

王辉 辽宁 辽宁石油化工大学石化学院 113001

张起凯 辽宁 辽宁石油化工大学石化学院 113001

刘立行 辽宁 辽宁石油化工大学石化学院 113001

摘要: 本文建立悬浮液技术及非完全消化-火焰原子吸收光谱法快速测定茄子中钙、镁的分析方法。试验表明,在悬浮液中加入适量盐酸可显著提高钙、镁的吸光度。对盐酸溶液用量、化学干扰、背景吸收干扰、试液与空白溶液物理性质的一致性进行考察。测定结果的RSD小于1.1%,测定结果与灰化法一致,相对误差小于 $\pm 1.0\%$ 。

关键词: 火焰原子吸收光谱法,悬浮液技术,非完全消化法,茄子,钙,镁

文章全文为pdf格式,请下载至本机浏览。[[下载全文](#)]

Determination of calcium and magnesium in eggplant by flame atomic absorption spectrometry

113001

113001

113001

Abstract: Treat the sample of eggplant with two pretreatment techniques of suspension method and noncomplete digestion method, respectively. A FAAS method for rapid determination of calcium and magnesium in eggplant with suspension technique or noncomplete digestion has been developed. The results indicated that in suspension technique absorbances of calcium and magnesium were markedly increased by adding suitable amount of hydrochloric acid into the test solution. Amount of hydrochloric acid solution, chemical interference, background absorption interference, the identity of physical properties for test solution and its blank solution were studied. The relative standard deviations were less than 1.1%. The determination results were consistent with those obtained by ashing method. The relative errors between them were less than $\pm 1.0\%$. In FAAS method, the displacement of ashing method by suspension technique or noncomplete digestion method for the sample pretreatment of eggplant is possible.

Key words: Flame atomic absorption spectrometry, Suspension technique, Noncomplete digestion method, Eggplant, Calcium

【大 中 小】 [[关闭窗口](#)]