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论文

烟叶中镁、钾元素含量的快速测定

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摘要　采用乙酸萃取和原子吸收光谱仪测定烟叶中镁、钾元素的含量，并对该方法的准确性和可靠性进行了研究。与行业标准方法YC/T 175-2003进行比较的研究结果表明，乙酸萃取-原子吸收法与行业标准法测定的数据吻合。采用国家烟草标准物GBW08514、GBW08515及茶叶标准物GBW08513进行验证实验，其测定数据与标准值相符。该方法把烟草中的镁和钾、水溶糖、烟碱及氯离子测定的前处理方法有机地结合在一起，使烟草中镁、钾分析更为简单快速，且操作简便，污染小，适合于大批量烟草样品镁和钾元素的检测分析。

关键词　烟草；镁；钾；乙酸萃取；原子吸收分光光度法

分类号　0657.31

A Quick Measurement Method of Mg and K in Tobacco Leaf

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Abstract

Contents of Mg and K in tobacco leaves were determined by AAS using samples extracted by acetic acid. The accuracy and reliability of this method were studied. The comparative studies indicated that the results determined by this method were identical with those assayed by the standard method of YC/T 175-2003. National standard samples GBW08514, GBW08515 and GBW08513 of tobacco and tea were assayed by this method for validation and the results matched the standard values. The pretreatment of the method could be integrated with assays of water soluble sugar, nicotine and chloride. The method is simple, brief, fast and safe, and suitable for determining Mg and K in tobacco leaves.

Key words　Tobacco　Mg　K　Acetic Acid Extraction　AAS

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