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## ▶ 前沿资讯

### 1. 农业农村部:截止到目前,我国非洲猪瘟疫情总体可控!

**简介:**截至12月3日,全国共有21个省份发生79起家猪疫情、2起野猪疫情,尽管非洲猪瘟疫情还在发生,但防控有效,总体可控,目前仍属于多点散发态势,没有出现大面积流行。这是记者12月4日从全国政协农业和农村委员会召开的非洲猪瘟疫情防控工作通报协商会了解到的信息。农业农村部副部长于康震在会上通报了相关情况,并回答了部分全国政协委员的提问。于康震在会上表示,农业农村部对非洲猪瘟疫情加强部署督导,果断处置已发疫情,全面开展监测排查,切断传播链条,着力保障市场供给。全国累计扑杀生猪63.1万头,所有已发疫情均得到有效处置。按照养殖、交易、屠宰环节排查全覆盖,生猪养殖场(户)监测全覆盖的要求,在全国范围内部署开展监测排查。同时,及时采取禁止发生疫情省份及相邻省份生猪跨省外调,关闭生猪交易市场,对生猪运输车辆实行备案,禁止餐厨剩余物喂猪等措施。目前疫情传播势头得到有效遏制,已有8个省的35个疫区按规定解除封锁。“非洲猪瘟不是人畜共患病,不会传染人,也不传染除家猪、野猪外的其他动物。但病毒若在我国定殖,将会严重威胁生猪产业发展。”于康震说,农业农村部将会同非洲猪瘟联防联控机制各成员单位进一步强化监管措施,严防外来疫情再次传入,重点抓好规模化猪场和种猪场防控工作,进一步压实地方责任,加强科研攻关。记者从会议了解到,非洲猪瘟疫情今年在全球也较活跃,全球共有俄罗斯、罗马尼亚、波兰等22个国家报告发生5800多起疫情。委员们对农业农村部组织开展的非洲猪瘟疫情防控工作给予肯定。对于加强非洲猪瘟疫情防控,张兴凯委员建议,应继续做好非洲猪瘟疫情信息及时发布,向公众客观说明情况,第一时间进行解疑释惑。切实做好一线防控人员的培训,进一步压实基层责任,做好联防联控工作。岳秉飞委员表示,我国生猪养殖方式总体还比较落后,散养户生物安全防护意识不强,增加了防控风险,下一步应深入推进生猪标准化规模养殖,完善防控机制,推进生猪生产转型升级。

**来源:**中国饲料行业信息网

**发布日期:**2018-12-05

**全文链接:**

<http://www.feedtrade.com.cn/news/china/2018-12-05/2031965.html>

### 2 . Keeping pigs comfortable in the winter: Using ventilation to optimise barn conditions (使用通风来优化谷仓条件让猪在冬天保持舒适)

**简介:** The temperatures are dropping and the first snow has already accumulated in parts of the world. It can be challenging to keep pigs comfortable under winter conditions. Maintaining optimal barn conditions is important for animal wellbeing, farm productivity and people working in the barn. Good ventilation will remove humidity, dust, gases and it will provide fresh air. PIC has observed lower respiratory challenges, lower mortality and higher feed intake in barns with optimal conditions versus barns with suboptimal conditions. The right ventilation strategy can make the difference. This article will review tips and tricks around ventilation management that PIC has developed over time in collaboration with many of its customers.

**来源:** THE PIGSITE

**发布日期:**2018-12-03

全文链接:

<http://www.thepigsite.com/articles/5473/keeping-pigs-comfortable-in-the-winter-using-ventilation-to-optimise-barn-conditions/>

## 学术文献

### 1. 饲料粗纤维水平与采食时间对生长猪肠道食糜通过速度的影响

**简介:** 本试验旨在研究饲料粗纤维水平和采食时间对生长猪肠道各段食糜通过速度的影响,为体外模拟消化过程的设置提供生理学依据。试验采用2×2完全随机设计,饲料粗纤维水平分别为3.39%和5.56%,采食时间分别08:00和16:00。选择体重为(21.90±1.62) kg的大×长二元杂交去势公猪24头,随机分成4组,每组6个重复,每个重复1头猪,随机选择其中2组在十二指肠安装T型套管,另2组在回肠末端安装T型套管。测定饲料中三氧化二铁(指示剂)在十二指肠、回肠末端及全消化道的出现与消失时间。结果表明:1)以食糜中指示剂颜色出现作为通过速度计时,饲料粗纤维水平对食糜在十二指肠、回肠末端及全消化道的通过速度均有显著影响( $P<0.05$ ),采食时间对食糜在十二指肠、回肠末端通过速度均有显著影响( $P<0.05$ ),但对食糜在全消化道的通过速度无显著影响( $P>0.05$ ),两者对食糜在十二指肠的通过速度有显著交互作用( $P<0.05$ )。与3.39%饲料粗纤维水平相比,5.56%饲料粗纤维水平使食糜的通过速度显著加快( $P<0.05$ ),08:00采食的食糜通过速度(除全消化道外)显著快于16:00采食的食糜通过速度( $P<0.05$ )。2)以食糜中指示剂颜色消失或以指示剂颜色出现与消失的平均时间作为通过速度计时,饲料粗纤维水平和采食时间对食糜在十二指肠、回肠末端及全消化道通过速度有显著的影响( $P<0.05$ ),但两者间对食糜在十二指肠、回肠末端通过速度无显著的交互效应( $P>0.05$ ),对全消化道通过速度有显著的交互效应( $P<0.05$ )。与3.39%饲料粗纤维水平相比,5.56%饲料粗纤维水平使食糜的通过速度显著加快( $P<0.05$ ),08:00采食的食糜通过速度显著快于16:00采食的食糜通过速度( $P<0.05$ )。由此可见,5.56%饲料粗纤维水平能够提高食糜在猪消化道各段的通过速度;08:00采食的食糜通过速度高于16:00采食的食糜通过速度。

**来源:** 动物营养学报

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**全文链接:**

[http://agri.ckcest.cn/file1/M00/00/00/Csgk0VwIazmASBEjAAcgM9\\_aWf0047.pdf](http://agri.ckcest.cn/file1/M00/00/00/Csgk0VwIazmASBEjAAcgM9_aWf0047.pdf)

### 2. 基于空间优化的九洲江流域畜禽养殖生态补偿简

**简介:** 以生态补偿试点区九洲江流域为例,基于调研数据和相关资料,以最小的政府生态补偿金额为目标,以水环境容量、耕地承载力、养殖户经济收益为主要约束,建立基于畜禽养殖模式转变的生态补偿空间优化模型。结果表明,九洲江流域生猪养殖最小生态补偿金额为5.83亿元,其中2.92亿元用于55.47万头的生猪禁养,1.94亿元用于补助适养区内新建47.99万头高架网床模式养殖,0.97亿元用于18.57万头的养殖模式升级改造。优化后全流域养殖总规模为121.18万头,比现状减少约4万头。可实现污染物削减率73.66%,COD、总氮、总磷分别削减13980,2545,995t。其中,传统养殖模式全部被禁养或升级改造,高架网床养殖模式为流域最主要养殖模式,占比达到81.19%。10个镇的补偿资金及污染物削减情况存在显著差异,补偿金占比较高的是文地、良田、古城镇,合计占总

补偿资金的56.78%, COD削减量占总削减量的55.35%。通过优化后的补偿方案, 同时实现环境效益和经济效益的双赢。

来源: 中国环境科学

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全文链接:

<http://agri.ckcest.cn/file1/M00/02/9E/Csgk0FwIauqA00W8AAckw4gus6A209.pdf>

### **3 . Mycotoxin binder improves growth rate in piglets associated with reduction of toll-like receptor-4 and increase of tight junction protein gene expression in gut mucosa (霉菌毒素粘结剂可通过减少toll样受体-4和增加肠粘膜紧密连接蛋白基因表达提高仔猪生长速度)**

简介: Deoxynivalenol(DON) is a mycotoxin produced by *Fusarium* species in the field, commonly found in cereal grains, which negatively affects performances and health of animals. Mycotoxin binders are supposed to reduce the toxicity of mycotoxins. Method: The effect of a mycotoxin binder(containing acid-activated bentonite, clinoptilolite, yeast cell walls and organic acids) on growth performance and gut health was studied. Hundred and twenty weaning piglets were allocated to 4 treatments, with 5 pens of 6 piglets each, arranged in a 2 × 2 factorial design: control diet; control diet with 1 kg/t binder; control diet with DON; and control diet with DON and 1 kg/t binder. From d014, the diet of DON-challenged groups was artificially contaminated with a mixture of DON(2.6 mg/kg), 3-acetyldeoxynivalenol(0.1 mg/kg) and 15-acetyl-deoxynivalenol(0.3 mg/kg), after which the total contamination level was reduced to 1 mg/kg, until d37. On d14, one pig from each pen was euthanized and distal small intestinal mucosa samples were collected for the assessment of intestinal permeability, and gene expression of tight junction proteins, toll-like receptor 4, inflammatory cytokines and intestinal alkaline phosphatase. Results: After 37 d, there were no differences in growth performance between control and DON-challenged groups( $P > 0.05$ ). Nevertheless, groups that received diets with binder had a significantly higher average daily gain(ADG) and average daily feed intake(ADFI) for the first 14 d as well as for the whole period, compared to groups without binder( $P \leq 0.05$ ). Groups with binder in the diet also exhibited lower expression of toll-like receptor 4 in distal small intestinal mucosa at d14, compared to groups without binder( $P \leq 0.05$ ). Interestingly, comparing the two DON treatments, piglets fed DON and binder had significantly higher ADFI and ADG compared to those with only DON for the first 14-d( $P \leq 0.05$ ). Addition of binder to DON contaminated diets, also down-regulated the gene expression of toll-like receptor 4( $P \leq 0.05$ ) and increased mRNA level zona occludens 1( $P \leq 0.10$ ) as compared to DON. Conclusions: The present data provide evidence that the binder improves growth rate in piglets associated with reduction of toll-like receptor-4 and increase of tight junction protein gene expression. However, the current study does not allow to assess whether the effects of the binder are mediated by alterations in the toxicokinetics of the mycotoxin.

来源: Journal of Animal Science and Biotechnology

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全文链接:

[http://agri.ckcest.cn/file1/M00/02/9E/Csgk0FwIb6uAVHDEAAYKL1-i\\_1c263.pdf](http://agri.ckcest.cn/file1/M00/02/9E/Csgk0FwIb6uAVHDEAAYKL1-i_1c263.pdf)

