

Usseliceras (Usseliceras) involutum sp. n. (Ammonitina) from the Lower Tithonian of Umbria-Marche Apennines

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ABSTRACT - The species *Usseliceras (Usseliceras) involutum*, proposed by the author in 1990, is described for the first time.

KEY WORDS: Ammonitina, Ataxioceratidae, Lower Tithonian, Umbria-Marche Apennines.

In the occasion of the 2nd Pergola Symposium (October 1987) I presented a study on Perisphinctids of the Ataxioceratidae family from the Darwini Zone (Lower Tithonian) of Umbria-Marche Apennines (Cecca, 1990). From the Passo del Furlo locality Rossi (1984) published a monograph on Upper Jurassic ammonites where some important Ataxioceratidae specimens had been figured. Some of his taxonomic identifications, as noted by Cecca & Enay (1991), are erroneous. They refer to species from sub-boreal and Ethiopian provinces (Enay, 1972) whilst the Mediterranean character of the fauna is absolutely clear and unanimous.

In the above mentioned paper I discussed and corrected some of the Rossi's identifications. In particular, the specimen erroneously named *Nothostephanus kurdistanensis* Spath (Rossi, 1984, p. 105, pl. 34, fig. 9) is a typical representative of the genus *Usseliceras* Zeiss. I indicated this specimen as *Usseliceras (U.) involutum* nom. nov. (Cecca, 1990, p. 42) just discussing the differences with *Usseliceras (U.) fascipartitum* Zeiss. In that occasion I did not present the formal diagnosis of *Usseliceras (U.) involutum* which is actually a *nomen nudum*.

The diagnosis is given below.

Order Ammonoidea Zittel, 1884
Suborder Ammonitina Hyatt, 1889
Superfamily Perisphinctacea Steinmann, 1890
Family Ataxioceratidae Buckman, 1921
Subfamily Lithacoceratinae Zeiss, 1968

Genus *Usseliceras* Zeiss, 1968

Type-species: *Usseliceras franconicum* Zeiss, 1968

Subgenus *Usseliceras* Zeiss, 1968

Usseliceras (U.) involutum sp. n.

Holotype - The specimen figured by Rossi (1984), pl. 34, fig. 9.

Type locality - Passo del Furlo, Marche Apennines.

Type level - Lower Tithonian, Darwini Zone.

Name origin - The name refers to the involute coiling of the shell compared to the other species of the same genus.

Depository - Museo Civico di Storia Naturale, Milan; collection of fossil invertebrates, specimen n° 15766.

Diagnosis - Platycone, involute shell with high whorls and rounded venter. Up to the first third of the last whorl the *variocostate ornamental stage* is visible: the ribbing is fasciculate and bidichotomous, branching at mid-side or lower from primary ribs thickened around the umbilical margin. Intercalary ribs also occur. The ribbing is weakened in a middle portion of the whorl side. The *adult macroconch ornamental stage* characterizes the rest of the last whorl: the secondary ribs gradually disappear whilst the distance between the primary ribs increases; on the second half of the last whorl the primary ribs are transformed in prominent bullae.

Discussion - In spite of the striking morphological similarities, the specimen figured by Rossi (1984) cannot be ascribed to *Nothostephanus kurdistanensis* Spath. I had the opportunity to see the holotype of this species (Spath, 1950, p. 116, pl. 7, fig. 1) in the

British National History Museum (London). It is a phragmocone which ribbing shows the variocostate stage and the very beginning of the adult macroconch stage. It is impossible to know the ribbing of the final stage because the body chamber is not preserved in any of the type-specimens. In *N. kurdistanensis* the ornamental change is more progressive than in *U. (U.) involutum* sp. n. and occurs at a larger diameter. In *U. (U.) involutum* the primary ribs are thickened on the umbilical edge at first and then become strong bullae whilst in *N. kurdistanensis* they become distinct rounded tubercles which slightly migrate higher on

the whorl side. The ribbing of the variocostate stage of *U. (U.) involutum* is clearly denser and finer than in *N. kurdistanensis*.

The *Usseliceras* species described by Zeiss (1968) *U. (U.) franconicum*, *obscurum*, *levicostatum*, *subvimineum*, *parvinodosum* and *tagmersheimense* have evolute shells and show some ornamental differences; *U. (U.) fascipartitum* shows some similarities with *U. (U.) involutum* but its umbilicus is wider and the development of bullae is less pronounced.

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