

PHYLOGENY OF THE RHINOCEROTIDS OF AFRICA

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(With 1 table)

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TEXT

The rhinocerotids as here understood comprise the *Epiaceratherium*—*Trigonias* group and its descendants. There are seven genera in Africa, as listed in Table 1. Four of them (*Brachyotherium*, *Aceratherium*, *Dicerorhinus* and *Chilotheridium*) emerge in the Early Miocene. As they represent full-fledged

TABLE 1. The rhinocerotids of Africa, distribution in space and time

	million years	<i>Brachyotherium</i>	<i>Aceratherium</i>	<i>Dicerorhinus</i>	<i>Chilotheridium</i>	<i>Diceros</i>	<i>Ceratotherium</i>	<i>Paradiceros</i>
Olduvai IV-Up. II	—	—	—	—	—	×	×	—
Lo. II-1	2-	—	—	—	—	—	×	—
Chemeron Fm.	4-2	—	—	—	—	—	×	—
Shungura Fm.	4-2	—	—	—	—	×	×	—
Mursi Fm.	4	—	—	—	—	×	×	—
Aterir Fm.	4-	—	—	—	—	—	×	—
Kanapoi	4	—	—	—	—	—	×	—
Langebaanweg	—	—	—	—	—	—	×	—
Lothagam Hill	6	×	—	—	—	—	×	—
Sahabi	6	×	—	—	—	—	—	—
Mpesida Beds	7	×	—	—	—	—	×	—
Ngorora Fm.	12-	×	×	or	×	—	—	—
Kirimun	—	—	×	or	×	—	—	—
Douaria	12	—	—	—	—	×	—	—
Alengerr Beds	14-12	—	×	×	—	—	—	—
Fort Ternan	14	—	—	—	—	—	—	×
Loperot	18	—	—	—	×	—	—	—
Sinda	—	×	×	—	—	—	—	—
Rusinga	18,5	×	×	×	×	—	—	—
Ombo	—	—	—	×	×	—	—	—
Napak	19	×	×	×	—	—	—	—
Bukwa II	23	×	—	?	×	—	—	—
Moghara	—	×	?	—	—	—	—	—

species different from their Eurasiatic counterparts they must have invaded Africa already in the Oligocene. *Brachypotherium* sprang from the Oligocene aceratheres. The African *Brachypotherium snowi* (Moghara, Egypt), *Brachypotherium heinzeli* (Bukwa II to Sinda, Zaïre), *Aceratherium acutirostratum* and *Dicerorhinus leakeyi* (both Napak to Alengerr) combine characters found in different Oligocene to Pliocene European species of the same genera, showing that the phylogeny in Africa was different from that in the rest of the Old World since the Oligocene. *Brachypotherium lewisi* (Ngorora to Lothagam Hill) is the latest representative of its genus in the world. *Chilotheridium pattersoni* is the African representative of the Eurasiatic *Chilotherium* div. spec., and differs in a combination of primitive (presence of metacarpal V, more slender metapodials) as well as progressive (small nasal horn, larger frontal air sinuses) characters. *Diceros* appears first in the Late Pliocene of North Africa (Douaria) and Eurasia (Pikermi, Samos, Maragha), and may be derived from the stock represented by *Paradiceros mukirii* (Fort Ternan). *Diceros bicornis* of Mursi, Ethiopia, has lower-crowned molars than the modern species (Shungura to Recent). *Ceratotherium praecox* (Mpesida to Mursi) is the direct ancestor of *Ceratotherium simum* (Shungura to Recent), and split off from the *Diceros* stock in the Late Miocene.

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