



# Myf5 and MyoG gene SNPs associated with Bian chicken growth trait

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**ABSTRACT.** The growth trait is important in poultry production. We analyzed the association between single nucleotide polymorphisms (SNPs) in the *Myf5* and *MyoG* gene and Bian chicken growth traits. SNPs in candidate genes of the Bian chickens were detected by the polymerase chain reaction-single strand conformation polymorphism method. Two mutation loci and six genotypes were identified in each candidate gene. In terms of growth traits, least square analysis showed that the FF genotype of the *MyoG* was the advantage genotype and the IJ genotype of the *Myf5* was the disadvantage genotype for growth

trait in Bian chicken. Correlation analysis suggested that the different combination genotypes between *Myf5* and *MyoG* genes had a significant effect on growth traits in Bian chickens. The result suggested that *MyoG* and *Myf5* genes can be used in marker-assisted selection for improving the growth trait in Bian chicken.

**Key words:** Bian chickens; *Myf5*; *MyoG*; Growth trait; SNP; Conjoint analysis