

## BIOLOGY AND BIOGEOGRAPHY OF THE MIDDLE OXFORDIAN AMMONITES OF THE SUBGENUS *PLATYSPHINCTES*: A NEW EVIDENCE FROM POLAND

Głowniak, Ewa

*Institute of Geology, University of Warsaw, sikorka@geo.uw.edu.pl*

After Tintant in 1961 created the ammonite genus *Platysphinctes* no other findings of forms allied to that genus were recorded. The original material used by Tintant (1961), however, provided only a fragmentary insight into biology and stratigraphic range of *Platysphinctes*.

The first records of the genus *Platysphinctes* in Poland give a new information on the biogeographic distribution of *Platysphinctes*. The representatives of *Platysphinctes* appear in the sections of the Polish Jura Chain, in non-condensed limestone succession, within a thin horizon of the uppermost part of the Plicatilis Zone (Middle Oxfordian). The collection represents monospecific population of *Perisphinctes* (*Platysphinctes*) *perplanatus* Tintant. Microconchs are for the first time recognized within this species and also within the subgenus *Platysphinctes*. Adult, lappeted microconchs range in final diameter from 45 mm to 77 mm. Macroconchs reach final diameter of about 120 mm or even more. In the adult macroconchs the terminal part of the body-chamber is almost completely smooth while the microconchs have never reached this stage of growth. The aspect of shell of the juvenile micro- and macroconchs is similar. It is characterised by moderately evolute to evolute way of coiling of whorls, by oval, rectangular or close to trapezoidal whorl-section and by numerous constrictions (3-4 on the last whorl of the adult microconchs and 3-5 in macroconchs). At an early stage of micro- and macroconch's growth ribs regularly bifurcate, later in ontogeny intercalatory ribs appear on the ventral side, whereas the bifurcations become occasionally alternated with paradischizotomous or even bidichotomous furcation. After each constriction the intercalatories increase in number and the points of furcation become less distinct.

Specimens of *Perisphinctes* (*Platysphinctes*) *perplanatus* occur in the Plicatilis Zone where also the representatives of the subgenus *Liosphinctes* Buckman are present. According to the new evidence, however, the suggestion of Brochwicz-Lewiński (1972) who considered *Platysphinctes* as a microconch of *Liosphinctes* seems to be an oversimplification.

The horizon where *Platysphinctes* are present, reflects the event of short-term invasion of ammonites from the Mediterranean Province to the area of the Polish Jura Chain, as indicated by the occurrence in that interval of such Mediterranean forms as *Perisphinctes* (*Kranaosphinctes*) *cyrilli* Neumann and *P. (K.) gyrus* Neumann.

Brochwicz-Lewiński, W., 1972, Middle Oxfordian representatives of the genera *Lithacoceras* Hyatt, 1900, and *Liosphinctes* Buckman, 1925, from the Polish Jura Chain. *Acta Geol. Polon.*, 22, (3), 473-497.

Tintant H., 1961, Études sur les ammonites de l'Oxfordien supérieur de Bourgogne. *Bull.Scient.Bourgogne*, 19, 109-145.

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Berichte der Geologischen Bundesanstalt](#)

Jahr/Year: 1999

Band/Volume: [46](#)

Autor(en)/Author(s): Glowniak Eva

Artikel/Article: [Biology and biogeography of the middle Oxfordian ammonites of the subgenus \*Platysphinctes\*: A new evidence from Poland 43](#)