

## **Fissumella motolae new genus new species from the late Aptian-early Albian of Southern Italy**

Erzika Cruz (1), Lorenzo Consorti (1), Matteo Di Lucia (2), Mariano Parente (3), Alex Ciria (1), and Esmeralda Caus (1)

(1) Departament de Geologia (Paleontologia), Universitat Autònoma de Barcelona. Campus de la UAB, 08193 (Cerdanyola del Vallès), Barcelona, Spain, (2) RPS Energy, Goldvale House, 27-41 Church Street West, Woking, Surrey GU21 6DH, United Kingdom, (3) Dipartimento di Scienze della Terra, dell'Ambiente e delle Risorse, Università degli Studi di Napoli Federico II, Largo San Marcellino 10, 80138 Napoli, Italy

Benthic foraminifera, together with calcareous algae and rudist bivalves, play a key role in the biostratigraphy of Cretaceous carbonate platforms of the peri-Adriatic area.

In the biozonation currently adopted for the carbonate platforms of central and southern Apennines (Italy) there is a stratigraphic interval, roughly corresponding to most of the Albian stage, which is poorly defined and assigned to a single biozone, called "Ostracoda and Miliolidae" biozone (Chiocchini et al., 2008).

We describe here a new peneropliform benthic foraminifer, *Fissumella motolae* n. gen., n. sp. which could be used for a finer biostratigraphic subdivision of this interval.

Its porcelaneous test shows a peneropliform shape with rounded margins. In the early stage of growth the chambers are streptospirally arranged, becoming later planispiral involute. The aperture is single, migrating during ontogeny from an interiomarginal position to the center of septa. The chamber lumina are traversed by few and short radial septula.

*Fissumella motolae* is a common constituent of benthic foraminiferal assemblages of the Apennine Carbonate Platform. We have found it in the same stratigraphic interval in several stratigraphic sections distributed along a NW-SE transect from Monte Croce (in the Aurunci Mts.) to Monte Tobenna (in the Picentini Mts.) to Monte Motola (in the Cilento Promontory). It first appears in the levels with *Archaeoalveolina reicheli*, close to Aptian-Albian boundary, and then continues for some tens of meters, associated with *Praechrysalidina infracretacea*, *Cuneolina parva*, *Sabaudia minuta*, conical imperforate foraminifers, miliolids, textularids, nezzazzatids, dasy-cladalean green algae and ostracods. Carbon isotope stratigraphy has been used to better constrain the correlation between the studied sections and their chronostratigraphic calibration.

Chiocchini, M., Chiocchini, R. A., Didaskalou, P., and Potetti, M., 2008. Microbiostratigrafia del Triassico superiore, Giurassico e Cretacico in facies di piattaforma carbonatica del Lazio centro- meridionale e Abruzzo: revisione finale, Mem. Descr. Carta Geol. d' It., 5–170.