Abstract

Introduction. The use of cards to collect, store and conserve blood is not enough in molecular biology research, in which these processes are preferably done with Vacutainer tubes with ethylene diamine tetra-acetic acid as an anti coagulant. However, due to the topography of the zone in which such research takes place, the use of conventional methods, with refrigerated transportation of the samples, is not adequate because of the difficult access conditions in the farms and the long distance between herds.

Objective. To standardize the technique (chain reaction of simple chain polymerase-polymorphisms) for the identification of polymorphisms of the kappacasein gen in Holstein, Norman, Jersey and Brown Suiss cattle in the dairy basin of the Nariño’s high tropical zone. Material and methods. Blood samples were taken from 1087 animals, using cards for collecting, storing and keeping the tissues for their analysis in the laboratory. Results. To obtain high quality amplified products, one 1.23 mm disc and an electrophoretic time of 16 hours at 160 V were sufficient. This research work allows to conclude that cards were an efficient mean, because they make transportation and storing of blood tissue easy and avoid the use of refrigeration to keep the samples during long periods of time.

Keywords
Kappa casein gen, DNA, Holstein, Norman, Jersey, Brown Suiss.