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# COMPARISON MICROSATELLITE LOCI GENOTYPES DISTRIBUTION IN GROUPS OF DUCKS WITH DIFFERENT LEVELS OF EGG PRODUCTIVITY

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One of the priority areas for the livestock sector development is to improve animals productive qualities and to research their genetic diversity. Microsatellite loci are selectively neutral; however, they can be physically associated with loci of quantitative traits. In this regard, the research relation individual microsatellite loci genotype with animal productivity deserves special attention.

The aim of our research was the genetic analyse ducks of the Shaoxing breed with different levels of egg productivity by 19 microsatellite DNA loci (APL2, APL11, APL12, APL23, APL26, APL36, APL83, APL82, APL81, APL80, APL79, APL78, APL77, CMO11, SMO7, SMO10, SMO11, SMO12, SMO13).

The material for research was eggs productivity of the Shaoxing duck (n=200), whose breeding is very relevant in the southern provinces of China.

On the basis of microsatellite analysis, frequency of alleles and genotypes was determined for 19 microsatellite loci. Animals of different groups differed by weight of eggs. Ducks of I group had eggs with mass 60–65 g, II — 65–70 g, III and IV groups — 70–75 and 75–80 g, respectively.

As a result of the analysis, it was found that with an increase in egg mass (from 60 to 80 g), the number of animals that were carriers of the individual alleles of the APL80 locus increased (from 0.58 to 0.77). This may indicate the promising use of this locus to find a candidate gene linked to him, whose polymorphism is associated with the weight of the egg.