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A SHORT NOTE ON THE PRESENCE OF THE ELTVILLE-TUFF LAYER IN THE SURROUNDINGS OF MAASTRICHT[1]

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During the summers of the years 1975-1980 I had the opportunity to carry out geomorphological fieldwork as part of my study in physical geography at Utrecht State University. The task was not only to make a geomorphological map of the S.W. part of South Limburg, but also to investigate the löss stratigraphy and the origin of the dry valleys. Prof. J. I. S. Zonneveld asked me to give special attention to the volcanic material that might be present in the löss.

The publication by SEMMEL & ROHDENBURG (1971), in which they traced the Eltville-tuff till Aken (West-Germany) and Luik (Belgium) at a distance of respectively 100 and 130 km in N.W. direction from the volcanic Eifel, proved to be very useful in this respect. Comparison of diagrams, published by Semmel during the last 15 years, with löss profiles present in the S.W. part of South Limburg, gave me the opportunity to prove that the Eltville-tuff layer, described by Semmel, is also present in The Netherland. In the beginning of 1980 the finds were reported to the Geological Survey, Heerlen. In July 1980 a final report, concerning the geomorphological fieldwork in the S.W. part of South Limburg was handed to Prof. J. I. S. Zonneveld (MEIJS, 1980).

In September 1980 under presidence of H. J. Mücher (University of Amsterdam) and O.S. Kuyl (Geological Survey, Heerlen) the Deuqua excursion visited the löss profile in the Brull pit near Nagelbeek during a tour through South Limburg. Prof. A. Semmel, who was one of the attendants, demonstrated a thin black layer, situated beneath the so-called 'Kesselt soil' to the members of the excursion and proposed it being the Eltville-tuff. Afterwards samples were taken by H. J. Mücher, who had investigated the Brull pit over the period 1979-1980 (VREEKEN & MÜCHER, 1981 in press; MÜCHER & VREEKEN, 1981 in press) and some further observations were made. So did A. Semmel and E. Juvigné (JUVIGNÉ & SEMMEL, 1981 in press). H. J. Mücher, A. Semmel and E. Juvigné at that time did not know that this stuff had been studied already some years before by the author.

For the attendants of the Deuqua excursion of September 1980 it might be interesting to know that in the beginning of 1979 the Eltville-tuff was discovered by the author not only in the Brull pit (Topographical Map of The Netherlands, scale 1:25.000 sheet 60 C Sittard, map co-ordinates 188-326), but also in the Nekamie pit (sheet 62 A Valkenburg, 183-316), the former Biesland pit (sheet 61 F Maastricht, 175-316) and along the Albert canal near Vroenhoven (sheet 61 F Maastricht, 173-315).

In the S.W. part of South Limburg the Eltville-tuff, a thin (1-2 mm) undulating black layer, is situated between 20 and 200 cm beneath the 'Kesselt soil' (which correlates with the 'E_4 – Nassboden') and normally lies between two sandy and/or gravelly horizons. Very often the Eltville-tuff layer is cryoturbated and interrupted, occasionally the tuff is divided in two separate layers, lying up to 2 cm above each other.

The heavy minerals from the Eltville-tuff samples, taken in the Nekamie pit and along the Albert canal near Vroenhoven, have been analysed by G. Ouwerkerk (Utrecht State University, Department of Physical Geography). The minerals augite and (to a lesser amount) olivine proved to be dominant. The heavy-mineral content corresponds with that of the Eltville-tuff, mentioned by J. Frechen (in BIBUS, 1973).

In one of the next issues of *Geologie en Mijnbouw* a short communication regarding the occurrence of the Eltville-tuff and its significance for the löss stratigraphy in The Netherlands will be given by MEIJS ET AL. (1981, in prep.).

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