



2019年第3期总170期

动物营养专题

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1. 缬氨酸在断奶仔猪应用上的研究进展

中国农业科学院农业信息研究所

联系人：熊本海

联系电话：010-62816017

邮箱：agri@ckcest.cn

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▶ 前沿资讯

1 . New study shows US pork's long-term sustainability progress (新的研究显示美国猪肉生产的长期可持续发展进程)

简介: USA - A new study from the University of Arkansas has confirmed what many have known for some time America's pig farmers are producing a product that has become increasingly sustainable over the past five decades. According to the new study, A Retrospective Assessment of U.S. Pork Production: 1960 to 2015, the inputs needed to produce a pound of pork in the United States became more environmentally friendly over time. Specifically, 75.9 percent less land was needed, 25.1 percent less water and 7.0 percent less energy. This also resulted in a 7.7 percent smaller carbon footprint. "The study confirms what we as producers have been doing to make good on our ongoing commitment of doing what's best for people, pigs and the planet, which is at the heart of the industry's We CareSM ethical principles," said Steve Rommereim, National Pork Board president and a pig farmer from Alcester, South Dakota. "It's a great barometer of our environmental stewardship over the years and gives us a solid benchmark for future improvements."

来源: The PigSite

发布日期: 2019-01-11

全文链接:

<http://www.thepigsite.com/swinenews/45840/new-study-shows-us-porks-longterm-sustainability-progress/>

2 . Algae-based β -glucan may provide gut, immune boost for piglets (基于藻类的 β -葡聚糖可以为仔猪提供肠道免疫增强作用)

简介: Piglets see immune boost from feed additive © GettyImages/dusanpetkovic Piglets see immune boost from feed additive © GettyImages/dusanpetkovic RELATED TAGS: Gut health, Algae, Immune system Piglets facing an immune challenge from E. coli may see an improvement to gut health and immune functioning from algae-derived β -glucan in their feed, say researchers. Researchers with the University of California, Davis in the US and Evonik explored algae's potential as a platform to generate beta-glucans (β -glucan) for use in piglet diets. The group published its work in the journal of Animal Feed Science and Technology. "The objectives of this study were to investigate the effects of algae-derived β -glucan on diarrhea, gut permeability and immune responses of weaned pigs experimentally infected with F18 E. coli," the researchers said. Adding high doses of the algae-derived β -glucan reduced incidents of diarrhea throughout the feeding and challenge trial, they said. Compared to results from the control diet, the feed additive also lowered white blood cells, serum tumor necrosis factor (TNF-a), neutrophils, cortisol and haptoglobin along with influencing the expression of several immune-linked genes. "The results of this study indicate that supplementation of around 108 mg/kg of β -glucan in animal feed could improve gut barrier function and immunity of weaned pigs and reduce post-weaning diarrhea, which will promote weaned pig health and increase profitability of pork producers as the use of antibiotics in feed is restricted," they said. The β -glucan used in this experiment was dried algae *Euglena gracilis*

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provided by Algal Scientific, US. The product contained around 50% β -glucan, in which 95% of them was β -1,3-glucan.

来源: www.feednavigator.com

发布日期:2019-01-11

全文链接:

<https://www.feednavigator.com/Article/2019/01/10/Beta-glucan-and-immunity-boosting-in-piglets>

3. 【国家奖】畜禽粪便污染核算和减排增效技术助力畜牧业绿色发展

简介:我国是畜牧养殖大国,其生猪饲养量占全球一半以上,丰富的畜禽产品供给为人民日益增长的生活水平提供了可靠的保障,但由于规模养殖与分散种植造成种养脱节,养殖环境污染问题日益突出。项目启动前,畜禽废弃物排放规律不明、监测核算方法处于空白、减排与利用技术效率低、经济适用模式缺乏,造成污染底数不清、大量粪便没有得到有效处理和利用,资源浪费和污染严重,成为影响农业绿色发展的难题。畜禽粪便污染防治和资源化利用是党和政府高度关注的重大民生工程,事关6亿农民的生产生活和面源污染防治。中国农业科学院农业环境与可持续发展研究所董红敏领衔的畜禽科学与工程创新团队在国务院第一次全国污染源普查重大科技专项、国家科技攻关计划和科技支撑计划等项目支持下,历经18年的持续攻关,在畜禽粪便污染监测核算方法、畜禽粪污处理利用减排增效关键技术和资源化利用典型模式等方面取得了创新性成果。

来源: 中国农业科学院

发布日期:2019-01-10

全文链接:

<http://www.caas.net.cn/xwzx/yw/295121.html>

4. 2018年中国饲料行业的十大事件?

简介:饲料企业的趋势是从生产企业向服务企业转型。养猪企业的趋势是从经验养猪向数据养猪转型。整个行业在转型,龙头饲料行业率先破局,预示着畜牧业进入了一个不同以往的新阶段。1、大北农、天邦、唐人神引入国资今年,行业整体不乐观,上半年养猪亏损严重,下半年又受非洲猪瘟困扰,不少上市企业陷入困境。近期,国资纷纷入股农牧巨头,包括大北农、天邦、唐人神等。国企浙江省农业发展集团有限公司(简称农发集团)将以6.96亿元的价格收购天邦股份10%股权;唐人神拟将其所持公司5800万股股份(占总股本6.93%)协议转让给湖南资管;大北农实际控制人、董事长邵根伙拟转让股份于北京首农食品集团,欲引入国资稳定经营状况。养猪亏损给企业造成重大打击,而大北农除了养猪亏损外,邵根伙收购的中国圣牧上半年已经亏损11亿元。行业一旦变天,几十年的积累就要从头来过。在资本市场,上市企业看起来生命力很强,同时也很脆弱,有人尝到了甜头,也有人吃了不少苦头。但是无论如何,畜牧行业多才俊,卷土重来未可知。2、血浆蛋白粉暂停用于饲料中近期,非洲猪瘟在各省发生,有行业人士指出,血浆蛋白粉有可能称为传播非洲猪瘟的隐患。9月13日农业农村部发出公告,饲料生产企业暂停使用以猪血为原料的血液制品生产猪用饲料,这意味着行业内普遍使用的血浆蛋白粉将退出市场。不少饲料企业纷纷将已添加血浆蛋白粉的饲料召回,并且对外承诺不再使用血浆蛋白粉。目前,市场上还没有哪种原料可以直接替代血浆蛋白粉,

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但是从功能替代角度出发,使用酵母提取物、昆虫蛋白等也能起到提高饲料适口性和消化率的作用。本次血浆蛋白粉的停用,引起了行业的高度关注,饲料企业也及时调整。政策的落地同时也决定了一批企业的兴衰。

来源: 阳光畜牧网

发布日期:2018-12-21

全文链接:

<http://www.xinmi123.com/html/ncbd/486691.html>

➤ 学术文献

1. 缬氨酸在断奶仔猪应用上的研究进展

简介: 摘要: 仔猪早期断奶会引起采食量降低、腹泻、生长发育迟缓等问题。添加微量元素、氨基酸以及维生素等营养物质,应用酸化剂、酶制剂以及益生菌等饲料添加剂和改善饲养管理均可从一定程度缓解仔猪断奶应激。缬氨酸作为三大支链氨基酸之一,具有氧化供能、促进蛋白质合成、促进糖异生等生理功能,可提高断奶仔猪成活率,促进断奶仔猪生长发育,提高其肠道免疫机能。文章通过对缬氨酸在断奶仔猪上的应用进行综述,主要介绍缬氨酸对断奶仔猪生长性能、免疫系统以及肠道形态的影响,并综述其营养调控机制,为缬氨酸在断奶仔猪上的应用提供理论支持。

来源: 黑龙江畜牧兽医

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全文链接:

<http://agri.ckcest.cn/file1/M00/06/5C/Csgk0Fw9mRmAdwyGAAMXKBjywjw659.pdf>