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POULTRY NUTRITION NEWSLETTER

THE POULTRY NUTRITION NEWSLETTER IS BROUGHT TO YOU BY

Department of Poultry Science
College of Agricultural & Environmental Sciences
UNIVERSITY OF GEORGIA

NUTRIBINS

LATEST NUTRITION RESEARCH AT A GLANCE

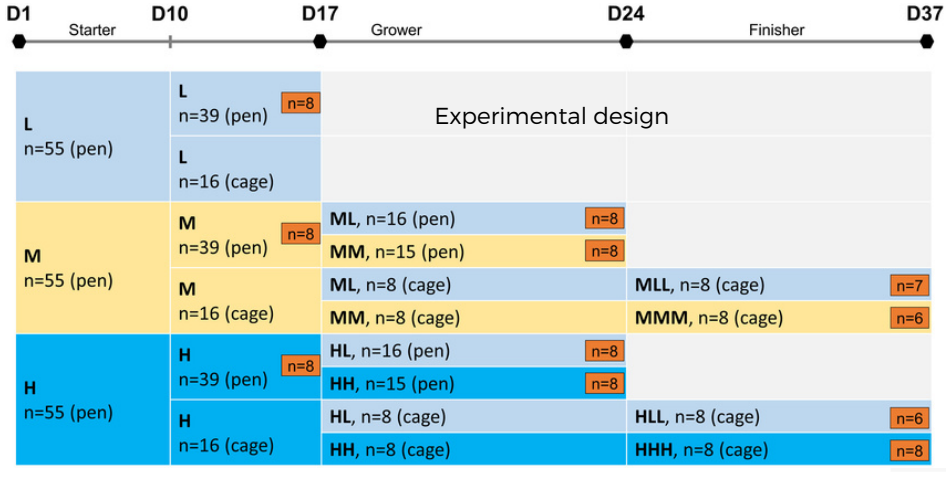
POULTRY

In LPS-challenged yellow-featherd broiler chicks, supplementing 100 or 400 mg/kg **anthocyanin** alleviated declined growth performance and gut mucosal damage, likely through its antioxidant effects.

Guangdong Academy of Agricultural Sciences /Link

In broiler chicks, **different levels and sources of Cu and Mn** (sulfate or hydroxychloride) showed that on d 43, 150 ppm Cu hydroxychloride and 40 or 80 ppm Mn hydroxychloride yielded the best FCR and breast yield.

São Paulo State University/Link



In broilers, following a **variable P** supply in the starter phase, the effects of a dietary P depletion were investigated at different developmental stages, results revealed a marked response to P depletion at the earliest developmental phase, after which indications of effective compensatory mechanism were detectable with advancing ages.

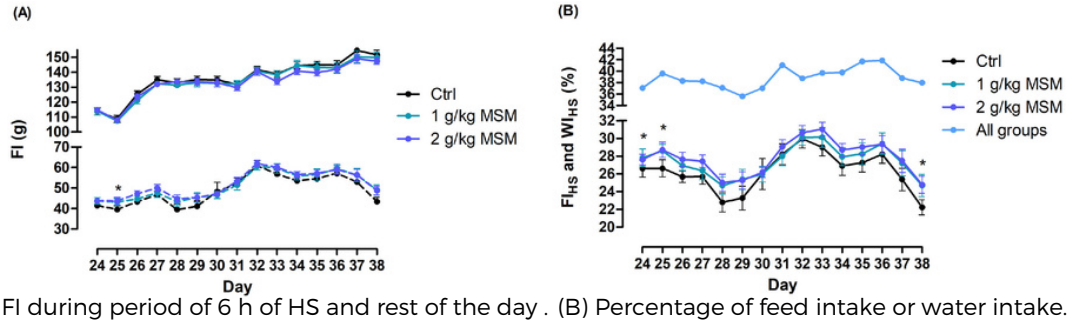
University of Rostock/Link

In broilers challenged with *Clostridium Perfringens*, supplementing **beta-1,3-glucan** at 250 mg/kg improved BW and FCR, and partly alleviated intestinal mucosal damage by the challenge.

Northwest A&F University/Link

In heat-stressed broilers, supplementing 1 and 2 g/kg **methyl sulphonyl methane (MSM)** improved performance in the grower phase (d10-21) and reduced mortality in the finisher phase (d21-39)

Ghent University /Link



(A) FI during period of 6 h of HS and rest of the day . (B) Percentage of feed intake or water intake.

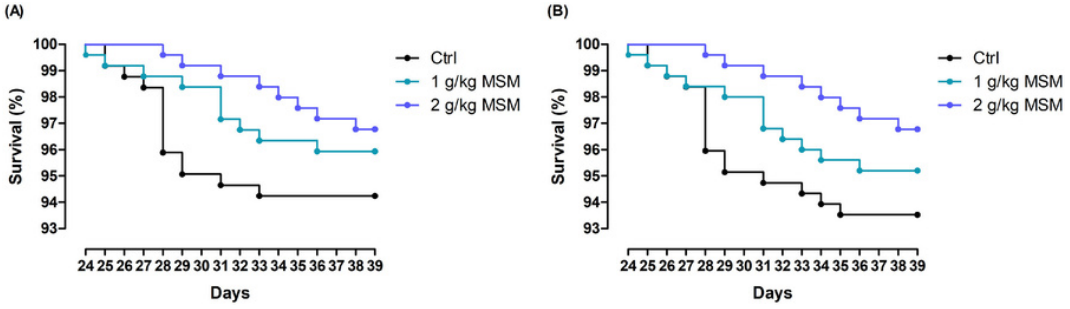


Fig. (A) & (B) Percent survival of birds in period of chronic cyclic HS model based on mortality/mortality and culling

In broiler chicks, there is no difference in the variation of estimates between the **3 and 4-point models for the regression method of determining ME** of ingredients , provided that the inclusion of the test ingredient is adequate and both models represent the linearity and variability of responses.

Purdue University/Link

POULTRY

LATEST NUTRITION RESEARCH AT A GLANCE

The **precision-fed rooster assay** is suitable for determination of phytic acid disappearance in plant-based feed ingredients; the assay was able to detect a significant effect of 1,800 U/kg of exogenous phytase on phytic acid disappearance for wheat middlings and rice bran.

University of Illinois/Link

In laying hens, compared to heavier weight hens (1.65 kg), the **light weight hens** (1.49 kg) sustained egg production throughout a longer laying cycle with beneficial bone characteristics; while higher nutrient density diet improved eggshell strength.

The University of Sydney | Link

In laying hens, a meta-analysis in 2012 and literature since then indicated that an **NPP concentration of 2.2 g/kg diet without phytase and 35 to 40 g Ca/kg** of feed is adequate to maintain laying performance of laying hens throughout the laying cycle. With phytase supplemention, NPP concentration can be reduced to the complete omission of mineral P depending on the phytase dose.

University of Hohenheim | Link

In laying hens, feeding **DHA-rich microalgae oil** enriched eggs with Very long-chain n-3 PUFA, but the recommended dietary inclusion should not exceed 20 g/kg

Pennsylvania State University | Link

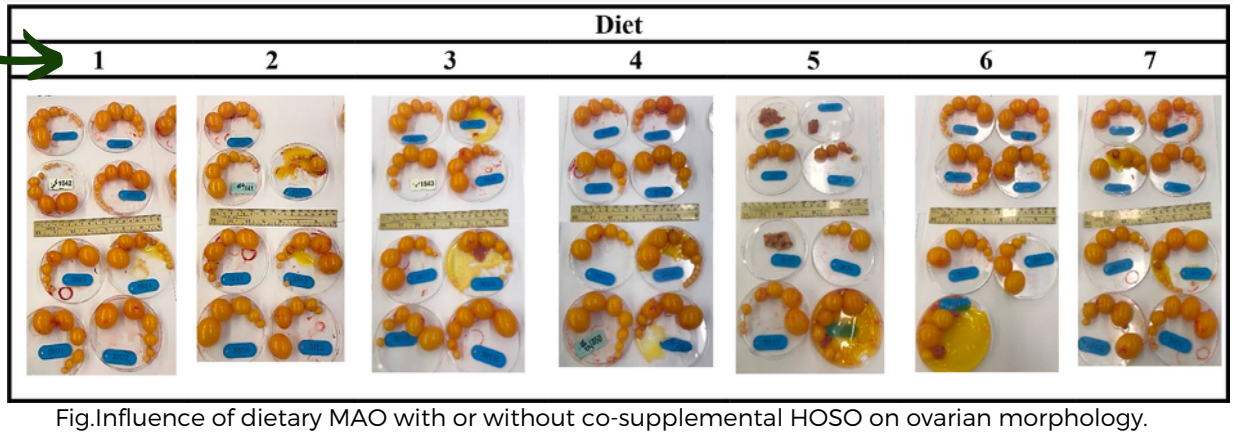
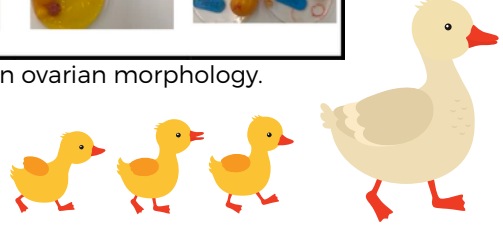


Fig.Influence of dietary MAO with or without co-supplemental HOSO on ovarian morphology.

In 50-70-week-old laying hens under heat stress, supplementing **hydroxy-selenomethionine** at 0.3 ppm improved productivity and egg quality compared to the Sodium Selenite group.

Federal University of Paraíba | Link



In meat ducks, supplementing **rosemary extract** at ≥500 g/t improved FCR and total antioxidant capacity.

Hunan Institute of Animal Husbandry and Veterinary Medicine | Link

A non-contact and **automated weighing method** was developed for duck carcasses that can provide a precision with a mean abstract deviation of 58.8 grams.

Northeastern University at Qinhuangdao | Link

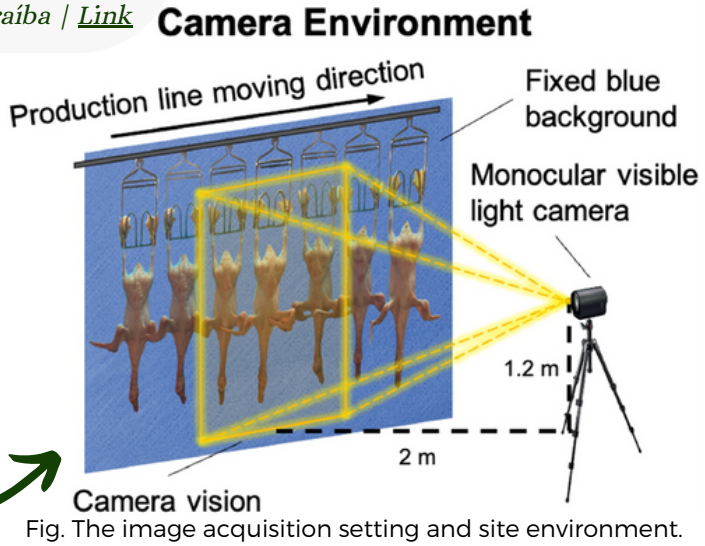


Fig. The image acquisition setting and site environment.