BOOK OF ABSTRACTS

XI INTERNATIONAL CONFERENCE ON GOATS

Gran Canaria, Spain, 23-27 September 2012

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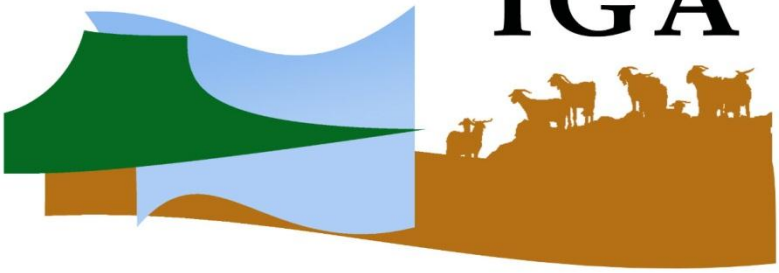
IGA



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Y-chromosome haplotype diversity in domestic goats

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In goats, domestication process has been mainly studied by using mitochondrial DNA markers. As much as six different lineages and a very weak phylogeographic structure have been revealed, suggesting very old migration processes and at least two independent domestication events in Asia. However, neither the geographic locations of the original stocks nor the routes of migration have been established. Interestingly, the information provided by Y-chromosome polymorphisms may be complementary to that of mitochondrial DNA and thus it may clarify the origin of domestic goats. In this work, we have sequenced seven regions of the Y-chromosome from 24 different goat breeds distributed worldwide. Our preliminary results agree with two independent domestication processes and suggest at least two migration routes from East to West: a Northern one linking Asia and Europe, and a Southern one that may have reached the Iberian Peninsula through Africa.