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纯粮固态发酵白酒生产中的碳排放及低碳生产

Carbon emissions and low carbon production in processing pure grain liquor by solid fermentation

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英文关键词: [wine](#) [fermentation](#) [carbon](#) [life cycle](#) [solids](#)

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中文摘要:

锁定生产纯粮固态发酵白酒的关键碳排放点可以明确碳减排重点环节, 引导企业低碳生产。该文基于生命周期理论, 研究了纯粮固态发酵白酒生产碳排放, 并根据各生产环节碳排放贡献率锁定了碳排放的关键点。结果表明, 消耗煤炭的锅炉运转与蒸粮蒸酒的生产工艺联系紧密, 成为纯粮固态发酵型白酒生产最关键的碳排放点, 同时用电消耗和厂内运输也对碳排放具有一定的贡献。据此提出改善能源消耗结构, 使用生物质能等清洁能源以促进纯粮固态发酵型白酒的低碳生产。该文研究结果为减少食品生产的碳排放提供了参考。

英文摘要:

The critical point of carbon emission in processing pure grain liquor by solid fermentation is significant to find the key processes of carbon reduction, guiding enterprises to low-carbon processing. Based on the theory of Life Cycle Assessment, the carbon emissions in liquor processing was quantified and the critical points were locked through the contribution rate of carbon emissions in processes in this paper. Results showed that liquor steaming strongly attached to the coal-burning boiler, which was the most critical point of carbon emissions in liquor processes, while net electricity consumption and transport in the plant were both mainly contributed to the carbon emissions of processing. Therefore, the method was contributed to promoting the low carbon emission of the pure grain liquor processor, improving the energy consumption structure and processing pure grain liquor by taking the biomass and other clean energy. These results also provided a reference to reduce carbon emission in food processing.

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