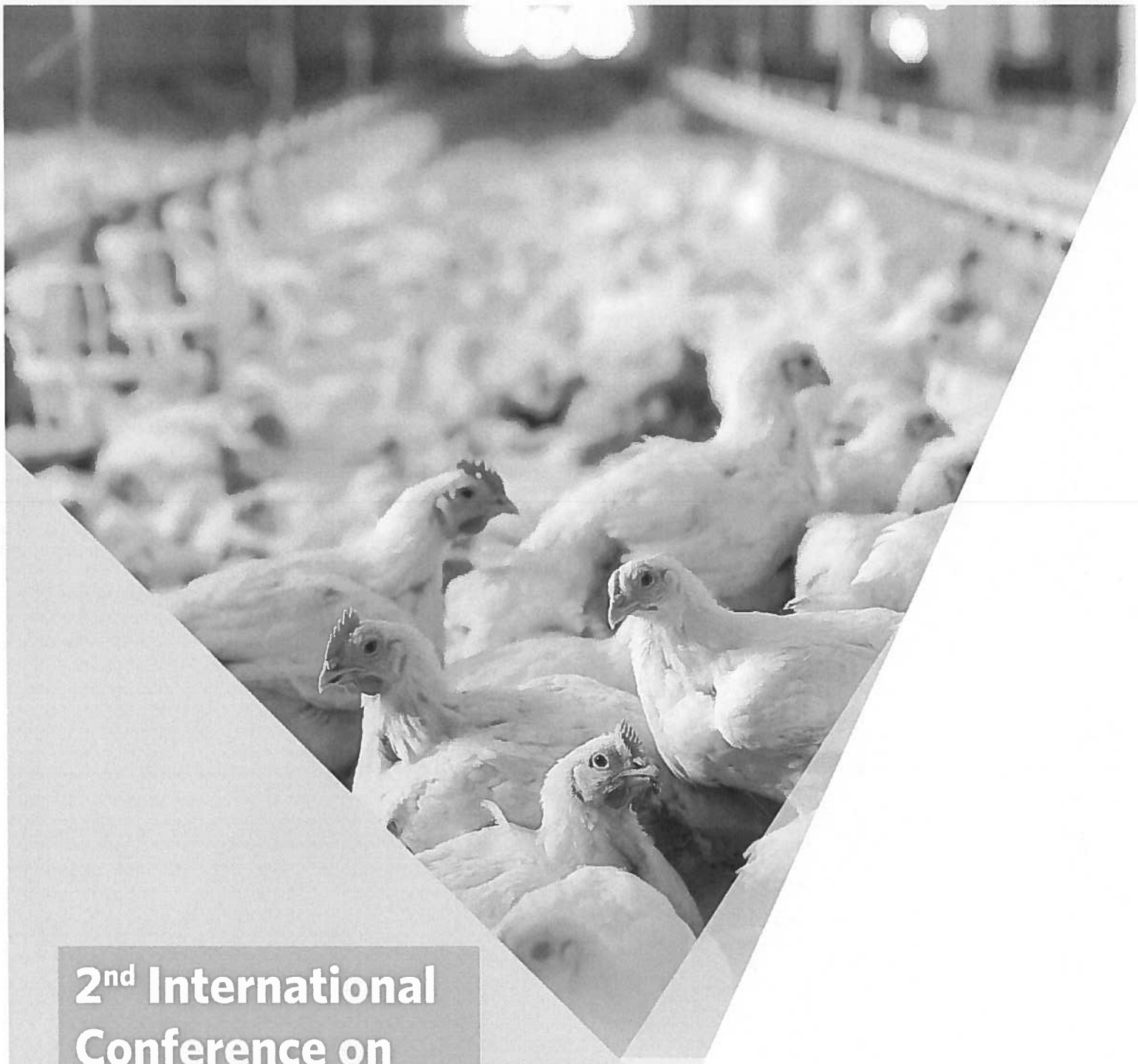

# 2nd International Conference on Necrotic Enteritis

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## *Program*

2nd International Conference on
Necrotic Enteritis in Poultry

**Effects of NeutraPath™ with or without nicarbazin on the performance of broiler chickens during simulated field challenge conditions**

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A 28-day study evaluated the effects of necrotic enteritis (NE) on growth performance of broiler chickens fed a diet containing a natural antimicrobial, NeutraPath™, and no commercial ionophore. On hatch day, 2,080 Ross 708 chicks were randomly assigned to treatments: non-challenged control (CON), challenged (CH) control, CH plus nicarbazin (0.01%), CH plus NeutraPath (1 kg/MT), and CH plus NeutraPath (1 kg/MT) and nicarbazin (0.01%). NeutraPath is a synergistic blend of antimicrobial fatty acids and essential oils that is optimized for pathogen control. NeutraPath was fed for 28 days; nicarbazin was fed through day 21. Except for CON, birds were placed on litter used during previous growouts. On day 7, litter containing *C. perfringens* and *Eimeria* was added to CH pens to simulate natural field exposure. Intestines were examined for lesions on day 28. Treatment differences were tested using one-way ANOVA.

Compared to CON, NeutraPath/nicarbazin- or nicarbazin-treated birds exhibited no significant difference in 28-day mortality. However, compared to CH control, all treatments significantly decreased mortality ($P<0.05$). Although no statistical difference was found among treatments for overall average feed intake, NeutraPath/nicarbazin- and nicarbazin-treated birds had significantly greater weight gain and improved feed conversion ratio (FCR) compared to CH control birds ($P<0.05$). Birds in all treatments also had significantly lower lesion scores than CH control birds ($P<0.05$).

NeutraPath-supplemented broilers exhibited significantly lower mortality and lesion scores compared to CH control ($P<0.05$). Adding nicarbazin resulted in further statistical improvement in these parameters. These data indicate NeutraPath can be used to manage *C. perfringens*-induced NE in broilers.