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A Study of Upper Paleozoic Sediments and Volcanics in the Northern Part of the Eastern Aar Massif¹⁾

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with 36 figures and 1 table in the text

ABSTRACT

Westphalian-Stephanian volcanic and clastic sediments of E. Switzerland were deposited rapidly on an older complex of gneiss and Tödi granite. The Bifertengrätli Formation, the only fossil (plant) bearing formation of the eastern Aar Massif, consists of a Volcanic, Estuarine and Lacustrine Member. Farther west in the Maderanertal, only volcanic rocks are seen (Tscharren, Witenalp and Windgälle); these are predominantly silicic and sub-silicic tuffs and ignimbrites. The explosive volcanic activity was followed by the gentle uprise of the Central Aar Granite.

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FOREWORD

This study was commenced in 1961 during the tenure of a post-graduate exchange scholarship between the Imperial College of Science and Technology, London, and the E.T.H., Zürich. The primary aim was a study of the Upper Carboniferous sediments of the Biferten inlier, under the guidance of Professor Dr. R. Trümpy, Zürich. In 1962 the topic was accepted as a thesis study at the E.T.H., and further work during the summers of 1962–65 under the supervision of Professors Dr. R. Trümpy and Dr. A. Gansser extended the field work to the Maderanertal and Val Gliems areas.

The results were prepared in the Geological Institute of the E.T.H. and University, Zürich, where the detailed field maps and specimens are deposited.

My deepest thanks are due to Professors R. Trümpy and A. Gansser for the supervision of this work, their advice in the field and laboratory and their valuable criticism of the manuscript. The continued interest and encouragement of Professors J. Sutton and J. G. Ramsay of Imperial College are warmly appreciated.

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