

研究论文

蜂王浆产品中五种大环内酯残留量的LC-MS/MS检测方法研究

谢文

浙江出入境检验检疫局检验检疫技术中心¹

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摘要 介绍了蜂王浆用酸沉淀蛋白,再用乙腈提取, C18小柱净化, LC-MS/MS测定蜂王浆中大环内酯类抗生素(螺旋霉素、竹桃霉素、泰乐菌素、罗红霉素、交沙霉素)残留。每一个大环内酯检测一个母离子和二个子离子, 五种大环内酯抗生素在10~250 mg/kg范围具有良好的线性关系, 方法检测低限均为20 mg/kg, 加标回收率为73.0%~90.2%, RSD为5.6%~10.5%。

关键词 [蜂王浆](#) [高效液相色谱串联质谱法](#) [大环内酯类抗生素残留](#)

分类号

Determination of five macrolide antibiotic residues in royal jelly sample by using LC-MS/MS

Abstract

A liquid chromatography tandem mass spectrometry (LC-MS/MS) method was developed for confirmation of the five macrolide antibiotic residues (spiramycin, oleandomycin, tylosin, roxithromycin, josamycin). Royal jelly sample was added with acid solution, precipitate protein, the upper layer solution was extracted with acetonitrile. Then it was cleaned up with C18 column. The two precursor/product ion transitions for each macrolide antibiotics were monitored. The limit of detections of royal jelly was 20 mg/kg and 0.2 mg/kg. The recoveries were between 91%-107%. The Relative standard deviations were between 5.6%~10.5%.

Key words [royal jelly](#) [LC-MS/MS](#) [macrolide antibiotic residues](#)

DOI:

通讯作者 谢文 xw@ziq.gov.cn

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