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水禽营养与饲料

研究方向:

1. 鸭精准营养、代谢与调控机制

研究不同养殖模式下鸭营养精准需要、代谢规律及互作效应; 研究饲料营养调控鸭肌肉发育和脂肪代谢的分子机制。

2. 鸭饲料营养价值评定

评价鸭饲料营养价值, 研究饲料养分消化吸收和代谢利用特点及规律, 解析鸭饲料养分高效利用的生物学特征及调控作用, 阐明肠道微生物、饲料养分与肉鸭互作关系及调控机制。

3. 鸭肉风味物质形成机理及品质营养调控

鸭肉风味物质鉴定、形成规律和机理; 优质鸭肉产品营养调控技术研究与应用。

代表性成果:

1. 肉鸭脂肪代谢营养调控技术创新

针对肉鸭规模化养殖过程脂肪沉积紊乱的问题, 采用填饲方式和胆碱缺乏等构建肉鸭脂肪代谢障碍性疾病模型, 通过表型测定、生理生化、多组学联合分析, 筛选到肉鸭肝脏脂肪合成、转运和分解的关键基因和蛋白, 明确肉鸭肝脏脂肪代谢的分子机制, 并研发了以胆碱、蛋氨酸、核黄素、PUFA、磷脂、表面活性剂等精准营养调控技术, 相关研究结果发表文章12篇, 制定《肉鸭饲养标准》1项

2. 代表性论文与专利

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