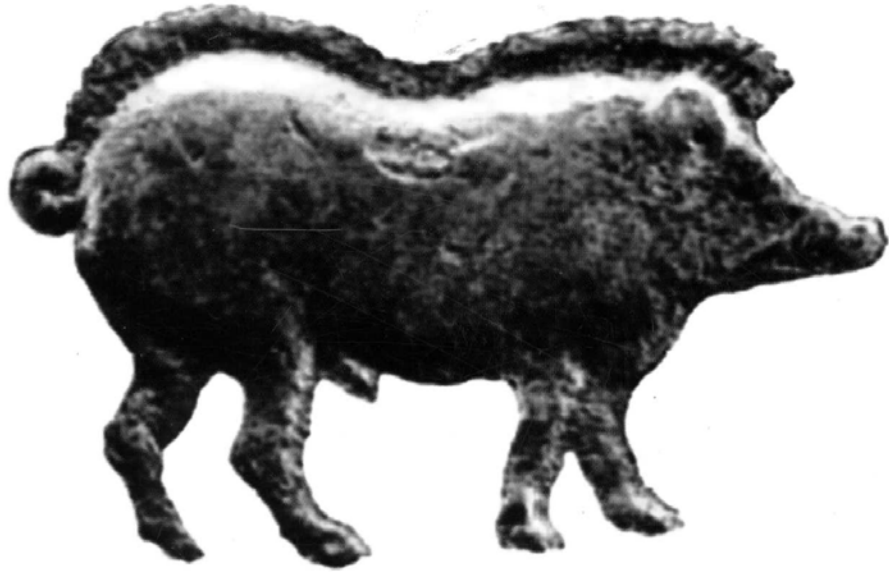


HYSTRIX The Italian Journal of Mammalogy



Ancient Etruscan coin (Populonia, 4th Century b.C.; Archaeological Museum, Florence)

V European Congress of Mammalogy
Siena, Italy
21-26 September 2007

PUBLISHED BY
ASSOCIAZIONE TERIOLOGICA ITALIANA

(N.S.) – VOL. I, SUPP. 2007

A MITOCHONDRIAL PHYLOGEOGRAPHY OF SIX *APODEMUS* SPECIES IN FAR EAST RUSSIA AND CHINA

HÉLA SAKKA^{1,2,3,5}, JEAN-PIERRE QUERE⁴, MARINA PAVLENKO⁶, IRINA KARTAVTSEVA⁶, LEE HANG⁷, MOHAMED MARRAKCHI³, JOHAN MICHAUX^{2,4}

¹ Unité de Recherches Zoogéographiques, Liège, Institut de Botanique, Université de Liège, Belgique; e-mail: hela_sakka@yahoo.fr

² Laboratoire de Génétique des Micro-organismes, Institut de Botanique, Belgique.

³ Laboratoire de Génétique Moléculaire Immunologie et Biotecnologie, Faculté des Sciences de Tunis

⁴ Centre de Biologie et de Génétique des Populations, Montpellier.

⁵ Faculté des Sciences de Bizerte

⁶ Institute of Biology and Soil Science, Far East Branch of Russian Academy of Sciences, Vladivostok, Russia

⁷ Conservation Genome Resource Bank for Korean Wildlife, College of Veterinary, Medicine and BK21 Program for Veterinary Science, Seoul National University South Korea

The phylogeography of six *Apodemus* species. (*A. agrarius*, *A. peninsulae*, *A. latronum*, *A. draco*, *A. chevrieri* and *A. illex*) have been studied in Far East Russia and China using cytochrome b gene sequences. Our analyses indicate a higher genetic diversity in some regions such as the Yunnan, Sichuan and Eastern Russia suggesting the existence of multiple refugia in these regions for these species. Several genetic lineages were observed within each of these species, evidencing a strong intraspecific differentiation for them, particularly for *A. draco*. This phenomenon is probably the result of past allopatric isolations associated to the existence of strong biogeographic barriers such as mountains and deserts which are frequent in China and Far East Russia. The presence of such barriers prevented the colonisation of these *Apodemus* species in other regions, at the exception of *A. agrarius* and *A. peninsulae* which were able to colonize more occidental areas, through the South of Siberia.