Production of succinic acid by *Mannheimia succiniciproducens* MBEL55E from wood hydrolysate

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In order to reduce the medium cost, batch cultures of *Mannheimia succiniciproducens* MBEL55E for the production of succinic acid was carried out in the wood hydrolysate based media. The hydrolysate medium was sterilized at a relatively low temperature of 60 ℃ with intention of reducing the formation of inhibitory compounds during the sterilization. The maximum succinic acid concentration and yield obtained in this study were 22.98 g/L and 0.75 g succinic acid/g (glucose+xylose), respectively, which were much higher than those (11.53 g/L and 0.56 g/g) obtained in batch cultures using a wood hydrolysate sterilized at 121 ℃. These results show that low-temperature sterilization could be very effective for succinic acid production from wood hydrolysate.

Reference

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