ABSTRAKT

Markers on the non-recombining region of chromosome Y is a useful tool for study of diversity between populations. SNPs are the most common polymorphisms in human genome. Mutation rate of SNPs is very low and so they may be used as genetic markers in evolutionary and population studies.

We have analyzed 205 unrelated men from 11 Sub-Saharan Fulani's subpopulations. Fulani are an ethnic group of people spread over many countries, mainly in West Africa. Our samples are from Tindangou area, Banfora area (Burkina Faso), Bongor area, Linia area (Chad), Diafarabé area (Mali), Tcheboua area (Cameroon), Banfora area, Diffà area, Zinder area, Ader area and Abalak area (Niger). Using kit Signet Y-SNP Identification Systems and Luminex instrument with LabMAP Luminex Technology we detected particular Y chromosome's SNPs. LabMAP Luminex Technology is universal array platform, which as a probe using fluorescent polystyrene microspheres.

We have observed 12 different haplogroups. Haplogroup E, which is typical African haplogroups, is determined with derivated allele in polymorphism M96. We have detected haplogroup E in maximum of 89,3% in the Fulani's subpopulations. In 7,8% we have detected haplogroup R, which is characteristic of populations in the Euroasia. Gene pool of Fulani's population is influenced with a Western and Eastern African population. A third of Fulani's population share Estern African haplogroups, which weren't detected in other populations of Western and Central Africa.

Keywords: Fulani; Y Chromosome; SNPs; haplogroups; Sub-Saharan Africa; nomad herdsmen