Expression of trypanotolerance in N'Dama x Boran crosses under field challenge in relation to N'Dama genome content

Orenge, Caleb; Munga, Leonard; Kimwele, Charles; Kemp, Steve; Korol, Abraham; Gibson, John; Hanotte, Olivier; Soller, Morris URI: <u>http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/10374</u> Date: 2011

Abstract

Animal trypanosomosis in sub-Saharan Africa is a major obstacle to livestock based agriculture. Control relies on drugs with increasing incidence of multiple-drug resistance. A previous mapping experiment in an F2 population derived from the indigenous trypanotolerant N'Dama cattle crossed to susceptible (Kenya)-Boran cattle under controlled challenge, uncovered a number of trypanotolerance QTL (T-QTL). The present study was to determine expression of N'Dama trypanotolerance in a backcross to the Boran under conditions of field challenge, and whether chromosomal regions associated with trypanotolerance in the F2 experiment showed similar effects in the BC population.