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模拟体系制备豆浆及其风味研究

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摘要: 将大豆蛋白、大豆脂质、大豆内源性酶和大豆多酚4种组分按照豆浆中比例以一定方法混合剪切后得到乳液体系。在不同正交反应条件下利用HS-SPME-GC-MS测定模拟体系产生的风味物质含量，确定了pH7.0，40℃下反应30 min是模拟体系中脂肪氧合酶催化氧化作用产生风味化合物的适宜反应条件。该反应条件下模拟体系产生了大量豆浆的特征性风味物质，通过主成分分析法(PCA)与豆浆的风味组成进行比较，证实该大豆风味模拟乳液体系与豆浆特征性风味具有很好的相似性。感官评定进一步表明，模拟体系具备了豆浆的特征性风味，但在逼真度、大豆香味等方面存在少许差异。

Abstract: The soybean protein, lipids, endogenous enzymes and polyphenols are mixed to be a emulsion system by a certain method.Under different orthogonal reaction conditions, volatiles of simulation system are determined by HS-SPME-GC-MS, and the optimal reaction conditions for catalytic oxidation of lipoxygenases to produce flavor compounds in simulation system was pH7.0, 40℃, 30 min. Model system under this reaction conditions produced a large amount of characteristic soybean flavors, and confirmed that the soybean emulsion flavor simulation system had good comparability with soymilk through the principal component analysis (PCA) of the composition of flavors. Sensory evaluation showed that the model system possessed characteristic soymilk flavor, but there were some differences in their fidelity, soybean aroma and so on.

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