ON THE TAXONOMIC IDENTITY OF THE PLANKTONIC FORAMINIFERAL SPECIES *GLOBOROTALIA BARISANENSIS* LE ROY, 1939

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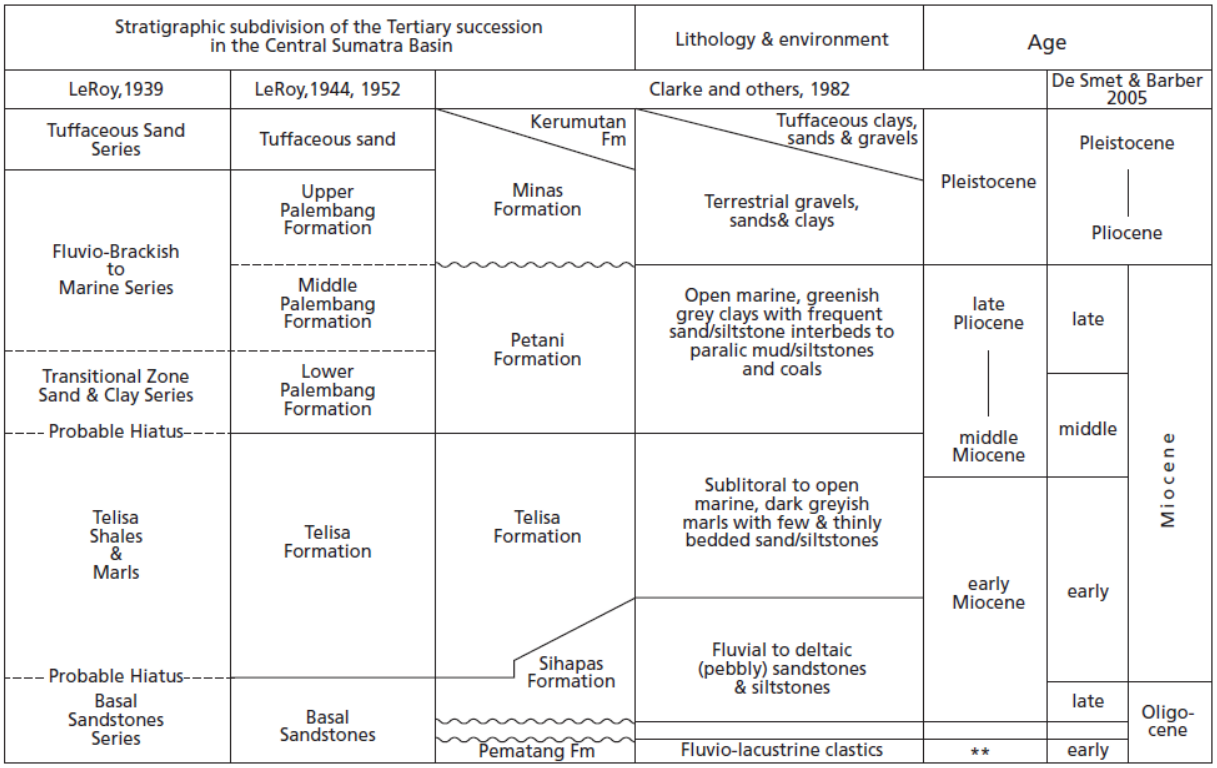
APPENDIX 1: Photograph of slide PS 1081a containing the holotype of *Globorotalia barisanensis* Le Roy, 1939.

APPENDIX 2: Lithostratigraphic units employed by Le Roy (1939, 1944) and modern equivalents (Clarke et al., 1982) along with lithology and depositional environment. Ages for lithostratigraphic units are from Clarke et al. (1982) and De Smet & Barber (2005). From Zachariasse & Sudijono (2012).

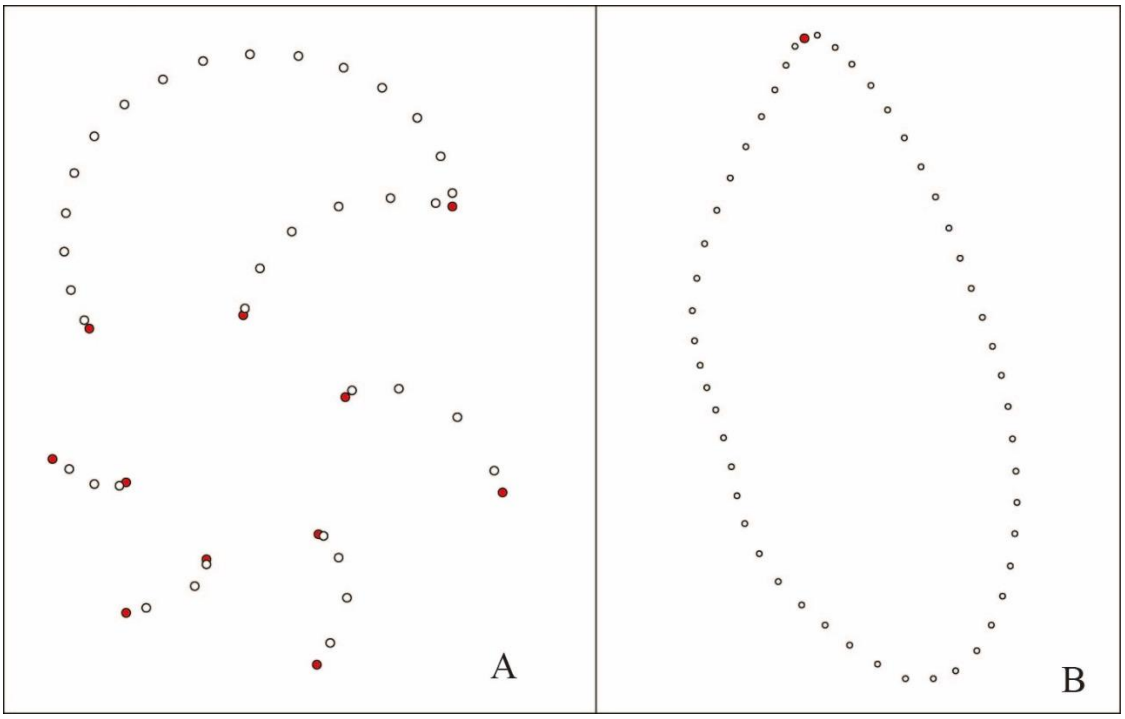


APPENDIX 3: Synopsis of the landmark-based morphometric method applied in this study.

Method

Both the spiral view and edge view were analyzed using the landmark-based morphometric method. For spiral view, all specimens were analyzed with spiral-side up, and dextral coiling specimens were digitally mirrored. Eleven landmarks were placed where intercameral suture and periphery meet. We placed the first landmark at the ultimate chamber and subsequent landmarks were placed back to the fifth chamber in the final whorl. Six curves of semi-landmarks were then placed between landmarks to capture intercameral suture and chamber shape information (see Figure A below). For edge view, one landmark and 50 semi-landmarks were placed alone the edge-view projection (Figure B below).

We follow the standard landmark method (Zelditch et al., 2012) in collecting and processing shape variables using popular toolkits (tpsDig, tpsUtil32 and tpsRelw created by F. James Rohlf, http://life.bio.sunysb.edu/ee/rohlf/software.html). The spiral-view shape was then summarized as the first two principal components (PC1 and PC2) of shape variables. In spiral view analysis, PC1 (related to the angular increment of chambers being larger to the negative and smaller to positive end) and PC2 (related to growth rate of chambers being smaller at negative and larger at positive end) account for 82% and 6.8% of the total variances, respectively. In the edge view, PC1 and PC2 account for 56% and 28.5% of the total variances, respectively.



The placement of landmarks and semi-landmarks: A in spiral view; B in edge view. Red dot: landmarks; hollow dot: semi-landmarks.