

33.55% 元素分析表明 ,AFM-1 中 C、H 和 N 的含量分别为 28.04%、5.89% 和 0.80% , AFM-1 氨基酸测定的结果表明 ,AFM-1 含 17 种氨基酸 ,其中谷氨酸和天冬氨酸含量最高 红外测定的结果表明 AFM-1 和 NFM-1 具有多糖的特征吸收 ,并且其糖环均为吡喃环 ,AFM-1 的糖环均以 α -糖苷键连接 ,而 NFM-1 的糖环有 2 种连接方式 ,即 α -糖苷键和 β -糖苷键。

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Separation and Purification of Acidic Polysaccharides and Neutral Polysaccharides from Flaxseed Gum

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ABSTRACT AFM-1 and NFM-1 were obtained using CTAB-Complex , ion-exchange and gel-filtration method. It is shown that their molecular weight were 7.62×10^5 and 1.19×10^6 , total sugar contents were 58.92% and 84.93% and uronic acid contents were 33.55% and 6.58% , respectively. The C , H , N contents of AFM-1 were 28.04% , 5.89% , 0.80% . The structure of both AFM-1 and NFM-1 contain pyranide and has the characteristic of glycoconjugate.

Key words flaxseed gum , neutral polysaccharide , acidic polysaccharide , separate purification

百泰清酒清洁生产新技术

无锡江南大学百泰生物公司研发成功无污染清洁工艺的清酒生产技术 ,并结合采用膜技术和树脂色谱分离技术 ,生产出了风味独特、品位高尚的清酒 ,已形成年产 3 000t 规模。

百泰清酒用对原料大米进行独特的高温 280℃ 瞬时干法糊化新技术 ,代替了传统湿法洗、浸、蒸、淋老工艺 ,从而消除了清酒或黄酒生产每吨排放 6t 高浓度有机废水污染 ,实现了清洁生产 ,并使发酵前原料的处理工序大为简化。瞬时高温处理可使大米中的部分蛋白质交联变性 ,同时发生美拉德反应产生一些新的芳香物质 ,共检出有 85 种香味物质。因而比湿法大米清酒具有独特的风格。

通过分析 ,百泰清酒除含有低度(8%~16%)的酒精 ,还有 18 种氨基酸及微量元素 Mn、Ca、Zn、Fe、Se 等 ,以及少量的低聚糖、氨基丁酸、谷胱甘肽等功能成分 ,适当饮用 ,对健康有益。