

SAGE 2013

**2nd Southeast Asian Gateway Evolution Meeting
March 11-15, Berlin, Germany**

Conference Program and Abstracts

**Museum für Naturkunde –
Leibniz Institute for Research on Evolution and Biodiversity**

Humboldt-Universität zu Berlin

Marie Curie Actions, EU

Seventh Framework Programme, EU

ThroughFlow, IPAEG, EU

Wallacea Research Group



First discovery of a hippopotamus fossil from Thailand and its significance on palaeobiogeography in SE Asia

Rattanaphorn Hanta¹, Pratueng Jintasakul² & Masanaru Takai³

¹Rajabhat University, Muaeng, Nakhon Ratchasima, Thailand

²Northeastern Research Institute of Petrified Wood and Mineral Resources, Nakhon Ratchasima

³Primate Research Institute, Kyoto University, Inuyama, Japan

1
2
3
4
5
6
7
G

S
Y
M
P
O
S
I
U
M

The two extant hippos are restricted to Africa: a smaller form, *Choeropsis liberiensis* (pygmy hippo) living in NW coast and a larger form, *Hippopotamus amphibius* (common hippo) found in the sub-Saharan. The earliest hippo, *Kenyapotamus*, is known from the Middle Miocene of Lothagam, Kenya. Hippos became more abundant in the Late Miocene, *Hexaprotodon*, and continue to Plio-Pleistocene and were one of the largest major mammalian components of ecosystems in Africa.

Hippopotamus has dispersed to southern Europe and southern Asia about 6 Ma. It is well known from the Middle and Upper Siwalik sediments of India/Pakistan and Irrawaddy sediments of Myanmar in southern Asia, and also known from Plio-Pleistocene localities in the Indonesian Archipelago, such as Java and Sumatra. In Thailand several hippo fossils have been reported to date: dental fragments from the Pleistocene of central Thailand, and some isolated teeth from the Late Miocene sand pits in the Tha Chang subdistrict, Muaeng district, Nakhon Ratchasima Province. However, the taxonomic identification was uncertain because of the scarcity of fossil specimens.

Here we firstly report a nearly complete hippo mandible from the Tha Chang sand pits. The specimen is most similar to *Hexaprotodon sivalensis*, which is found from the Late Miocene of central Myanmar, in size and dental/mandibular morphology. *Hexaprotodon* have dispersed to SE Asia probably in the Late Miocene, which is much earlier than, as previously thought, the Pleistocene.