中国农学通报 2011, 27(第19期8月) 277-282 DOI: ISSN: 1000-6850 CN: 11-1984/S



园艺—应用研究

# 金银花、山银花绿原酸类提取物体外抗NDV作用研究

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**摘要:**

为研究比较价格差异较大的金银花和山银花的体外抗病毒作用，分别提取金银花和山银花绿原酸类活性成分，利用Vero细胞体外培养系统，通过观察细胞病变效应（CPE），并用MTT法检测细胞活性来评价和比较金银花和山银花绿原酸类提取物体外抑制新城疫病毒（NDV）对细胞的感染作用。结果表明：在安全浓度范围内，金银花和山银花绿原酸类提取物均具有显著的抗病毒作用，体外对NDV分别具有明显的阻断作用、抑制作用和中和作用，且两者之间的抗病毒效果差异不显著。本试验为价格相对便宜的山银花在一定领域部分代替金银花提供了实验依据。

**关键词:** Vero

## The Study on Antiviral Effect of Chlorogenic Acids from Flos Lonicerae japonicae and Flos lonicerae on NDV in Vitro

Abstract:

The aim was to study the antiviral effects between Flos Lonicerae japonicae and Flos lonicerae which were very different in price. Chlorogenic acids were extracted from them. The antiviral effects of the Chlorogenic acids extracts on the infection of Newcastle disease virus (NDV) to cells were investigated by observing cytopathic effect (CPE) in Vero cell, and the cell survival rate by MTT method was detected. The antivirus effects of Flos Lonicerae japonicae and Flos Lonicerae were compareed. The results showed that the chlorogenic acids ingredients from Flos Lonicerae japonicae and Flos Lonicerae had significant antivirus function in safe concentration; the chlorogenic acids extracts had obvious interdiction, inhibition and neutralization effects to NDV in Vero cell. There were no obvious differences between Flos Lonicerae japonicae and Flos Lonicerae in the antivirus effects. It will give the test proof that the cheaper Flos Lonicerae can take part place of Lonicera japonica japonicae in a certain area.

Keywords: Vero

**收稿日期** 2011-03-04 **修回日期** 2011-03-31 **网络版发布日期** 2011-08-01

DOI:

**基金项目**:

郑州师范学院青年科研课题

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**参考文献:**

[1] 梁晓天.常用中药基础研究,第二卷[M].北京,科学出版社,2004:287-300.
[2] 张素梅,杨明凡,王学斌,等.黄芪、金银花体外对伪狂犬病病毒作用研究[J].中兽医医药杂志,2003.(2):8-10.
[3] 邵红,吴玲,王新.七种中药抗鸡新城疫病毒作用的研究[J].黑龙江畜牧兽医,2006,7:89-91.
[4] 潘曌曌,王雪峰,岳志军,等.金银花、连翘配伍提取物体外抗甲型流感病毒FM1株的实验研究[J].甘肃中医学院学

报,2007,24(2):5-8.
[5] 中华人民共和国卫生部药典委员会.中华人民共和国药典,2005年版I部[S].北京,化学工业出版社,2005,152-153.
[6] 蔡宝祥.家畜传染病学[M].第四版,北京:中国农业出版社,2001,207-209.
[7] 刘月凤.鸡新城疫的近期发生特点及防制[J].畜禽业,2007,1(213),22-24.
[8] 丁既鹏,李世林.醇提法和超声波法提取金银花中绿原酸类物质的研究[J].中国实验方剂学杂志,2005,11(4):64
[9] 赵钟兴,韦藤幼,郝瑞然,等.从金银花中提取氯原酸生产工艺的改进[J].时珍国医国药,2004,15(12):829-830.
[10] 殷震,刘景华.动物病毒学[M].第二版,北京:科学出版社,1997,329-330.
[11] 沈萍,范秀荣,李光武.微生物学实验[M].第三版,北京:高等教育出版社,2002,151-153.
[12] 斯佩克特D L.德曼R D.细胞实验指南(上册)[M].莱因万德L A.黄培堂译. 北京:科学出版社,2001,27-31.
[13] 徐丽华,王芳.板蓝根中的抗病毒活性成分[J].中国天然药物,2005,3(6): 359-360.
[14] 贺生中,王涛.黄芪多糖的免疫作用及其兽医临床应用[J].动物科学与动物,2004,21(7):39-40.
[15] 陈够芬,詹勇.三萜皂甙的免疫生物学和抗病毒机理研究[J].饲料工业,2006,27(14):57-59.

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