A review of Middle Namurian ammonoid biostratigraphy

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with 15 figures

Abstract. The stratigraphical range and the boundaries of the Middle Namurian ammonoid Reticuloceras Zone are reviewed, and the ammonoid occurrences indicating this interval are documented. The richest ammonoid occurrences are recovered from the South Urals, whereas the highest precision of ammonoid-based biostratigraphy is achieved in Britain. Three subdominant zones are recognizable within the Reticuloceras Zone in both successions, but their boundaries do not correspond exactly. The lowermost occurrence of reticuloceratids (Reticuloceras compressum) in Western Europe occurs slightly lower than the entry of the coarsely-ornamented and widely umbilicate ammonoid Phillipsoceras circumpticatile which is commonly associated with the base of the Kinderscoutian. This level apparently correlates with the first appearance of reticuloceratids in the South Urals, but it lies above the lower boundary of the "Reticuloceras-Bashkortoceras Genus Zone" of Ruzhentsev. The appearance of Bilinguites bilinguis marks the beginning of the following Upper Namurian "Bilinguites-Cancelloceras Genus Zone".

1 Introduction

Ammonoids are widely recognized as major index fossils for the Carboniferous providing a general framework for Carboniferous biostratigraphy. They reflect a sequence of evolutionary events that can be recognized easily world-wide. However, the value of ammonoids for precise biostratigraphic correlation of Late Carboniferous successions was questioned in the last decade (Winkler Prins 1990, Wagner & Winkler Prins 1994, etc.) due to the incomplete-