Article

**Comparative study of lactic acid production in complex vs. grass press-juice media at bench- and reactor-scale**

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Supplementary

Amino acids analysis

The derivatization process was automated using the Azura AS 6.1L autosampler (Knauer GmbH, Berlin, Germany) using the own “mix method” option. The OPA reagent was prepared by weighting 270 mg OPA in a 50 mL volumetric flask. The reagent was dissolved in 5 mL ethanol. Then, 200 µL 2-mercapto-ethanol were added and the final volume was filled up with 0.4 M borate buffer.

To analyze the samples, they must be protein and particles-free. For this reason, the proteins were firstly precipitated by adding 4 parts of ice-cold methanol and 1 part of the sample. The sample was placed at -20°C overnight. Then, the sample was centrifuged for 10 min at 10000 rpm (Eppendorf, Hamburg, Germany). Finally, the sample was diluted with 0.4 M borate buffer. A dilution of at least of 1:1 is necessary as the sample has to have a pH 10 for the derivatization. The derivatization was performed by adding 80 µL of the sample or the standard and 50 µL of OPA reagent. After 1 min, 40 µL were injected for measurement