

Effect of Ultra High Pressure Treatment on Flavour Compounds of Hami Melon (*Cucumis melo* L.) Juice

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ABSTRACT The paper studied the difference of flavor compounds in Hami melon juice before or after ultra high pressure (UHP) treatment by combining solid phase micro-extraction with GC-MS method. It was discovered that UHP processing changed the peak areas and varieties of their esters, alcohols, aldehydes and ketones. A decrease of 5 esters and 10% peak areas of esters after UHP treatment were observed while the varieties and peak areas of aldehydes and ketones were increased. Overall characteristic esters of Hami melon juice at 500 MPa/20min and 400MPa/20min treatment were basically unchanged, but 3 unsaturated aldehydes were not found in latter case, which contributed substantially to the overall green notes perception of Hami melon juice. The organoleptic results demonstrated that UHP process reduced the esters varieties and their flavor strength, increased the green notes, both of which matched well with the flavor analysis results of the Hami melon juice.

Key words solid phase micro-extraction, Hami melon, *cucumis melo*, ultra high pressure treatment, flavour analysis



河南新郑电力集团麦滋尔糖业公司 30 万 t 淀粉糖项目奠基

河南新郑电力(集团)麦滋尔糖业有限公司 30 万 t 淀粉糖项目工程于 2003 年 9 月 28 日举行了奠基仪式。

新郑麦滋尔糖业公司 30 万 t 淀粉糖项目预计投资 1.7 亿元,一期工程建设规模 15 万 t/a。项目主要产品为啤酒专用糖浆,并附带有其他淀粉糖系列产品,2004 年 3~4 月投产。该公司淀粉糖项目由乐开淀粉糖业发展有限责任公司进行设计。土建由郑州粮食学院建筑设计院进行设计。



添加剂柠檬苦素诞生

柠檬苦素及其类似物在柑橘属中含量丰富,主要存在于柑橘类果实的核、内果皮和囊衣等部位,含量在 1% 左右,迄今在柑橘属中已分离出 36 种柠檬苦素类似物和 17 种葡萄糖配糖体。

目前,美国、日本已取得采用柠檬苦素类似物制作药物、功能性保健食品和饮料的专利。随着对柑橘柠檬苦素类似物生理活性的阐明,国外对柠檬苦素类化合物的大规模的提取分离以及作为功能性食品添加剂的应用研究已有成功先例。中国食品发酵工业研究院刘凌博士表示,在不远的将来,柠檬苦素类似物将作为功能性食品添加剂或抗癌药物而商业化。

美国制成防止啤酒氧化失鲜的瓶盖

日前,美国加州阿拉米达市的一家公司与生产啤酒瓶盖的企业合作,针对啤酒瓶内混入了氧气,会逐渐将酒香成分氧化,使啤酒失去原有香味的问题,共同开发出了能防止啤酒氧化失鲜的瓶盖。

这种能防止啤酒氧化失鲜的瓶盖,内带一种类似血红蛋白的物质,它具有与肺叶血红蛋白相似的作用,能够结合任何一个与之相遇的氧分子。因此,啤酒瓶盖内所带的血红蛋白能吸收混入啤酒瓶中的氧,使啤酒不会因为氧化而失鲜。