

RHINOCEROS SONDAÏCUS DESMAREST FROM KITCHEN-MIDDENS OF BINDJAI TAMIANG, NORTH SUMATRA

by Dr D. A. HOOIJER

(Rijksmuseum van Natuurlijke Historie, Leiden)

Some time ago Dr H. M. E. Schürmann gave me for study some fragments of rhinoceros teeth out of his private collection originating from a palaeolithic refuse-heap at Bindjai Tamiang, 50 m S. and at a distance of 15 km from the mouth of the Tamiang river in N. Sumatra. The mound consisted of layers of shells of molluscs, chiefly *Meretrix*, alternating with ashy layers containing implements, boulders, ruddle and remains of various land mammals, marine tortoises, fish and crabs which served as the food of the hunters and fishers by whom the mound was accumulated. There is evidence that these ancient aboriginals practised cannibalism. Remains of pottery have not been found.

Schürmann (1931, p. 923) regards the kitchen-middens as probably of upper Pleistocene or early Holocene age. The thickness of the *Meretrix* shells as compared to those of the living specimens is an indication for the non-recent age of the deposit. The mammalian remains collected by Dr Schürmann belong to elephants, rhinoceroses, bears, deer, dogs and swine.

The fragments of the rhinoceros teeth could be matched, and the result is shown in fig. 1. It is a left M², about one-half worn down. The antero-external angle is incomplete, the bottom of the medisinus and the crochet are missing, and the enamel is lost at the internal surface of the proto-loph and at the lingual half of the posterior surface. The roots are crumbled away completely.

Nevertheless the tooth is complete enough for specific identification. In an earlier paper (Hooijer, 1946, pp. 16-46) I described the teeth of rhinoceroses from prehistoric caves in the Padang Highlands, Central Sumatra. Two species were shown to be mixed up with the cave fauna, the common Sumatran *Dicerorhinus sumatrensis* (Fischer) and the Java one horned species, *Rhinoceros sondaicus* Desmarest. The latter is four times less abundant than the former. The teeth often present greater dimensions than those of recent Sumatran skulls.

The Bindjai Tamiang tooth belongs to *Rh. sondaicus* Desmarest, the rarer of the two forms. This is evident from the absence of a vertical groove in the anterior surface of the proto-loph which is such a distinctive character of *D. sumatrensis* (Fischer). This groove, for its proximity to the protocone, I have called the protocone fold (Hooijer, l.c., p. 11). In the anterior surface of the metaloph a groove is not present either.

Dr Schürmann's specimen has a great resemblance to a left M² of *sondaicus* from the Sibrembang cave of the Padang Highlands in the Dubois collection (Hooijer, l.c., p. 41/42, pl. II, fig. 7). The posterior breadths of the two molars are the same, viz. 51 mm.

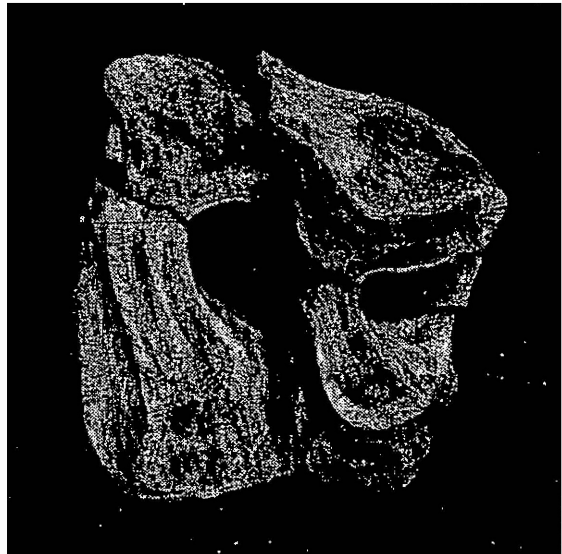


Fig. 1. *Rhinoceros sondaicus* Desmarest, M² sin. Bindjai Tamiang, N. Sumatra, crown view. Natural size.

The antero-transverse diameter of the N. Sumatran tooth cannot be determined exactly, but it must have been at least 60 mm.

These measurements are as great as those of the largest M² in recent Sumatran skulls, and fall better between the limits of the prehistoric and fossil M² of *sondaicus* from Sumatra and Java. This result coincides well with the archaeological evidence and thus supports Dr Schürmann's opinion as to the age of the kitchen-middens of Bindjai Tamiang.

LITERATURE.

- Hooijer, D. A., 1946. Prehistoric and Fossil Rhinoceroses from the Malay Archipelago and India. Zool. Med. Museum Leiden, vol. 26, pp. 1—138, pls. I—X, 1 fig., 8 tables.
- Schürmann, H. M. E., 1931. Kjökkenmöddinger und Paläolithicum in Nord Sumatra. Tijdschr. Kon. Ned. Aardr. Gen., ser. 2, vol. 48, pp. 905—923, 15 + 1 figs., 2 maps.