

## Rodent Assemblages of Cenozoic sediments from the Valley of Lakes, Central Mongolia.

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The Valley of Lakes in Central Mongolia is a prominent area, where Cenozoic fossiliferous sediments are associated with basalts. Radiometric basalt dating (<sup>40</sup>Ar/ <sup>39</sup>Ar method) gives a stratigraphic framework in which biostratigraphic data are fitted. The ages of the three basalt eruptions (I-III) are 31 - 32 Ma (Early Oligocene), 27 - 28 Ma (basal Late Oligocene) and 13 Ma (Middle Miocene).

About 60 small mammal faunas were collected by wet screening of large quantities of sediments from stratified fossil horizons within sequences of the Hsanda Gol and Loh formations. Due to the rodent content the vertebrate faunas were arranged in 6 groups (assemblages A, B, C, D, D1 and E) representing a chronological sequence. The assemblages (A) from Hsanda Gol sediments below the basalt (I) and (B) from above the basalt (I) are of Early Oligocene age. The rodent assemblage (C) is situated above basalt (II) of basal Late Oligocene age. Assemblage (C) is known from the uppermost part of Hsanda Gol and lower parts of Loh sediments. Assemblage (D), recognized from connecting Loh sediments is of Late

Oligocene or lowermost Early Miocene age. Early to Middle Miocene silts and sands of the Loh formation contain the rodent assemblage (D1). Assemblage (E) is of Late Miocene age and was recognized in the highest parts of the Loh sequence.

The Mongolian rodent assemblages (A) and (B) can be correlated with faunas of the Chinese mammal age Ulantatalian and the Buran svita from the Zaisan depression / Kasachstan, the assemblages (C) and (D) are correlative with the Chinese faunas of the Tabenbulukian and from Altyn-Chokysu and Akespe from the Northern Aral Region /Kasachstan. The assemblage (D1) may be correlated with faunas of the Chinese Shangwangian and Tungguri-an. The youngest assemblage (E) is correlativ with late Baodean faunas from China.

The first paleontological results of the Mongolian-Austrian cooperation in the Valley of Lakes can be summarized as follows:

1. A biochronology on the base of Oligocene-Miocene rodent assemblages (A-E) was established.
2. The faunas were correlated with Oligocene-Miocene faunas from Kasachstan and China, and with Chinese Mammal Ages.
3. Eomyids, glirids and several undescribed rodent species from the Cenozoic of Central Mongolia were recorded for the first time.

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