



动物营养学报

CHINESE JOURNAL OF ANIMAL NUTRITION

首页 期刊介绍 编委会 编辑部 投稿须知 期刊订阅 广告服务 联系我们 留言与回复

动物营养学报 » 2011, Vol. 23 » Issue (01) :122-129 DOI: 10.3969/j.issn.1006-267x.2011.01.018

饲料安全 最新目录 | 下期目录 | 过刊浏览 | 高级检索

<< Previous Articles | Next Articles

>>

三聚氰胺对肉鸡毒性作用分析

丁雪梅, 张克英*, 王亮

(四川农业大学动物营养研究所, 教育部动物抗病营养工程中心, 雅安625014)

Toxicity of Melamine in Broilers

DING Xuemei, ZHANG Keying*, WANG Liang

(Key Laboratory for Animal Disease-resistance Nutrition of China Ministry of Education, Institute of Animal Nutrition, Sichuan Agricultural University, Ya'an 625014, China)

- 摘要
- 参考文献
- 相关文章

Download: PDF (3265KB) HTML (1KB) Export: BibTeX or EndNote (RIS) Supporting Info

摘要 本试验旨在通过研究三聚氰胺(MEL)对肉鸡生长性能、血清生化指标和肝肾病理学的影响,分析其对肉鸡的毒性作用。试验选用1 920只1日龄科宝肉仔鸡,随机分为6个处理,分别饲喂添加0、2、10、30、50和100 mg/kg MEL的饲料,每个处理10个重复,每个重复32只肉鸡。试验期42 d。结果表明,饲料中添加MEL对肉鸡生长性能无显著影响($P>0.05$);21 d时,随着饲料MEL添加水平的增加,肉鸡血清中谷丙转氨酶(GPT)的活性增加,100 mg/kg组显著高于0、2、10和30 mg/kg组($P<0.05$);血清中尿酸的含量,21 d时,100 mg/kg组显著高于10和50 mg/kg组($P<0.05$),42 d时,显著高于0、2和30 mg/kg组($P<0.05$);血清中谷草转氨酶(GOT)的活性和肌酐的含量各处理间差异不显著($P>0.05$);病理切片显示肉鸡肝脏和肾脏受到不同程度的损伤。由此可知,饲料中添加0~100 mg/kg MEL不影响肉鸡生产性能,但对肝脏和肾脏存在一定的毒性效应,血清GPT和尿酸对MEL反应敏感,其中100 mg/kg MEL的毒性作用最强。

关键词:

Abstract: The experiment was conducted to study the effects of melamine on growth performance, serum biochemical parameters and the toxicity in liver and kidney of broilers. A total of 1 920 one-day-old Cobb broilers were randomly allotted to 6 treatments (10 replicates per treatment and 32 chicks per replicate). Broilers in different treatments were fed with diets containing 0, 2, 10, 30, 50 and 100 mg/kg melamine. The experiment lasted for 42 days. The results showed that dietary melamine supplementation had no significant effects on the growth performance of broilers ($P>0.05$). At d 21, the serum glutamic-pyruvic transaminase (GPT) activity were increased with the increase of the melamine, and that of 100 mg/kg group was significantly higher than that of the control, 2, 10 and 30 mg/kg groups ($P<0.05$). The serum uric acid (UA) content of 100 mg/kg group was significantly increased than that of 10 and 50 mg/kg groups at 21 d and the control, 2, 30 mg/kg groups at 42 d ($P<0.05$); there were no significant differences in serum glutamic-oxaloacetic transaminase (GOT) activity and creatinine (CRE) content among all treatments ($P>0.05$). The extent of damage of kidney and liver were increased with the increase of dietary melamine supplemental level. In conclusion, the diets supplemented with 0~100 mg/kg melamine have no significant effects on growth performance, but showed toxicity in the liver and kidney. The serum GPT activity and UA content are sensitive to dietary melamine supplementation. In the experiment, the toxicity of 100 mg/kg melamine is the strongest. [Chinese Journal of Animal Nutrition, 2011, 23 (1) : 122-129]

Keywords:

引用本文:

. 三聚氰胺对肉鸡毒性作用分析[J]. 动物营养学报, 2011,V23(01): 122-129

. Toxicity of Melamine in Broilers[J]. Chinese Journal of Animal Nutrition, 2011,V23(01): 122-129.

链接本文:

http://118.145.16.228/Jweb_dwyy/CN/10.3969/j.issn.1006-267x.2011.01.018 或 http://118.145.16.228/Jweb_dwyy/CN/Y2011/V23/I01/122

Service

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ Email Alert
- ▶ RSS

作者相关文章

没有本文参考文献

没有找到本文相关文献