

INSTITUT ROYAL DES SCIENCES NATURELLES
DE BELGIQUE

MÉMOIRES

MÉMOIRE N° 136

KONINKLIJK BELGISCH INSTITUUT
VOOR NATUURWETENSCHAPPEN

VERHANDELINGEN

VERHANDELING N° 136



EOCENE AND OLIGOCENE OSTRACODA OF BELGIUM

BY

ADRIAAN JAN KEIJ

MINERALOGISCH-GEOLOGISCH INSTITUUT DER RIJKSUNIVERSITEIT TE UTRECHT.

(WITH 23 PLATES.)

P 4085



BRUXELLES

INSTITUT ROYAL DES SCIENCES NATURELLES DE BELGIQUE
RUE VAUTIER, 31

1957

Distribué le 31 mars 1957.

BRUSSEL

KONINKLIJK BELGISCH INSTITUUT VOOR NATUURWETENSCHAPPEN
VAUTIERSTRAAT, 31

1957

Uitgedeeld de 31^e maart 1957.



INTRODUCTION

In 1952 a team of the Paleontological Department of the Mineralogical Geological Institute of the State University of Utrecht started on a detailed study of the Belgian Older Tertiary. It was considered recommendable to give an up-to-date account of the microfauna. This paper deals with the Ostracoda; the Eocene and Oligocene Foraminifera will be described in later papers by Mr. J. P. H. KAASSCHIETER and Dr. D. A. J. BATJES respectively.

The Eo-Oligocene of Belgium is especially important for general stratigraphy, since it contains the type-localities of several, more or less commonly accepted stages, as there are : Ypresian DUMONT 1849 (= Early Eocene); Ledian MOURLON 1887 (= Early Late-Eocene); Wemmelian RUTOT and VINCENT 1878 (= Bartonian = Later Late-Eocene); Tongrian DUMONT 1849 (= Early Oligocene); Rupelian DUMONT 1849 and 1851 (= Middle Oligocene). Furthermore, Belgian geologists distinguished in earlier descriptions : Paniselian DUMONT 1851 (= Late Ypresian-Early Lutetian ?); Bruxellian DUMONT 1851 (equivalent of the Early Lutetian = Middle Eocene); Laekenian DUMONT 1851 (= Early Ledian); Asschian RUTOT 1882, equivalent of the Wemmelian.

From a great many localities covering the entire Eo-Oligocene series with the exception of the Late Oligocene which is not outcropping in Belgium, numerous samples were taken by Dr. BATJES and Mr. KAASSCHIETER. In addition a number of samples from borings could be studied through the courtesy of the Belgian Geological Survey. For comparison with faunas from adjoining regions some samples were available from the Upper Ypresian of Cuise-Lamotte and the Upper Lutetian of Grignon, both in the Paris Basin; from the type Bartonian of Barton Cliff in the Hampshire Basin; and from the Lower Miocene of the Aquitaine Basin.

So far very few data have been published on the Ostracoda of the Belgian Eo-Oligocene deposits. In fact the only records are to be found in the monograph of BOSQUET (1852), which deals with the Tertiary Ostracoda of Belgium and France. In this paper the Ostracoda are described of but a single Eocene locality in Belgium against 27 from the Paris Basin. On the other hand, the Oligocene of northern France is represented by the fauna of only two localities against 10 of the Belgian Oligocene. BOSQUET's paper belongs to the classical literature of the Tertiary Ostracoda, to which later authors have often referred. Considering his primitive means, and regarding the knowledge of the Ostracoda at 1850, this monograph is of outstanding quality. During the last century the classification of the Ostracoda has been so much refined, however, that a re-study of BOSQUET's collection was highly necessary. This was possible through the kindness of the directorate of the Royal Belgian Institute of Natural Science at Brussels.

The author is gratefully indebted to his colleagues Dr. D. A. J. BATJES and Mr. J. P. H. KAASSCHIETER, who generously put all their material, collected in Belgium, at his disposal. Their extensive knowledge of the literature about the Tertiary of northwestern Europe was of outstanding importance.

Deep gratitude must be acknowledged to Dr. C. W. DROOGER for his unflagging interest, his valuable suggestions and instructive criticism.

Sincere thanks are furthermore due :

to the Directorate of the Institut Royal des Sciences Naturelles de Belgique for permitting to insert this paper in the series of Memoirs;

to the Netherlands Organization for Pure Research (Z. W. O.) for their financial support;

to Dr. M. GLIBERT of the Institut Royal des Sciences Naturelles for the courteous loan of the collection BOSQUET;

to Ir. A. GROSJEAN, Director of the Belgian Geological Survey, for his permission to publish data concerning borings of the Survey;

to Ir. M. GULINCK, geologist of the Belgian Geological Survey for the furnishing of numerous field data and critical remarks on part of the manuscript;

to Dr. H. OERTLI, Berne (Switzerland), for his cooperation and for the gift of important comparison material;

to Dr. E. TRIEBEL, Frankfurt (Germany), for the valuable discussions of specific and general problems of mutual interest, as well as for his valuable advice about microphotography;

to Dr. H. HILTERMANN, Hannover (Germany), for his kind gift of Oligocene samples from Kassel, and for the courteous loan of samples from Hermsdorff and Pietzpuhl;

to Dr. J. H. VAN VOORTHUYSEN, Haarlem (Netherlands), for his permission to study the collection KUIPER, stored at the Netherlands Geological Survey;

to Mr. D. CURRY, Pinner (England), for his valuable suggestions during the sampling at Barton;

to Mr. C. W. WAGNER, the Hague (Netherlands), for his assistance in the determination of the genus *Cytherissa*;

to Mr. F. K. BARENDSE, Utrecht (Netherlands), who prepared the beautiful half-tone drawings of our plates.

With the exception of the BOSQUET-collection, the material has been stored in the collection of the Mineralogisch-Geologisch Instituut der Rijks Universiteit te Utrecht, Netherlands.
