

INTER AND INTRA GENETIC BIODIVERSITY IN SOUTH EAST ASIAN RODENTS: NEW INSIGHTS FOR THEIR CONSERVATION.

Marie Pagès, Alice Latinne, Taiana Rivière and Michaux Johan*

*Institut de Botanique (Bat. 22), Université de Liège, 4000 Liège (Sart Tilman), Belgique and CBGP (Centre de Biologie et de Gestion des Populations), UMR INRA/IRD/Cirad/Montpellier SupAgro, Campus international de Baillarguet, CS 30016 , 34988 Montferrier-sur-Lez cedex France. Email : Johan.Michaux@ulg.ac.be

Southeast Asia has a high level of mammal endemism and the highest number of threatened and data deficient mammal species.

The first aim of our study is to present first data on a biodiversity inventory of the Murine rodents (Rattini group) from this region based on molecular markers. We applied the method developed by Pons et al., 2006 that determines with no a priori the locations of ancestral nodes that define putative species. To give a name to cluster recognized as a valid species, we proved that the strategy consisting in integrating in our phylogeny DNA sequences from holotype specimens is powerful and illustrated how huge opportunities ancient DNA analysis may offer to taxonomists.

Our second aim was to present original data concerning the intraspecific genetic structure of some rare and threatened South East Asian mammals species (the newly described *Laonastes aenigmamus* and *Leopoldamys neilli*) endemic to karst habitats.

Our results evidenced a high geographic structure of the genetic diversity of these two species. The observed highly divergent genetic lineages would have to be considered as distinct evolutionary units or Management units. These results are essential for the best conservation issues of species endemic to karsts and to South East Asia in general.

We therefore evidence that South East Asia is a biodiversity hotspot not only on the interspecific but also on the intraspecific point of view.