**Titre d’article : Genetic characterization of four Algerian goat breeds assessed by microsatellite markers**

**Résumé :**

Genetic characterization and diversity of local goat breeds (Naine de Kabylie, Arbia, Mekatia, and M’zabite) raised in Algeria (n = 224) were investigated by eighteen microsatellite markers recommended by FAO (2011). A total of 450 alleles were detected in this study. The mean values of polymorphic information content, observed heterozygosity and expected heterozygosity were 0.93, 0.84, 0.94, respectively. The mean number of alleles per population ranged from 12.94 (M’zabite) to 16.39 (Arbia). The highest values of FIS, FST and FIT known as Wright F-statistics were 0.179, 0.087 and 0.219, respectively. Although a total of 118 private alleles was observed in this study, only frequency of six allele in M’zabite goat breed was greater than 5%. Mekatia and Arbia goat populations were genetically closest to each other according to dendrogram. Obtained GST value from the present study indicated that 4.00% of total genetic variation resulted from the differences between the breeds. This study indicates that the four studied Algerian native goat breeds are classified into distinct breeds with a good level of genetic diversity. Indeed, our results showed that the used microsatellite markers were adequately polymorphic and that they can be successfully used to investigate genetic diversity in Algerian goat populations.