Research in Veterinary Science 114 (2017) 524

Contents lists available at ScienceDirect

Research in Veterinary Science

journal homepage: www.elsevier.com/locate/rvsc

Corrigendum

Corrigendum to "Dietary *Allium hookeri* reduces inflammatory response and increases expression of intestinal tight junction proteins in LPS-induced young broiler chicken" [Res. Vet. Sci. 112:149–155]

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The authors regret that the abstract was not published with the main manuscript and would like to publish the abstract in the corrigendum.

Abstract

We undertook a study to assess the effects of *Allium hookeri* (AH) root and fermented root on inflammation and intestinal integrity of lipopolysaccharide (LPS)-challenged broiler chickens. Birds were assigned to six groups (n = 25 birds/treatment) and fed with basal diets (CON) or basal diets supplemented with AH root or fermented root at two concentrations (1 or 5%). At 7 d of age, five groups (n = 125) in each dietary treatment were injected with LPS (1 mg/kg body weight), and the remaining 25 birds were injected with sterile phosphate-buffered saline (PBS) as a negative control. LPS challenge significantly reduced average body weight gain at 24 h post-injection compared with PBS control. Fermented root supplementation increased average body weight gain by 1% compared with the LPS-challenged control. Serum α-1-AGP levels, interleukin (IL)-1β, IL-8, tumor necrosis factor superfamily member 15 (TNFSF15), and LPS-induced tumor necrosis factor-α factor (LITAF) transcript levels were significantly higher in the small intestine in LPS-injected chickens. However α-1-AGP levels were reduced by AH root or fermented root (1 and 5%) supplementation and IL-1β, IL-8, and LITAF were also down-regulated by root and fermented root (1 and 5%) supplementation. The reduced expression of tight junction proteins (junctional adhesion molecule 2 (JAM2) and occludin) and intestinal mucin 2 (MUC2) by LPS challenge was reversed by root or fermented root (1 and 5%) supplementation. These findings demonstrate that dietary AH root and fermented root influence anti-inflammatory activity and tight junction protein expression in LPS-induced chickens.

The authors would like to apologise for any inconvenience caused.

DOI of original article: http://dx.doi.org/10.1016/j.rvsc.2017.03.019
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http://dx.doi.org/10.1016/j.rvsc.2017.06.009

0034-5288/