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Ammonite biostratigraphy of the Oxfordian – Kimmeridgian transitional beds of Moscow, Kaluga and Ivanovo regions (central part of the European Russia)

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Central part of the European Russia and especially the Moscow region are well-known as a source of some types of ammonite taxa, which characterized the uppermost Oxfordian and lowermost Kimmeridgian (*Prorasenia mniovnikensis*, *Plasmatites zietenii*, *P. tuberculatoalternans*, *P. praebauhini* and *Amoeboceras rectinatoalternans*), but detailed information concerning the Oxfordian-Kimmeridgian transitional beds of this area is poorly known, and descriptions of key sections are not published yet. Here preliminary data about the ammonite distribution in three reference sections (Moscow region – Rybaki; Kaluga region – Lipitsy; Ivanovo region – Yakimikha) are presented. The full succession of the Ox/Km transitional beds is recognized in the Rybaki and Yakimikha sections, while in the Lipitsy section Kimmeridgian overlying Oxfordian with a gap.

Uppermost Oxfordian is relatively poor in ammonites, which are mainly small-sized (microconchs are strongly prevailed) and including the both late *Amoeboceras* (*A. frebaldi*, *A. tuberculatoalternans* auct. non Nikitin) and aulacostephanids (*Ringstedia/Microbiplites*). The beginning of the Kimmeridgian is marked by appearance of *Plasmatites*, which are mainly represented by specific morphotype characterized by poorly developed secondaries (*P. zietenii*) and could be tentatively ascribed to as *zietenii* horizon. These ammonites are co-occurs with uncommon *Plasmatites* close to *P. bauhini* and *P. praebauhini*. Typical *P. tuberculatoalternans* also could be found in this horizon. Aulacostephanid ammonites are mainly represented by inner whorls of *Pictonia* (Yakimikha) or *Prorasenia* (Rybaki and Lipitsy), while poorly preserved pieces of big-sized ammonites recovered from the same beds could be ascribed to as *Pictonia (Pomerania)*. Above *Plasmatites* with poorly developed secondaries are missing, while typical *P. bauhini* and/or finely ribbed *P. lineatum* became common. In the strongly condensed Lipitsy succession Bauhini Zone is directly overlying by the uppermost Lower Kimmeridgian glaukonite sands with *Crussoliceras*, while Rybaki and Yakimikha sections are shown transition from Bauhini to Kitchini zones. The lowermost part of the Kitchini Zone is characterized in these sections by appearance of early *Amoebites* (*A. bayi*).

It should be noted that in all studied sections as well as in Mikhalenino (Glowniak et al., 2010) cardioceratids from the Ox/Km boundary beds and especially from the lowermost

Kimmeridgian are represented by small-sized specimens, sometimes occurred in abundance. Such mass ammonite records could be caused by Lilliput effect and/or reflect widespread changes in sedimentation leads to stratigraphic condensation.

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