g
Tryptone	10 g
chlorella vulgaris extract / yeast extract	5 g
H_2O	add 1 L

1. Produce medium containing extract of *chlorella vulgaris* and medium containing yeast extract.
2. Autoclave the media.
3. Add 5 mL of the respective medium to six 5 mL reaction tubes.
4. Inoculate three reaction tubes per medium with *vibrio natriegens* and the other three reaction tubes with *escherichia coli.*
5. Incubate the reaction tubes over night at 37°C, 200 rpm
6. Observe the turbidity of the reaction tubes.

Medium without tryptone

To determine whether *chlorella vulgaris* extract was able to substitute tryptone as a medium component, additionally, media containing different concentrations of NaCl *chlorella vulgaris* extract and yeast extract were prepared.

Table 2: Media-components for 1L chlorella vulgaris or yeast medium

Component	amount
NaCl	10 g / 20 g
chlorella vulgaris extract / yeast extract	0 g / 5 g / 10 g
H_2O	add 1 L

1. Produce media containing either 5 g or 10 g of *chlorella vulgaris* extract or yeast extract with the different concentrations of NaCl listed in Table 2.
2. Media containing no extract of *chlorella vulgaris* or yeast was produced as a control.
3. Autoclave the media.
4. Add 5 mL of the respective medium to three 5 mL reaction tubes.
5. Inoculate the reaction tubes with *vibrio natriegens*.
6. Incubate the reaction tubes over night at 37°C, 200 rpm
7. Observe the turbidity of the reaction tubes.