

# **INFLUENCE OF *Lactobacillus* STRAINS TO THE *Meq* GENE SYNTHESIS OF MAREK DISEASE VIRUS IN CHICKEN**

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## **Summary**

This study aimed at evaluating the inhibition of Herpes virus (MDV) replication by *Lactobacillus casei* B1.3, *Lactobacillus acidophilus* B1.8 bacterial strains. Real-time PCR technique allowed to determine the reduction proportion of *Meq* genes copies in immune organs such as spleen, bursa, breast of three chicken breeds (Ri, Luong Phuong and Ross 308). The virulence inoculation of MDV strain at  $2 \times 10^3$  CFU/chicken individual, in supplement with *Lactobacillus casei* B1.3 and *Lactobacillus acidophilus* B1.8, both at with  $10^7$  CFU/chicken individual. The results showed that the reduction proportion of *Meq* genes copies in chicken with supplement of both *Lactobacillus casei* B1.3, *Lactobacillus acidophilus* B1.8 was higher than in chicken with supplement of one strain: in spleen (93.3% – 93.74% for Ri; 99.39% – 99.85% for Luong Phuong; 95.22% – 96.1% for Ross 308 chicken), in Bursa (99.54% – 99.81% for Ri; 99.35% – 99.68% for Luong Phuong and 99.2% – 99.42% for Ross 308 chicken), in breast (99.49% – 99.63% for Ri, 99.16% – 99.48% for Luong Phuong and 95.01% – 99.63% for Ross 308). The results showed that the combination of *Lactobacillus casei* B1.3, *Lactobacillus acidophilus* B1.8 strains could be used to inhibit *Meq* gene replication causing Marek disease in chicken.

**Keywords:** *Lactobacillus*, gene *Meq*, Ri, Luong Phuong, Ross 308, Marek.