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STRATIGRAPHY OF THE CAPORALINO-SANT'ANGELO UNIT: A FAKE JURASSIC-EOCENE SUCCESSION OF THE "ALPINE" CORSICA

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Abstract. This paper aims to provide new insights on the Caporalino-Sant'Angelo Unit outcropping north of Corte, in the Caporalino-Omessa area (NE Corsica). It belongs to the stack of the units from the "Alpine" Corsica, which overlies the "Hercynian" Corsica basement and its sedimentary cover. Based on a geological mapping, a refined lithostratigraphy and new datings, the Caporalino-Sant'Angelo Unit is a fake Middle Jurassic-Middle Eocene succession, sedimented on the European continental margin, because it is a Middle Eocene clastic wedge, accumulated in a synorogenic compressive basin located between the European distal continental margin and the deforming "Corsican" accretionary wedge. This basin received the siliciclastic input from the "Hercynian" Corsica basement, and the carbonatic input from the sedimentary cover of tectonic units, subsequently involved into the complex "Corsican" accretionary wedge.

Riassunto. I risultati di questa ricerca hanno permesso di fornire nuovi dati lito- e bio-stratigrafici, attraverso cui si è giunti a delineare una nuova stratigrafia dell'Unità di Caporalino-Sant'Angelo, che affiora a Nord di Corte, nell'area di Caporalino-Omessa (NE Corsica). Il dettagliato rilevamento geologico e gli studi micropaleontologici, basati sui nannofossili calcarei e sui foraminiferi planctonici, hanno permesso di dimostrare che l'Unità di Caporalino-Sant'Angelo non è una successione sedimentatasi sul margine continentale europeo, dal Giurassico medio all'Eocene medio, come ritenuto da quasi tutti i precedenti autori; essa è invece una successione clastica deposta in un bacino, localizzato tra il margine continentale Europeo e il prisma di accrezione in deformazione, durante l'Eocene medio. Tale bacino era alimentato prevalentemente dal basamento "Ercinico" corso ed, in misura minore, dalle coperture sedimentarie di unità tettoniche successivamente coinvolte nella deformazione del prisma di accrezione.

Introduction

Many papers dealing with the geology of the Corsica mention the Caporalino-Omessa area, because the relationships between the "Alpine" (eastern) Corsica and the "Hercynian" (western) Corsica can be surveyed in detail. This area, that is located between Corte and Ponte Leccia (Fig. 1), has also been investigated due to the presence of the Caporalino-Sant'Angelo Unit, an intriguing tectonic unit there well-exposed. This unit is affected by a low-grade metamorphism and a weak deformation with respect to the other underlying and overlying "Alpine" units; therefore the sedimentary features of the lithological assemblages are recognizable, and the fossil record is in part still preserved. Nevertheless, the stratigraphy and the age of the Caporalino-Sant'Angelo Unit are not yet constrained, and hence its palaeogeographic position and the sedimentary setting remain debated. The majority of geologists stated that the sedimentary succession assigned to the Caporalino-Sant'Angelo Unit (cfr. upper part of the Caporalino Pedani Unit of Durand-Delga 1987) settled in an extensional basin situated on the European continental margin, from the Middle Jurassic to the Middle Eocene (Amaudric du Chaffaut 1977, 1980, 1982; Rieuf 1980; Durand-Delga 1985, 1987; Rossi et al. 1994). Differently, Mattauer & Proust (1975) allocated the Caporalino-Sant'Angelo Unit as a coarse-grained Eocene "autochthonous" deposits with huge olistoliths of Mesozoic limestones, accumulated in a distensive basin on

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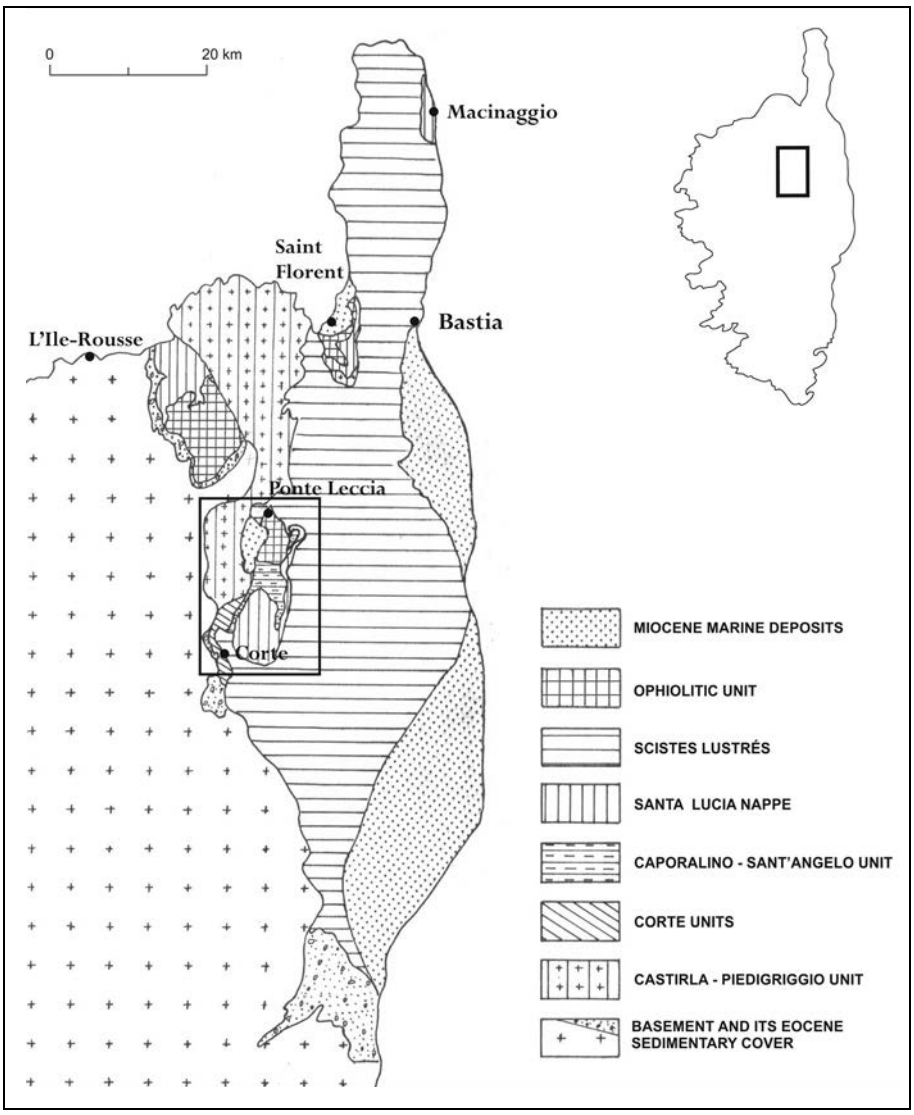


Fig. 1 - Tectonic sketch map of the NE of Corsica; the investigated area is within the rectangular frame.

the European continental margin. The aims of this paper are to propose a new stratigraphic interpretation of the Caporalino-Sant'Angelo Unit and a new interpretation of its sedimentary evolution. The achieved results are based on a geological survey at 1:10,000 scale, a refined lithostratigraphy, and dating using calcareous nannofossils and foraminifera.

Geological setting

In the study area (Fig. 2), the "Hercynian" Corsica consists of imbricates of basement and remains of a volcano-sedimentary cover. The autochthonous Variscan basement is constituted by a series made up of gneiss, slates, metabasites, and Paleozoic mainly detritic deposits, intruded by Carboniferous calc-alkaline granitoids, which metamorphosed the country-rocks in hornfels (*Roches brunes* or *Cornéennes Auctt.*). It is overlaid by two thick volcanic successions which are topped by slices of Mesozoic and Cenozoic deposits (Nardi et al. 1978; Durand-Delga 1984). The "Alpine" Corsica consists of a stack of laminated continental and oceanic units, sedimented on the European continental margin and the nearby Ligure-Piemontese oceanic crust (Mattauer & Proust 1975, 1976; Malavieille 1983; Harris 1985; Mattauer et al. 1977; Dallan & Puccinelli 1995). In the investigated area, the "Alpine" units are the Castirla-Piedigriggio Unit, the Caporalino-Sant'Angelo Unit, the Santa Lucia Nappe, the Ophiolitic Unit and the *Schistes lustrés* (Durand-Delga 1978, 1984, 1987; Amaudric du Chaffaut 1980; Rossi et al. 1994). The Castirla-Piedigriggio Unit (cfr. Corte Units or *Écailles de Corte*, cfr. *Écaille de Prado-Orienda p.p.*) outcrops between Ponte Castirla and Piedigriggio, and W of Francardo. It consists of: a) Carboniferous calc-alkaline granitoids intruded in Paleozoic country-rocks, that are represented by hornfels including micaschistes, amphibolites, gneiss and metabasites; b) a Permo-Trias "volcanic-sedimentary serie" which is mainly made of rhyolites, arkoses and rhyolitic arkoses, quartzites and phyl-

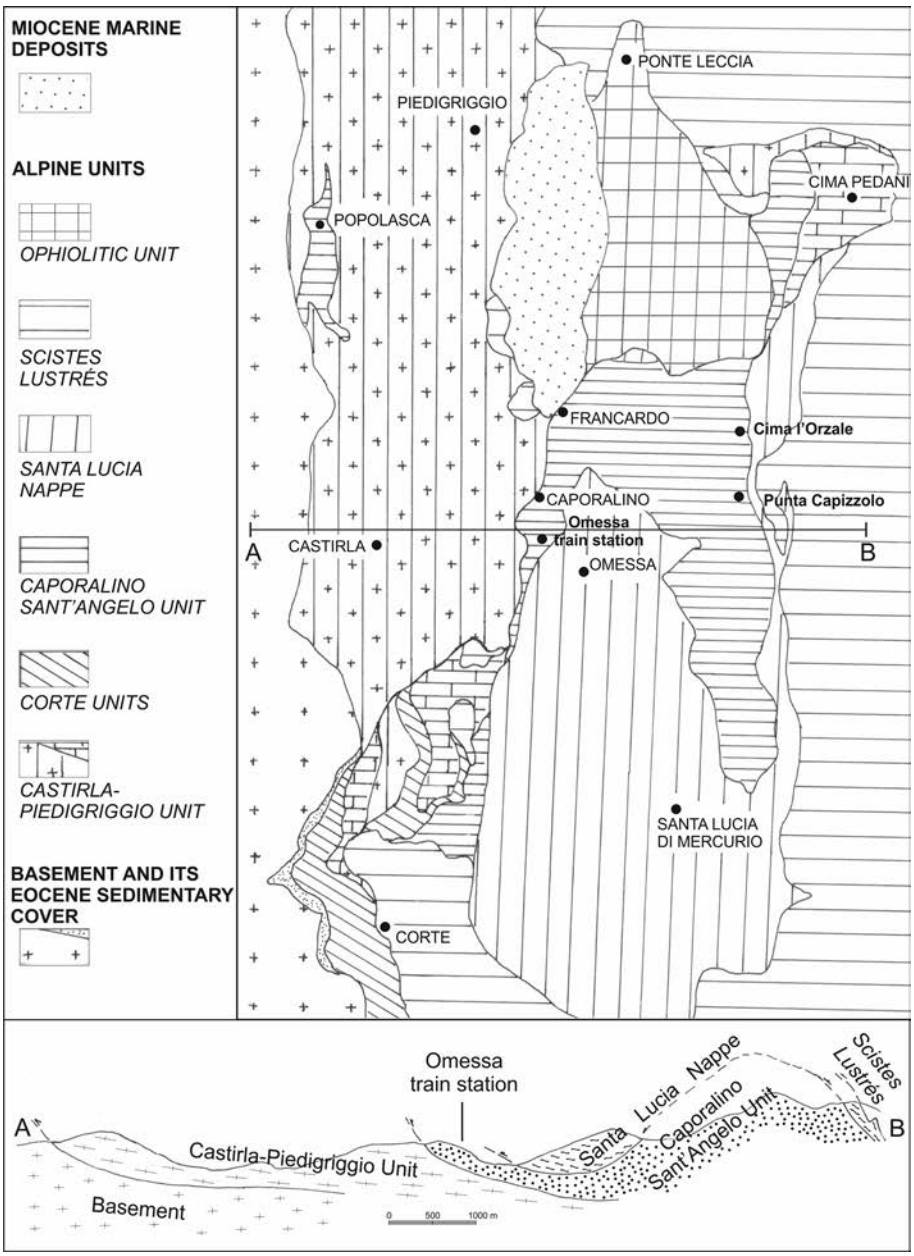


Fig. 2 - Tectonic sketch map of the Corte-Ponte Leccia area, and schematic geological cross section (A-B) showing the relationship between the tectonic units belonging to the "Alpine" Corsica (Castirla-Piedigriggio Unit, Caporalino-Sant'Angelo Unit, Santa Lucia Nappe and *Schistes lustrés*) and the basement of the "Hercynian" Corsica.

lites; c) a Triassic – Lower Jurassic succession (Durand-Delga 1987). This latter succession outcropping northwards of the Corte includes: 1- carnioles and breccias with carbonatic and basement clasts (Trias); 2- dolomites with marly calcareous or pelitic intercalations, and dolomitic breccias (Rhaetian); 3- limestones or dolomitic limestones with cherty or pelitic intercalations (Lower Jurassic). In some areas, the transgressive Eocene sandstones with *Nummulites,* overlies the Permo-Trias "volcanic-sedimentary serie" (nearby the Omessa train station) or the basement (Corte area). The Caporalino-Sant'Angelo Unit, which is assigned to the so-called "parautochthonous units" of the French authors, will be described in the next paragraph. The Santa Lucia Nappe is represented by its Cretaceous metamorphosed sedimentary cover, which comprises the metaconglomerates of the Tomboni conglomerates and the metamarly-calcareous turbidites of the Tralonca Flysch. The Ophiolitic Unit includes the Pineto gabbros exposed between Francardo and Ponte Leccia. The *Schistes lustrés* composed of micaschistes, calcschists, marbles, radiolarites and ophiolites, crops out east of the Cima Pedani-Cima l'Orzale-Punta Capizzolo alignment. The tectonic contact between the Castirla-Piedigriggio Unit and the Caporalino-Sant'Angelo Unit is visible south the Omessa train station, and that between the Caporalino-Sant'Angelo Unit and the Santa Lucia Nappe is exposed E of the Cima l'Orzale-Punta Capizzolo alignment. South of Cima Pedani, the Caporalino-Sant'Angelo Unit is tectonically overlaid by the "Pineto gabbros". The relationships between these units are sealed by the Miocene (Burdigalian-Langhian) marine

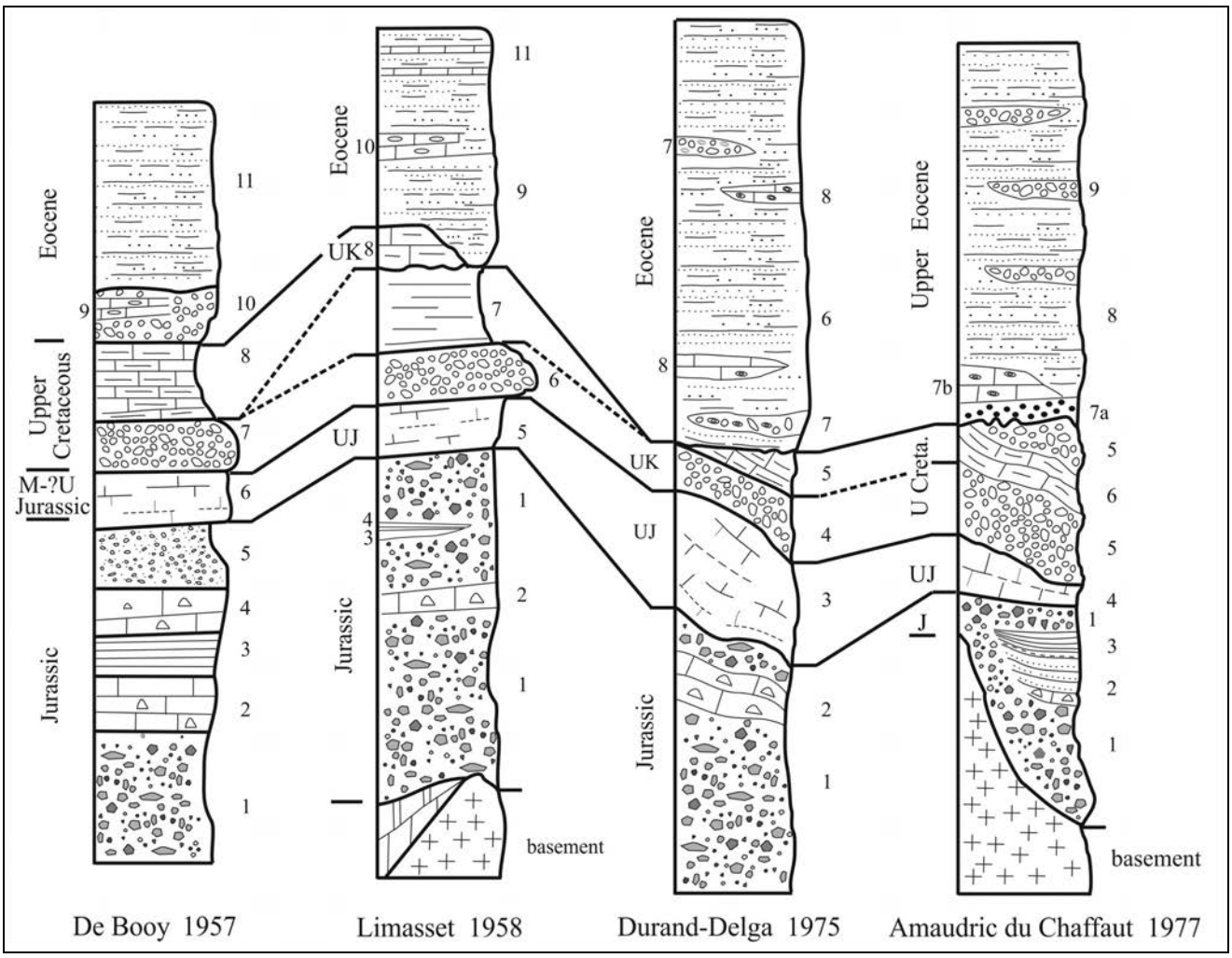


Fig. 3 - Lithostratigraphic sketches of the Caporalino-Sant'Angelo Unit.
A - De Booy (1957): 1 - Breccias, conglomerates and sandstones; 2 - Sub-oolitic limestones with *Trocholinae*; 3 - Spongolites, limestones, siliceous sandstones; 4 - Oolitic limestones with *Trocholinae*; 5 - Conglomerates with basement clasts; 6 - Caporalino limestones; 7 - Conglomerates with carbonatic clasts; 8 - Marly limestones with *Globotruncana*; 9 - Limestone with *Nummulites* and (10) conglomerates; 11 - Arkosic sandstones and pelites. B - Limasset (1958): 1 - Conglomerates; 2 - Limestones with *Trocholinae;* 3 - Ophiolites; 4 - Radiolarites; 5 - Caporalino limestones; 6 - Conglomerates with carbonatic clasts; 7 - *Lydiennes* Fm.; 8 - Marly limestones with *Globotruncana*; 9 - Arenaceous pelitic flysch with (10) nummulitic limestones; 11 - Pelitic-calcareous Flysch. C - Durand-Delga (1975): 1 - Breccias with basements clasts; 2 - Limestones with *Trocholinae*; 3 - Caporalino limestones; 4 - Conglomerates; 5 - Limestones with *Globotruncana*; 6 - Arenaceous pelitic flysch with (7) conglomerates and (8) limestones with *Nummulites*. D - Amaudric du Chaffaut (1977): 1 - Breccias with basement clasts; 2 - Siliciclastic turbidites and arenaceous limestones with *Trocholinae*; 3 - Limestones and cherts (*Lydiennes*); 4 - Caporalino limestones; 5 - Conglomerates with carbonatic clasts; 6 - Limestones with *Globotruncana*; 7 - (7a) Conglomerates and (7b) nummulitic limestones; 8 - Arenaceous pelitic flysch and (9) conglomerates with *Nummulites*. M = Middle; U = Upper; J = Jurassic; K = Cretaceous; Creta. = Cretaceous.

sedimentary deposits outcropping between Francardo and Ponte Leccia.

The Caporalino-Sant'Angelo Unit: previous studies

In the years the lithological assemblages outcropping in the Caporalino-Omessa areas have been allocated as the Caporalino, the Sant'Angelo, the Caporalino-Sant'Angelo units (De Booy 1957; Limasset 1958; Durand-Delga 1975; Amaudric du Chaffaut 1977, 1980, 1982; Rieuf 1980), or to the upper part of the Caporalino-Pedani Unit (Durand-Delga 1984; Rossi et al. 1994). All these authors stated that the Caporalino-Sant'Angelo Unit, i.e. upper part of the Caporalino-Pedani Unit, is roughly composed of three or four main sedimentary portions (Figs 3 and 4) which are Jurassic, Cretaceous and Cenozoic in age, according to the scarce and discontinuous fossil record, including benthic and planktonic foraminifera, tintinnids, cephalopods, calcareous algae, and corals (Tab. 1). The Jurassic or Middle Jurassic (Tab. 1), thick siliciclastic basal portion of the Caporalino-Sant'Angelo Unit is made of breccias and conglomerates dominated by basement clasts (amphibo-

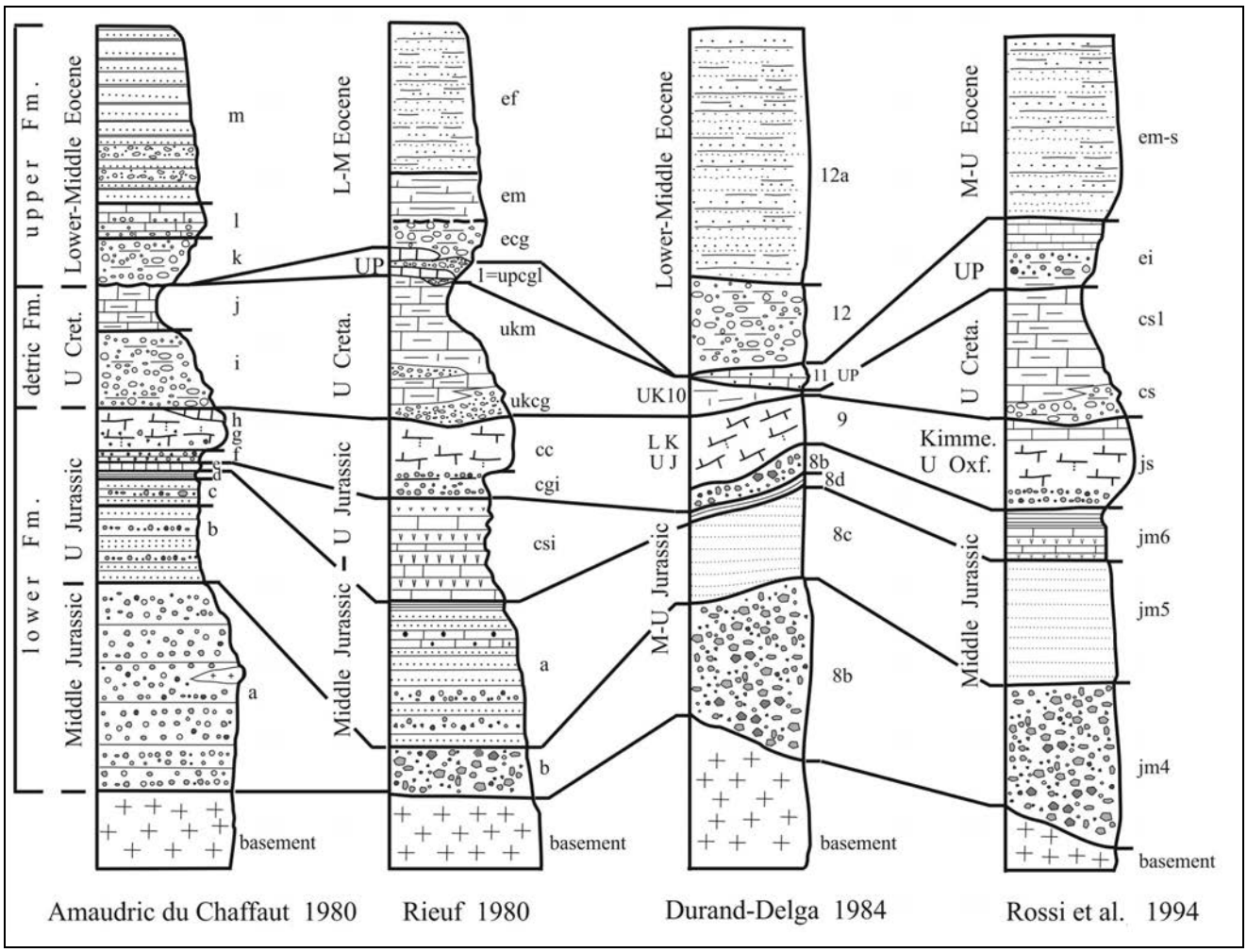


Fig. 4 - Lithostratigraphic sketches of the Caporalino-Sant'Angelo Unit. A - Amaudric du Chaffaut (1980): a - Breccias and conglomerates; b - Arenaceous flysch; c - Calcareous breccias with carbonatic cements; d - Black micaceous pelites; e - Radiolarites and limestones; f - Breccias; g - Caporalino limestones; h - Partly silicizzed limestones; i - Breccias; j - Clayey limestones; k - Conglomerates; l - Clastic limestones; m - Arkose and pelites. B - Rieuf (1980): b - Breccias; a - Arkoses; csi - Limestones and cherts 'intermediares'; cgi - Conglomerates 'intermediares'; cc - Caporalino limestones; ukcg - Upper Cretaceous conglomerates; ukm - Upper Cretaceous marls with *Globotruncana*; upcgl - Upper Paleocene conglomerates and limestones; ecg - Eocene conglomerates; em - Eocene marls; ef - Eocene flysch. C - Upper part of the Caporalino-Pedani unit (= Caporalino-Sant'Angelo Unit) outcropping in the Caporalino area, according to Durand-Delga (1984): 8b - Francardo breccias; 8c -Arkosic flysch; 8d -Limestone and cherts; 9 - Caporalino limestones; 10 - Conglomerates and marly limestones with *Globotruncana*; 11 - Conglomerates and limestones; 12 - Conglomerates; 12a - Tonda Flysch. D - Upper part of the Caporalino-Pedani unit (= Caporalino-Sant'Angelo Unit) outcropping in the Caporalino area, according to Rossi et al. (1994): jm4 - Francardo breccias; jm5 - Setonia arkoses; jm6 - Siliceous limestones; js - Caporalino limestones; cs - Conglomerates; cs1 - Marls; ei - Limestones and conglomerates; em-s - Arenaceous Flysch. U = Upper; Creta. = Cretaceous; L = Lower; M = Middle; J = Jurassic; K = Cretaceous; Oxfor. = Oxfordian; Kimme. = Kimmeridgian.

lites, gneiss, rhyolites, quartzarenites and slates); lenses of limestones with *Trocholinae* (De Booy 1957; Limasset 1958; Durand-Delga 1975; Amaudric du Chaffaut 1977) and slices of ophiolites and radiolarites (Limasset 1958) are also present. The overlying arkosic sandstones, showing the same petrographic composition of the breccias and conglomerates (Amaudric du Chaffaut 1977; Rieuf 1980; Durand-Delga 1984; Rossi et al. 1994), have been dated to the Jurassic (Amaudric du Chaffaut 1977) or to the Dogger-Lower Malm (Durand-Delga 1984; Rossi et al. 1994). Some authors recognized within the coarse basal siliciclastic portion (Amaudric du Chaffaut 1977) or above the arkosic sandstones (Amaudric du Chaffaut 1980; Beauvais & Rieuf 1981; Durand-Delga 1984; Rossi et al. 1994) a discontinuous level of limestones and cherts, which has been assigned to the Jurassic or to the Middle-Upper Jurassic (Tab. 1), also because it lies below the Caporalino limestones (Rossi et al. 1994). This latter unit was dated to the Middle-?Upper Jurassic (De Booy 1957), to the Upper Jurassic (Limasset 1958; Durand-Delga 1975; Amaudric du Chaffaut 1977), to the Upper Oxfordian (Rieuf 1981; Beauvais & Rieuf 1981), to the Oxfordian-Kimmeridgian (Durand-Delga 1984; Rossi et al. 1994) or to the Kimmeridgian-Berria-

Lithologies	Ages	Fossil records	Authors
Marls and/or limestones	L Senonian (Campanian)	**m**- *G.* gr. *lapparenti tricarinata, G.* gr. *lapparenti bulloides, G. rosetta G.* gr. *stuartiformis, G. elevata and Hedbergella*	J. Magné *in* Rieuf 1980;
	Middle Senonian (?Santonian)	**j-** *Globigerinae* and *Globotruncana* (*Globotruncana* gr. *sigali, G. gr. marginata, G.* gr. *fornicata*)	J. Sigal *in* Amaudric du Chaffaut 1980;
	L Cretaceous	*Globotruncana, Globigerinae*	Amaudric du Chaffaut 1977;
	L Cretaceous	*Globotruncana*	De Booy 1957; Limasset 1958; Durand-Delga 1975, 1984; Rossi et al. 1994;
Conglomerates	E Berriasian	*Calpionella alpina* , *Tintinnopsella carpatica, Crassicollaria* cf. *parvula*	Rieuf 1980; Durand-Delga 1984;
	Cretaceous	**h**- *Trocholinae*	Amaudric du Chaffaut 1980;
Caporalino limestones	Berriasian-Kimmeridgian	*Propeneroplis, Aptychus, Belemnites, Saccomidae, Calpionella* cf. *alpina*	Amaudric du Chaffaut 1980;
	Kimmeridgian-Oxfordian	*Favreina salavensis, Protocoprolithus centripetus, Helicerina, Diceras, Protopeneroplis*	Rossi et al. 1994;
	Kimmeridgian-Oxfordian	*Protopeneroplis, Trocholinae, Clypeina, Favreina**	Durand-Delga 1984; * see Beauvais in Rieuf 1980;
	L Oxfordian	*Cladophyllia dichotoma, Stylina micromammata, Stylohelia coalescens, Aplosmilia crassa**	L. Beauvais, in Rieuf 1980; *full list *in* Beauvais & Rieuf 1980;
	L Jurassic	*Clypeina, Solenoporees*	Limasset 1958; Amaudric du Chaffaut 1977;
	M-?L Jurassic	*Protopeneroplis, Lenticulina* cf. *vidalina*	De Booy 1957;
Limestones and cherts	M Jurassic	*Protopeneroplis striata*	Rossi et al. 1994; Durand-Delga 1984;
	Jurassic	*Trocholinae*	De Booy 1957; Limasset 1958; Durand-Delga 1975; Amaudric du Chaffaut 1977, 1980; Rieuf 1980;
Arkosic flysch	Dogger-E Malm	*Protopeneroplis striata,*	Rossi et al. 1994; Durand-Delga 1984;
	Jurassic	*Trocholinae*	Amaudric du Chaffaut 1977;
Siliciclastic, coarse-grained deposits	Dogger-? Malm	*Protopeneroplis striata, Planiinvolutina carinata*	Rossi et al. 1994; Durand-Delga 1984;
	Jurassic or M Jurassic	*Trocholinae*	De Booy 1957; Limasset 1958; Durand-Delga 1975; Amaudric du Chaffaut 1977;

Lithologies	Ages	Fossil records	Authors
Marls and arenitic marnes	L-M Lutetian	*Morozovella* (*M. spinulosa, M.* cf. *bulloides tricarinata*) *Turborotalia* cf. *centralis, Spatangus* (E-M Lutetian) *Nummulites, N.* cf. *millecaput, Nummulites* sp. (E-M Lutetian)	J. Magné *in* Rossi et al. 1994;
Marls and turbiditic sandstones	L-M Lutetian	**sandstones**- *Truncorotalia, Nummulites* (*N. sordensis, N. carpenteri, N. aturicus, N. millecaput*) *Assillina gr. exponens* (M Lutetian) **marls**- *Turborotalia, Truncorotalia Globorotalia* (*G.* cf. *centralis, G. spinulosa* (Lutetian) *Nummulites* cf. *millecaput* (L-M Lutetian)	A. Blondeau and J. Magné *in* Rieuf 1980;
Turbiditic sandstones	L-M Lutetian	***m- sandstones*** *Nummulites, Assillina* gr. *exponens* (L-M Lutetian) ***m- conglomeratic intercalations*** *Nummulites (N.* gr. *millecaput, N.* cf. *aturicus, N.* cf. *sordensis a puschi, N.* gr. *biarritzensis*) (mélange L-M Lutetian) ***m- carbonatic clasts*** *Discocyclines, Assillina exponens, Nummulites* (*N.* gr. *millecaput, N.* gr. *brongniarti*) (Lutetian)	A. Blondeau, *in* Amaudric du Chaffaut 1980;
Limestones (l) and conglomerates (k)	L Eocene (l) L Cuisian (k)	**l-** *Rotaliidae, Discocyclinae, Operculina* and *Nummulites* cf. *partschi-granifer* **k-** *Nummulites* (*N. gr. partschi-granifer N.* gr. *aquitanicus*), *Assillina* gr. *leymerie*	A. Blondeau, *in* Amaudric du Chaffaut 1980;
Conglomerates and limestones	Eocene Eocene	*Lithothamnium, Nummulites, Discocyclines* *Nummulites*	Amaudric du Chaffaut 1977; De Booy 1957; Limasset 1958; Durand-Delga 1975; Rieuf 1980;
Conglomerate and limestones	E Eocene-L Paleocene E Eocene-Paleocene	algae (*i.e. Distichoplax biserialis*, Parachaetetes asvapati*); foraminifera [(*i.e. Idalina* cf. *sinjanarica, Miscellanea* (?), *Valvulina-Cribogoesella, Planorbulina cretae, Coscknoilina* cf. *liburnica, Glomalveolina sp.* (and/or *Lacazinella* sp.), *Discocyclina* sp. (*common*), *Operculina* sp.] 11- *Discoplax biserialis*, *Coskilina* cf. *liburnica*	Magné and Durand-Delga, *in* Rieuf, 1980; *determinated by Durand-Delga 1984; Durand-Delga 1984;

Tab. 1a, b - Fossil record and inferred ages available in literature for some of the lithological assemblages assigned to the Caporalino-Sant'Angelo Unit.

sian (Amaudric du Chaffaut 1980). Above the Caporalino limestones, lie conglomerates rich of carbonatic clasts and/or marls to limestones with *Globotruncana* (Tab. 1), showing conglomeratic lenses (Rieuf 1980; Rossi et al. 1994). This latter deposits have been assigned to the Upper Cretaceous (Tab. 1) or to the Senonian by J. Sigal (Amaudric du Chaffaut 1980), J. Magné (Rieuf 1980) and Magné & Durand-Delga (1983). The Cenozoic portion of the Caporalino-Sant'Angelo Unit includes the Upper Paleocene-Lower Eocene limestones

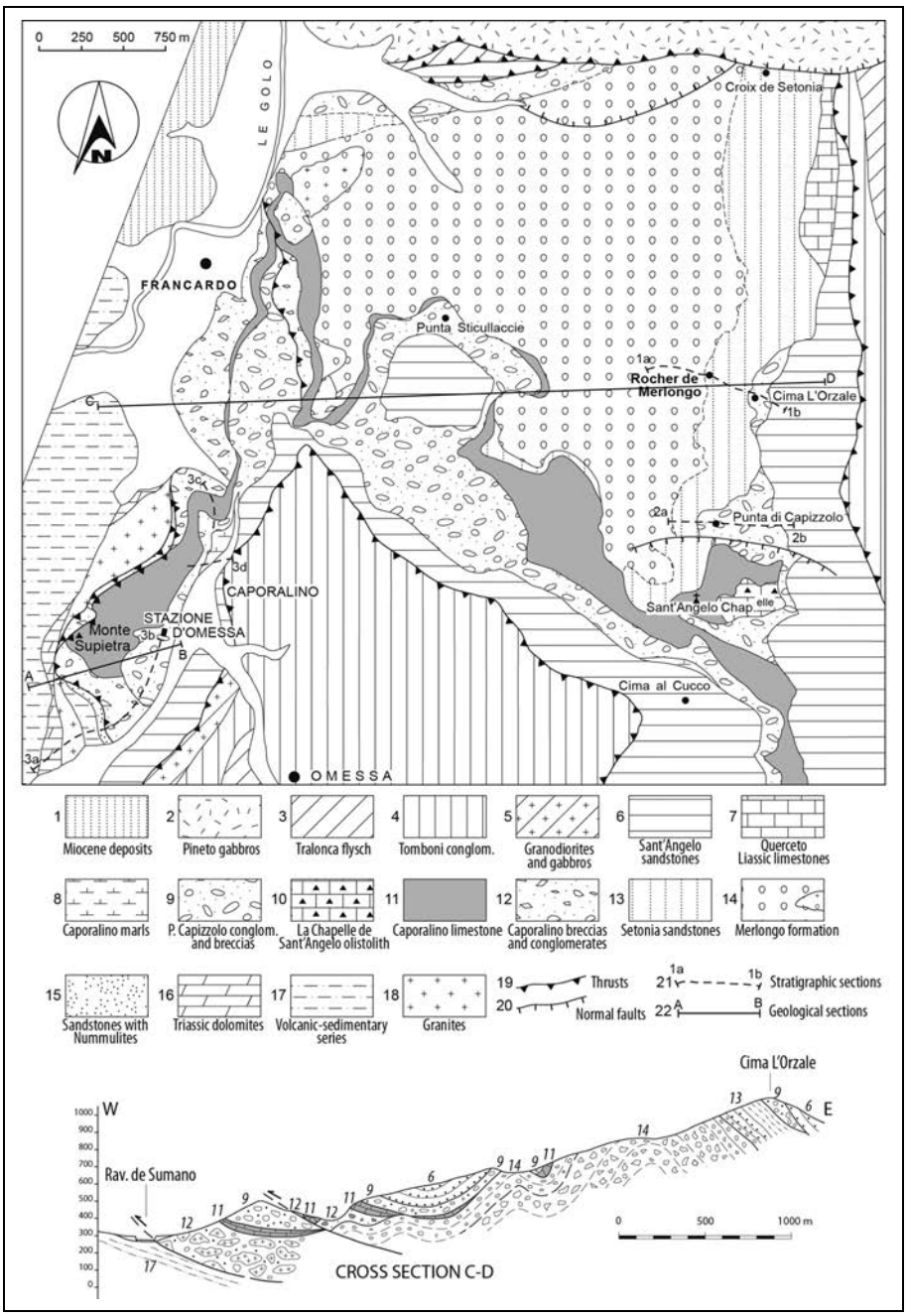


Fig. 5 - Geological map of the Caporalino-Omessa area, and cross-sections showing the relationship between the distinguished units.

and conglomerates (Rieuf 1980; Durand-Delga 1984) and/or a thick Lower-Middle Eocene succession made of turbiditic sandstones with intercalations of conglomerates and limestones. The *Nummulites* recovered from the coarse- and fine-grained deposits of the upper clastic portion have been assigned to the Eocene (Tab. 1), to the lower Cuisian-middle Lutetian by A. Blondeau (Amaudric du Chaffaut 1980) or to the lower-upper Lutetian by A. Blondeau and J. Magné (Rieuf 1980; Rossi et al. 1994).

Materials and methods

Based on a new geological mapping of the Caporalino-Omessa area (Fig. 5), we have selected three lithostratigraphic sections that allow the reconstruction of the Caporalino-Sant'Angelo Unit. They are the Cima l'Orzale, the Punta Capizzolo and the Omessa train station sections. The first section is located along the slope that goes from the Rocher de Merlongo towards the Cima l'Orzale (1a-1b of Fig. 5). The Punta Capizzolo section lies 1 km south of the Cima l'Orzale section (2a-2b of Fig. 5). The third composite section (3a-3b and 3c-3d of Fig. 5) lies along the railway behind the Omessa train station, and along the road that connects the train station with the Caporalino village. From these sections, more than 170 samples have been collected in order to study calcareous nannofossils and foraminifera. The sampling mainly focused on the Setonia sandstones Fm., the Punta Capizzolo conglomerates and breccias Mb., the Caporalino marls Mb. and the Sant'Angelo sandstones Fm. (Figs 6, 7). The analysis of calcareous nannofossils was carried out on almost 70 samples, prepared as standard smear slides (Bown 1998), and analyzed using a light microscope (transmitted light and crossed nicols) at about 1250X magnification. Due to the low diversity and the scarcity of nannofossils, each slide was processed almost as a whole, and no distribution-

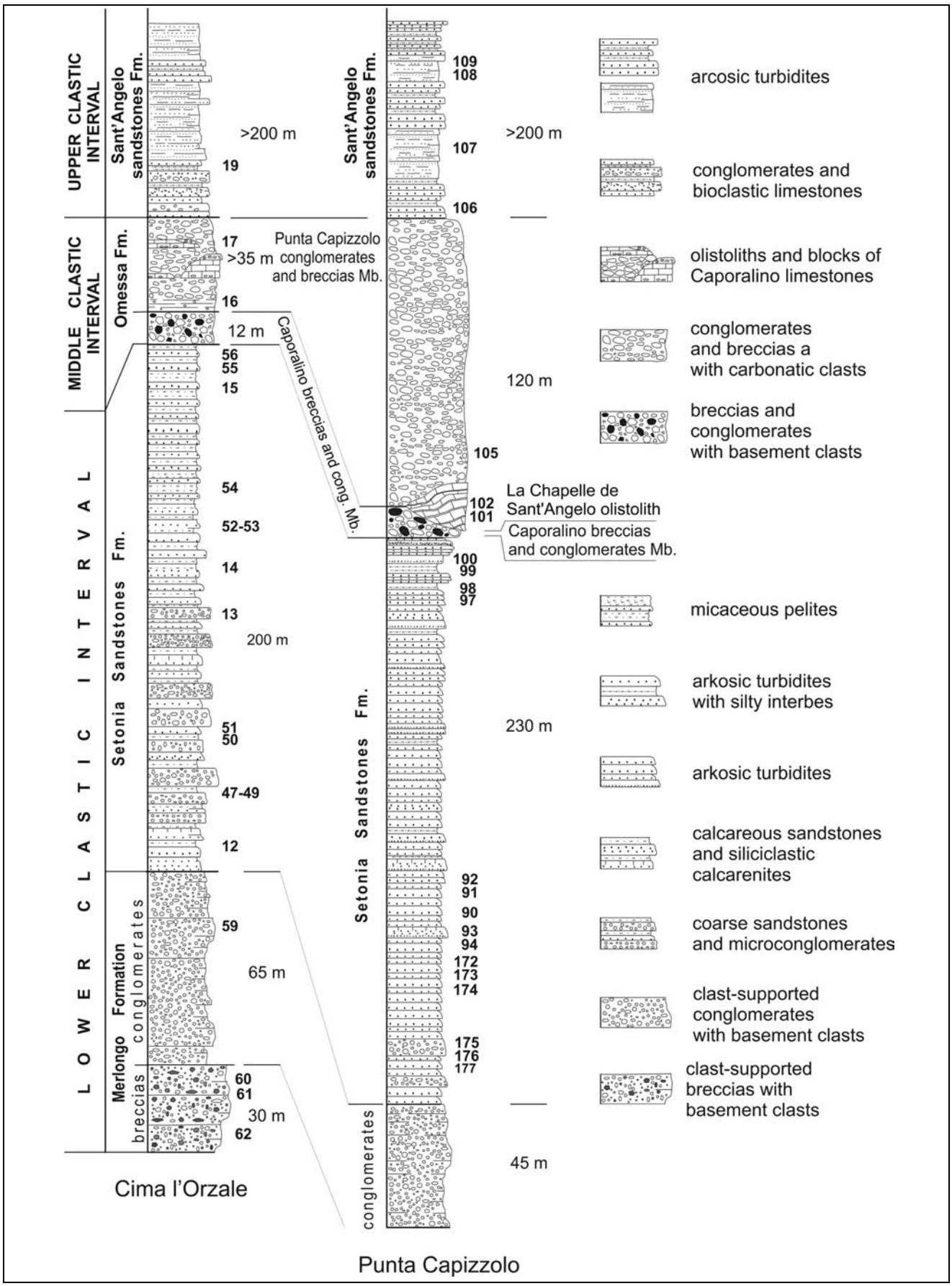


Fig. 6 - Lithostratigraphy of Caporalino-Sant'Angelo Unit exposed at Cima l'Orzale (1a-1b of Fig. 5) and Punta Capizzolo (2a-2b of Fig. 5) sections; in both sections is represented only the uppermost part of the Merlongo Fm. and the lowermost part of the Sant'Angelo sandstones Fm. (Samples are the numbers in bold).

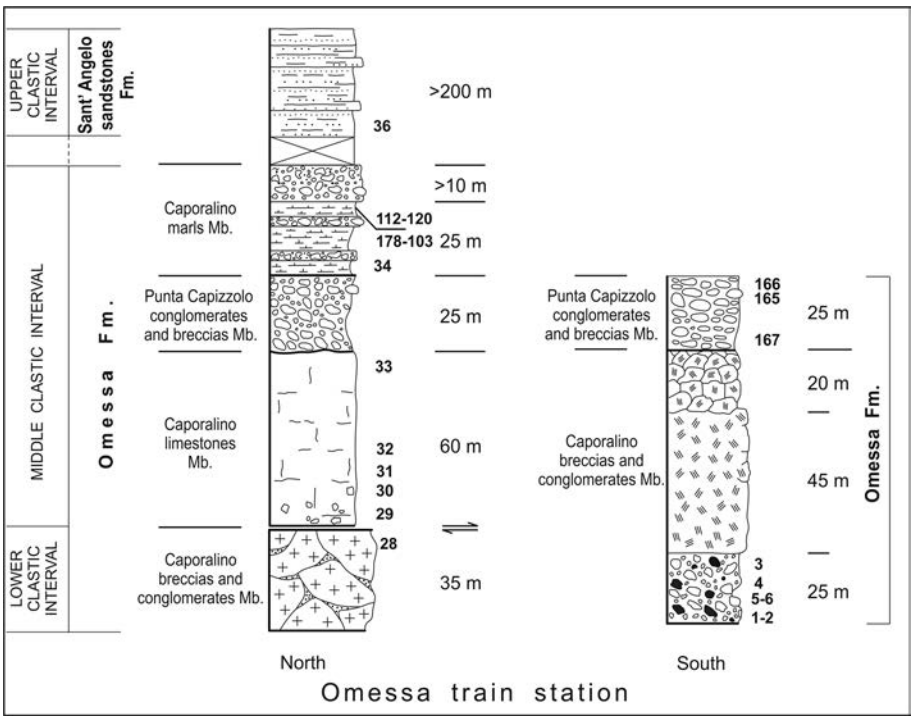


Fig. 7 - Lithostratigraphy of Caporalino-Sant'Angelo Unit exposed north (3c-3d of Fig. 5) and south (3a-3b of Fig. 6) of the Omessa train station; in the (North) thicker section is represented only the lowermost part of the Sant'Angelo sandstones Fm. (Samples are the numbers in bold).

chart was done. The biostratigraphical framework adopted is based on the species ranges by Perch-Nielsen (1985), Bown (1998), and Fornaciari et al. (2010). Almost 30 thin sections were prepared for the study of foraminifera following the species distribution ranges of Caron (1985) for the Cretaceous planktonic foraminifera, and Toumarkine & Lutherbacher (1985) for the Paleocene and Eocene. Because most of the studied samples resulted barren, and the fossiliferous ones contain very rare specimens, the studied units have been attributed to time intervals rather than biozones.

Caporalino-Sant'Angelo Unit: results

The new geological mapping (Fig. 5), and the study of the selected three sections allows to recognize three main clastic intervals and four informal formations (Figs 6-8). The lower clastic interval is up to 500-600 m thick and comprises the Merlongo Fm. and Setonia sandstones Fm. The middle clastic interval reaches a thickness of 400-500 m. It corresponds to the Omessa formation, that includes four members: the Caporalino breccias and conglomerates, the Caporalino limestones, the Punta Capizzolo conglomerates and breccias, and the Caporalino marls. The upper clastic interval is up to 250 m thick and corresponds to the Sant'Angelo sandstones Fm. Almost all the units are exposed at the Cima l'Orzale and Punta Capizzolo sections (Fig. 6), and the relationship between the members belonging to the Omessa Fm. are better surveyable on the southeast flank of the Monte Supietra, and along the railway nearby the Omessa train station (Figs 5, 7).

Lower clastic interval

Merlongo formation

This formation includes 2 litofacies: breccias and conglomerates. The first one is up to 200-250 m thick and consists of massive or crudely stratified red and green clast-supported breccias, well exposed at Rocher de Merlongo (Fig. 9A). The unsorted pebbles to cobbles are granites, amphibolites, gneiss, rhyolites, quartzarenites and slates. The conglomerates, up to 90-100 m thick, are nicely exposed between Cima l'Orzale and Punta Capizzolo. They consist of clast-supported conglomerates, locally showing gradation and crude stratification, and arkoses with thin intercalations of pelites. The lithologies and the size of the clasts are similar to those of the breccias; also the fine- to coarse-grained matrix of the breccias, conglomerates and of the arkose shows the same petrographic composition of the clasts. The transition between breccias and conglomerates is visible at the Cima l'Orzale section, and the stratigraphic contact between Merlongo Fm. and the Setonia sandstones Fm. is exposed at Punta Capizzolo section.

Setonia sandstones formation

The unit outcrops between Croix de Setonia and La Chapelle de Sant'Angelo. It is up to 200-250 m thick and consists of thinning-upward siliciclastic sequence of fine- to coarse-grained turbidites with silty interbeds, and dark pelites that become dominant in the uppermost part of the formation (N of the Cima l'Orzale). The Setonia sandstones Fm. also includes: intercalations of microconglomerates and thick beds of breccias and

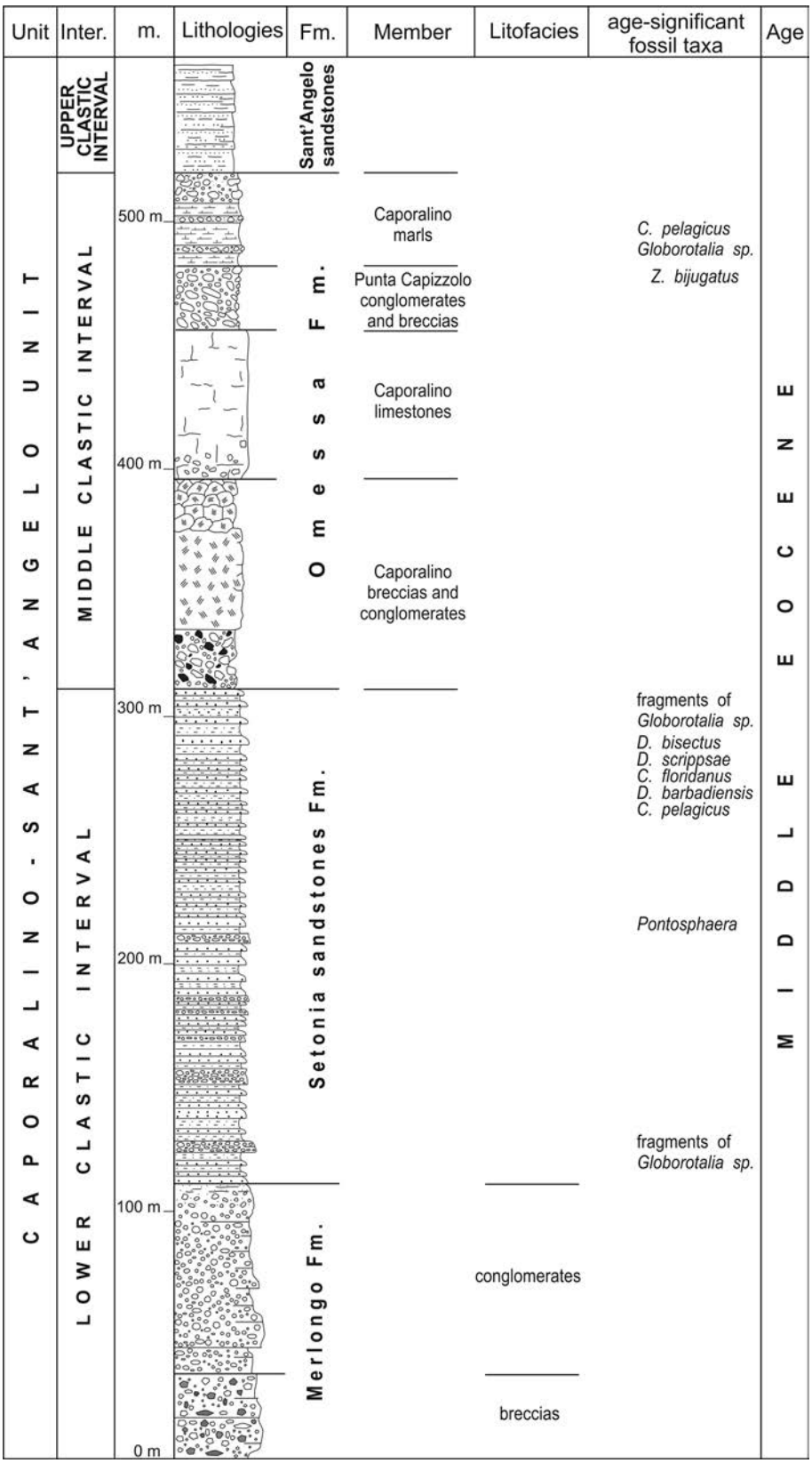


Fig. 8 - Lithostratigraphy of the Caporalino-Sant'Angelo Unit in the Caporalino-Omessa area based on the Cima l'Orzale, Punta Capizzolo and Omessa train station sections (see Figs 6 and 7); in the log is represented only the uppermost part of the Merlongo Fm. and the lowermost part of the Sant'Angelo sandstones Fm.

conglomerates (Fig. 9B), calcareous sandstones and siliciclastic calcarenites (Fig. 9C) with ooliths, bioclasts of echinoid and forams, i.e. *Trocholinae*, *Protopeneroplis* (Pl. 1). From the bottom to the top of the Setonia sandstones Fm., the bed thickness decreases from (1-2) meters to (few) centimeters (e.g. Punta Capizzolo). W of Cima l'Orzale, the lower portion of the formation shows coarse-grained sandstones, and very thick (up to 10 m) lenticular beds with erosive bottom. The upper portion of Setonia sandstones Fm. mainly consists of fine-grained siliciclastic sandstones with (rare) intercalations of breccias, conglomerates, and dark micaceous

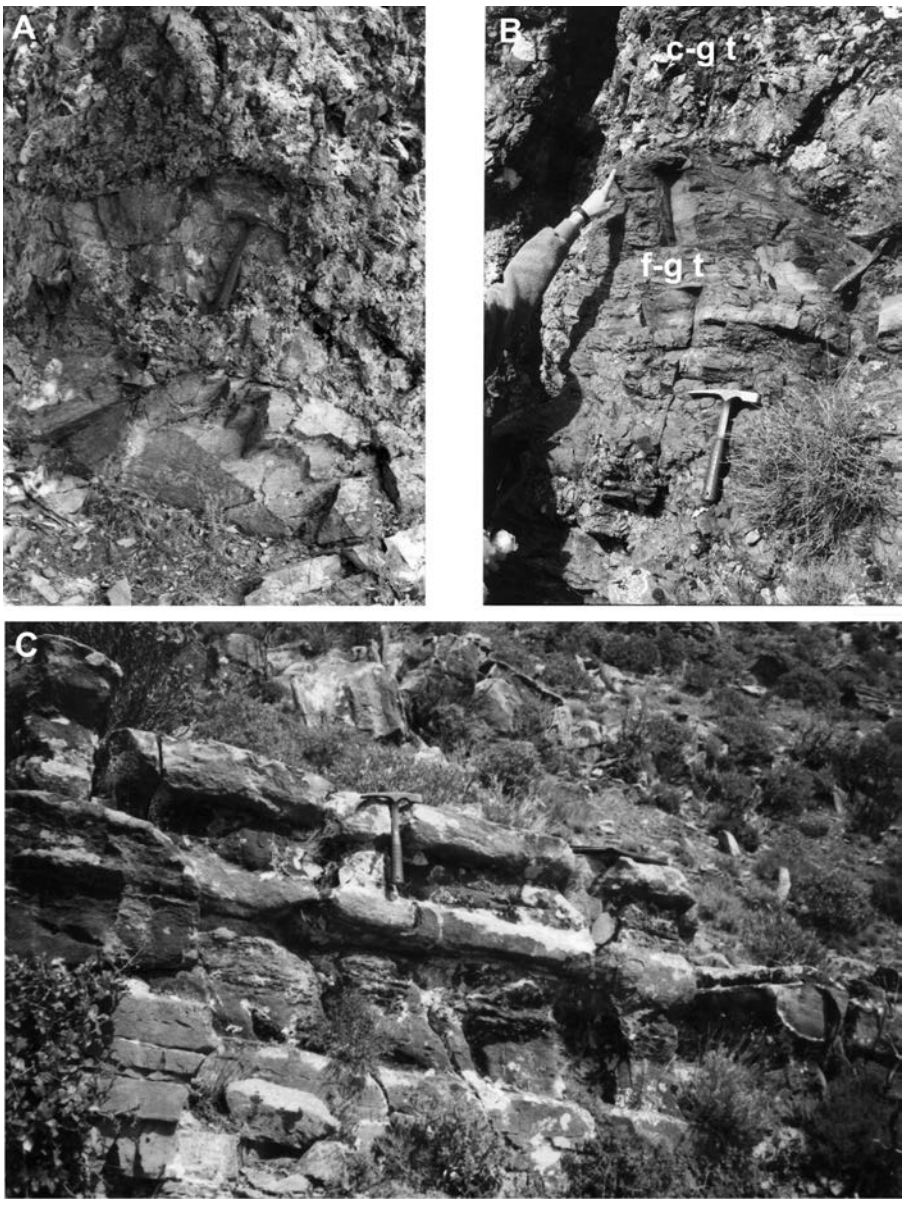


Fig. 9 - A - Unsorted breccias of the Merlongo Fm. made of basement clasts; lower part of the Cima l'Orzale section. B - Fine-grained (f-g t) and the coarse-grained (c-g t) turbidites of the Setonia sandstones fm.; lower part of the Cima l'Orzale section. C - The Setonia sandstones Fm., fine- to medium-grained turbidites and siliciclastic calcarenites; middle part of the Cima l'Orzale section.

pelites. The Setonia sandstones Fm. grades to the Omessa Fm. as is surveyable along the Punta Capizzolo section. The samples, collected from the silty to silty marly layers of the middle-upper portion of the formation at Punta Capizzolo section, furnished age-significant nannofossil assemblages containing *Cyclicargolithus floridanus*, *Dictyococcites bisectus*, *Dictyococcites scrippsae*, *Discoaster barbadiensis*, *Sphenolithus* sp. and *Pontosphaera* sp. (Pl. 2); they occurs along with reworked Cretaceous species. The occurrence of *Dictyococcites bisectus* in the sample 97 (Fig. 6), allow us to assign the upper portion of this formation a Middle Eocene age (early Bartonian). The Eocene age of the Setonia sandstones Fm. is also supported by the presence of few specimens of the planktonic foraminifera belonging to the Cenozoic genus *Globorotalia*, which occur along with Cretaceous taxa (*Protopeneroplis angulata*, *Rotalipora appenninica*, *Globotruncana* sp. and remains of *Rudistes*). Upper Cretaceous planktonic foraminifera genera, i.e. *Globotruncana* and *Rotalipora*, have been documented also in two samples (12 and 15) collected at the Cima l'Orzale section (Fig. 6).

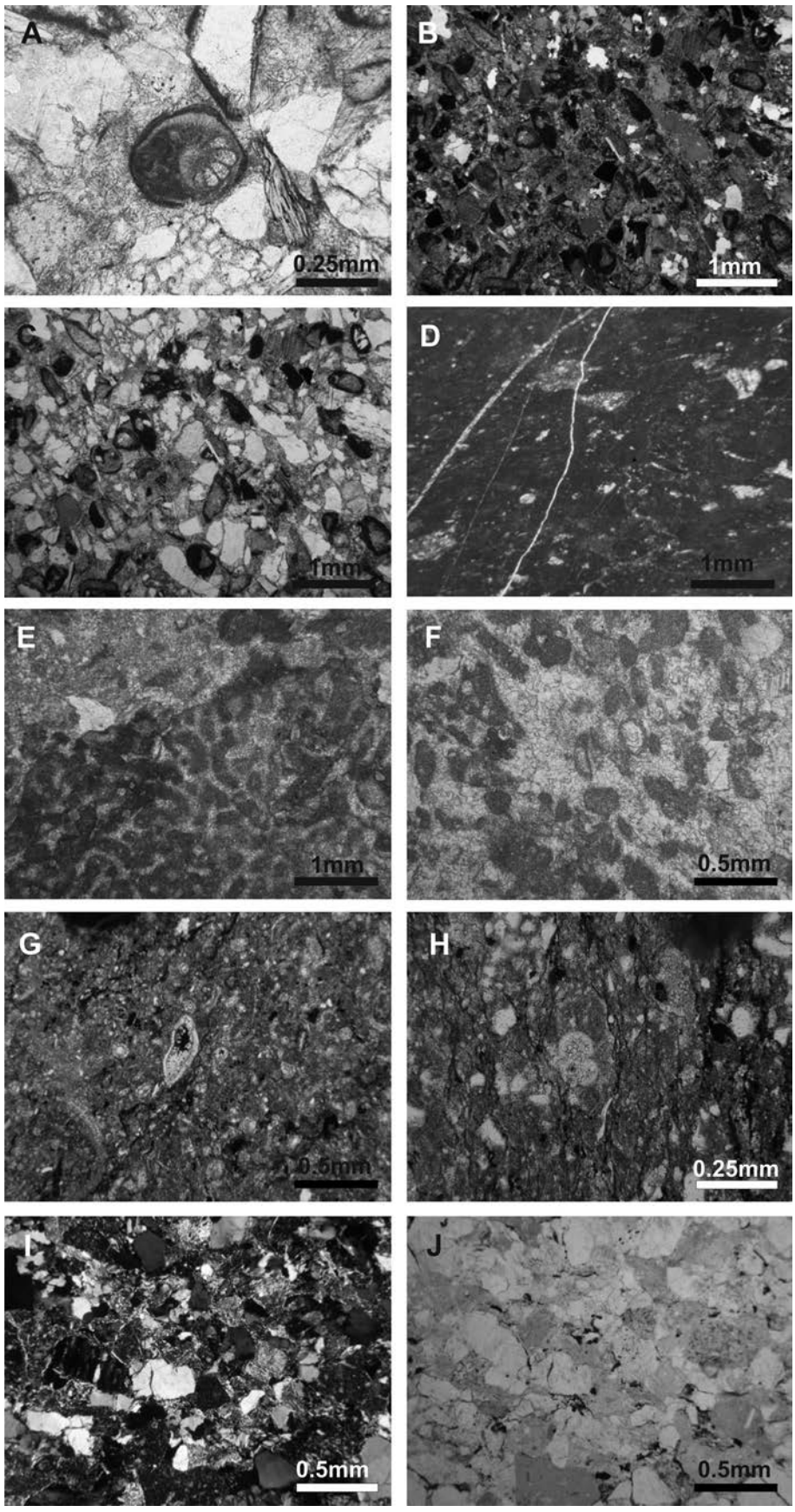
Middle clastic interval

Omessa formation: Caporalino breccias and conglomerates member

This member, up to 100 to 250 m thick, is well exposed south of Monte Supietra and nearby the Omessa train station, where it is composed of two clastic intervals, with a thick olistolith of amphibolites interposed between them (Fig. 7). The lower interval consists of polymictic, unsorted, clast-supported breccias and conglomerates, with the clast ranging from a few centimeter to >1 m (Fig. 10). The main lithologies of the clasts are amphibolites and granites, they occur along with rhyolites, hydrothermal quartz; rare carbonatic

PLATE 1

A, B, C - Setonia sandstones Fm. Siliciclastic calcarenites with foraminifer bioclasts (*Protopeneroplis trochoangulata*); Cima Capizzolo section, sample 90; A: PL. B: XP, C: PL.
D, E, F - Caporalino limestones Mb. Omessa train station (north) section; D: packstones; sample 29; PL. E: calcirudite with coral bioclast; sample 30; PL. F: wackstone/packstones with peloid and bioclasts; sample 31.
G - Caporalino marls Mb. Specimen of planktonic foraminifera (?) *Globorotalia* sp.; Omessa train station (north) section, sample 178; XP.
H - Caporalino marls Mb. Specimens of planktonic foraminifer Globigerinid; Cima al Cucco; sample 103; XP.
I, J - Sant'Angelo sandstones Fm. Cima Capizzolo section, sample 107; XP, PL.
Light micrography: XP = cross-polarized light, PL = plain transmitted light.



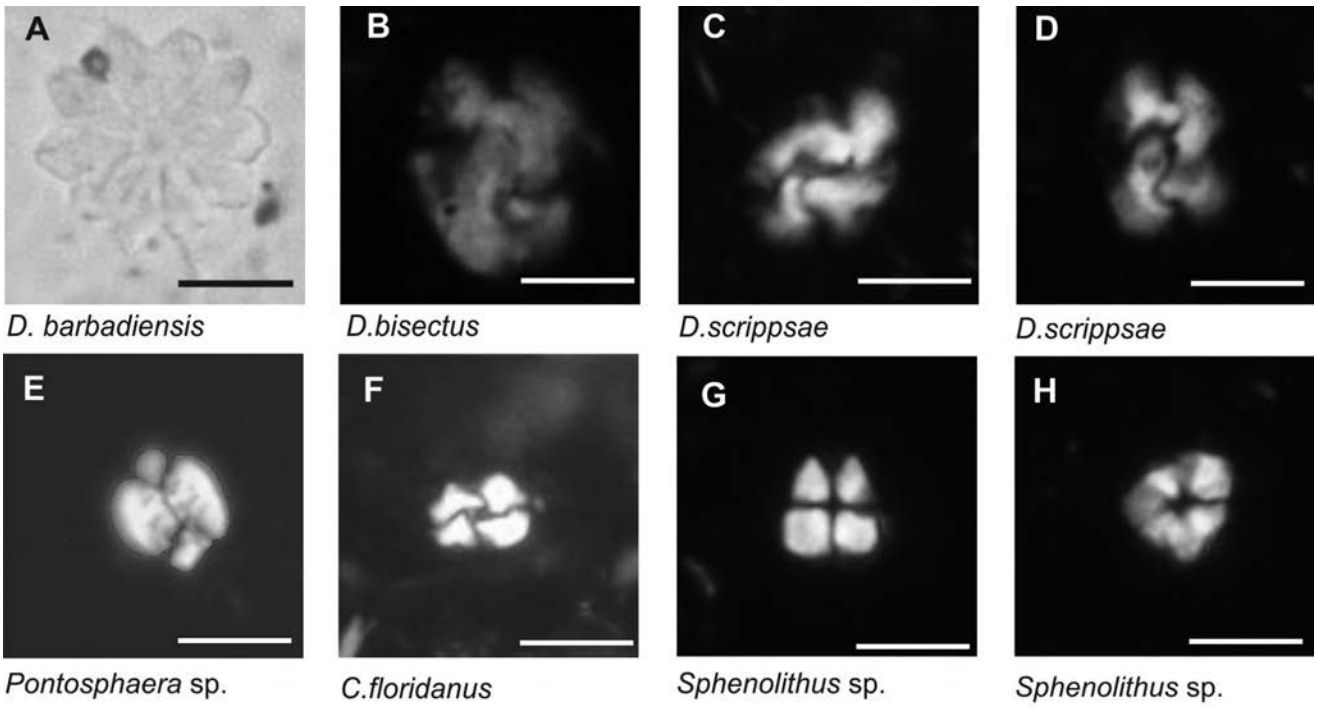


PLATE 2

A - *Discoaster barbadiensis* Tan, 1927. Setonia sandstones Fm. Cima Capizzolo section, sample 97; PL.
B - *Dictyococcites bisectus* (Hay, Mohler and Wade 1966) Bukry and Percival, 1971. Sample 97; XP.
C, D - *Dictyococcites scrippsae* Bukry & Parcival,1971. Sample 97; XP.
E - *Pontosphaera* sp. Lohmann, 1902. Sample 97; XP.
F - *Cyclicargolithus floridanus* (Roth and Hay *in* Hay *et al*. 1967) Bukry, 1971. Sample 97; XP.
G, H - *Sphenolithus* sp. Deflandre *in* Grassé 1952. Sample 97; XP.
Light micrography: XP = cross-polarized light, PL = plain transmitted light. Scale bar = 5 micron.

clasts (micritic, bioclastic or oolithic limestones) similar to the Caporalino limestones Mb. are also present. The upper interval, is represented by a breccias with (common) amphibolites clasts and (rare) carbonatic clasts. The silty to arenitic or marly to shaly matrix of both portions is rare. The presence of relatively more rounded basement clasts along with carbonatic clasts, permits us to distinguish this member from the conglomeratic lithofacies of the Merlongo Fm. South of the Monte Supietra, this member also includes blocks and small olistoliths similar to the overlying Caporalino limestones. The calcareous nannofossils recovered from the silty matrix of the breccias, sampled at the Punta Capizzolo section, are few and poor preserved Upper Cretaceous specimens.

Omessa formation: Caporalino limestones member

The member consists of lens-shaped olistoliths which usually overlies the previous member (Figs 7, 8). The Caporalino limestones Mb. is well exposed at Monte Supietra and at La Chapelle de Sant'Angelo. At Monte Supietra (Fig. 11A), the largest mapped olistolith of Caporalino limestones Mb. up to 60 100 m thick, is made up of fine-grained calcarenites and coarse-grained bioclastic calcirudites, showing a massive to crude stratification. The calcarenites consist of micritic wackstone/packstones with peloid and bioclasts, and packstones with ooids and/or pseudo-ooids, echinoderm fragments and quartzs (Pl. 1). The calcirudites are characterized by the presence of bioclast of gastropods, bivalves, bryozoans, rudists, corals, small benthic foraminifera, and echinoderms; bioclasts are more abundant in the coarse grained bottom of the beds. In the middle-upper part of the Caporalino limestones Mb., nodular reddish to pinkish limestones with remains or ghost of belemnites are present; at La Chapelle de Sant'Angelo, this facies could grade to cherts and silicified, micritic calcilutites with calpionellids, radiolaria and/or fragments of ammonoids (e.g. Cima al Cucco). The uppermost part of the Caporalino limestones Mb. also shows small fractures filled with micritic limestones or large fractures filled with conglomerates belonging to the overlying member. The stratigraphic contact between the Caporalino limestones Mb. and overlying member is well-exposed along the railway, north of the Omessa train station (Fig. 7) and on the southeast flank of the Monte Supietra (Fig. 11B).

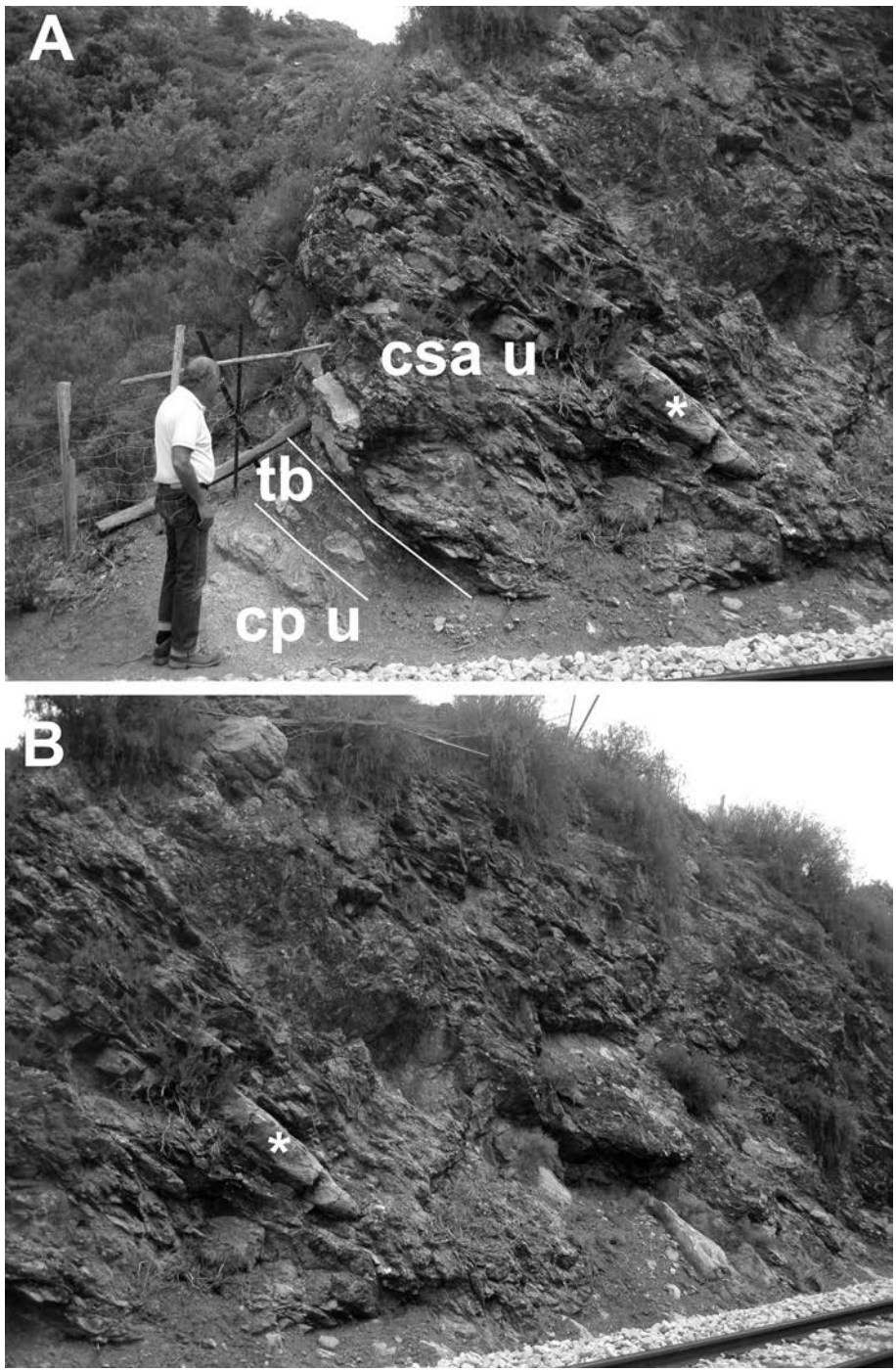


Fig. 10 - A- Tectonic contact between the sandstone with *Nummulites* belonging to the Castirla-Piedigriggio Unit (cp u) and Caporalino breccias and conglomerates Mb. of the Omessa Fm. belonging Caporalino Sant'Angelo Unit (csa u); the two units are separated by a tectonic breccias (tb); the contact is visible along the railway, 800 m south of the Omessa train station. B - Caporalino breccias and conglomerates Mb. of Omessa Fm., enlargement of the previous figure, showing the coexistence of basement clasts along with the (rare) carbonatic-clasts. The white asterisk shows the same bed of fig. 10A.

Omessa formation: Punta Capizzolo conglomerates and breccias member

This member, up to 100-120 m thick, is well exposed at Punta Capizzolo, Cima l'Orzale, and nearby the Omessa train station. With respect to the Caporalino breccias and conglomerates, this member is characterized by a higher percentage of large rounded carbonatic clasts (Fig. 13), mainly referable to the Caporalino limestones (e.g. Cima l'Orzale), and a low percentage of angular clasts of metabasites, granites, rhyolites and filonian quartz. The clasts range from pebbles to blocks (>1 m). Also this member shows a low percentage of silty to arenitic (e.g. Omessa train station) or marly to shaly matrix (e.g. Cima l'Orzale, Punta Capizzolo). At Punta Capizzolo, a decametric-thick olistolith is intercalated in the lowermost part of this member (Fig. 6). It is made up of thin-bedded bioclastic calcarenites with radiolarian and sponge spicules and oolitic limestones showing remains of *Trocholinae* and of echinoids; silty marls with thin cherty intercalations and calcarenites with dark pelitic interbeds are also present. As aforementioned, on the south flank of the Monte Supietra (Fig. 11), and south of the Omessa train station (Fig. 7), the two coarse-grained clastic members of the

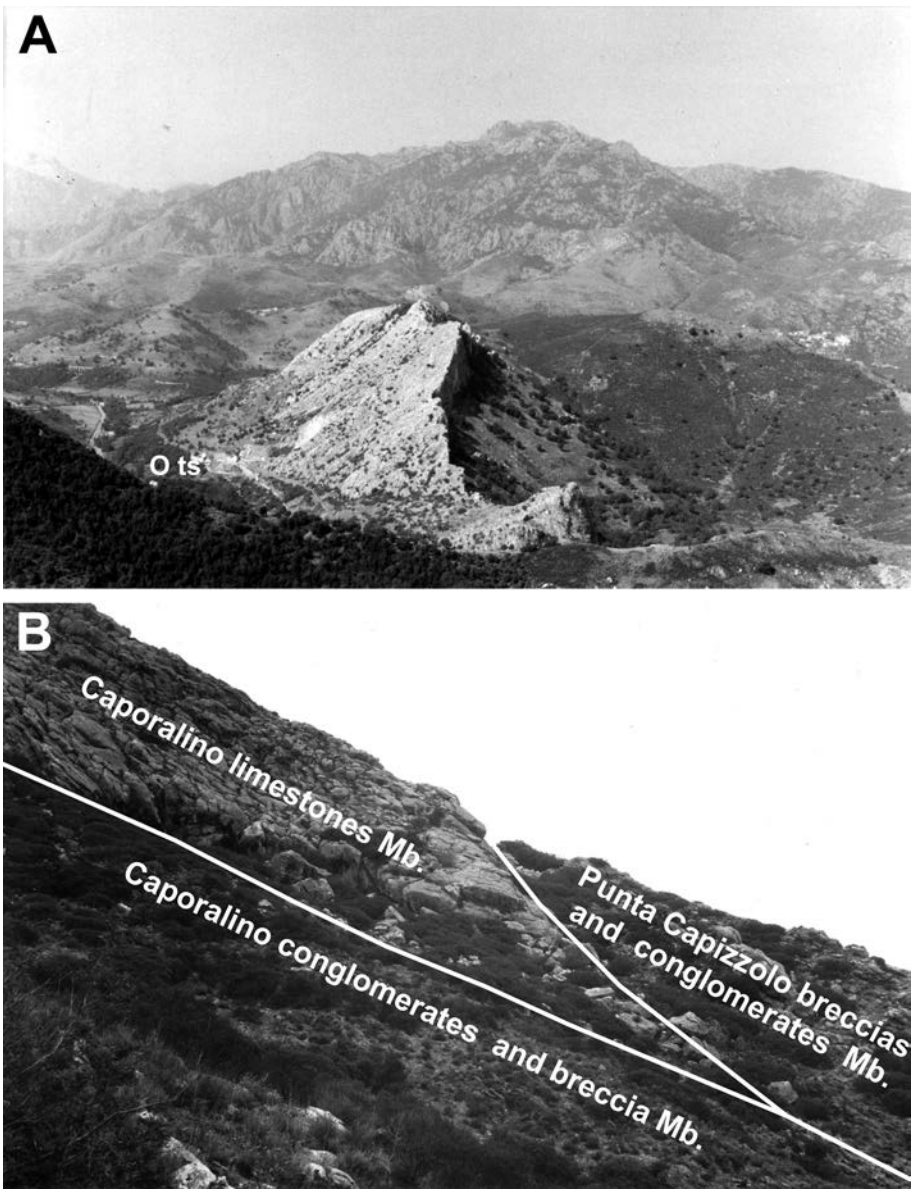


Fig. 11 - A - The huge olistolith of the Caporalino limestones Mb. of Monte Supietra dipping towards the Omessa train station (O ts). B - Relationships between the Caporalino breccias and conglomerates Mb., the Caporalino limestones Mb., and Punta Capizzolo conglomerates and breccias Mb.; south flank of Monte Supietra.

Omessa Fm. are directly superimposed because the Caporalino limestones Mb. is absent (Figs 11B, 12).

Omessa formation: Caporalino marls member

It is exposed along the road that connect the Omessa train station with the Caporalino village (Fig. 7) and nearby Cima al Cucco. This unit reaches a thickness of 30 m and consists of grey-bluish to dark-gray silty or siliceous marls, and siliceous marly limestones. Marls and limestones contain planktonic foraminifera (*Globotruncana*), spicules of sponges, quartz and metamorphic granules. The Caporalino marls Mb. also shows intercalations of breccias and conglomerates very similar to underlying unit, as they are mainly composed of carbonatic clasts similar to the Caporalino limestones, whilst the basement clasts are rare (Fig. 13B). At Cima al Cucco, the lower part of this member consists of lens-shaped debris flows with block of limestones, which are mainly referable to the Caporalino limestones Mb., and a marly to silty matrix. Between the Omessa train station and the Caporalino village, the topmost part of the Caporalino marls Mb. is represented by 10-15 m thick interval of conglomerates, similar to the underlying member, because they are dominated by rounded clasts similar to the Caporalino limestones Mb.; rare or very rare basement clasts and dm-lenses of marls (similar to the Caporalino marls) are also present. The sharp transition between the Caporalino marls Mb. and the Sant'Angelo sandstones Fm. is visible at Cima al Cucco. The sample 178 picked from the Caporalino marls Mb. exposed at Omessa train station section, and the sample 103 collected at Cima al Cucco (not reported in Fig. 6) revealed poor preserved foraminifer and calcareous nannofossil assemblages. Among the planktonic foraminifera, the Paleogene genus *Globorotalia* (Pl. 1) occurs

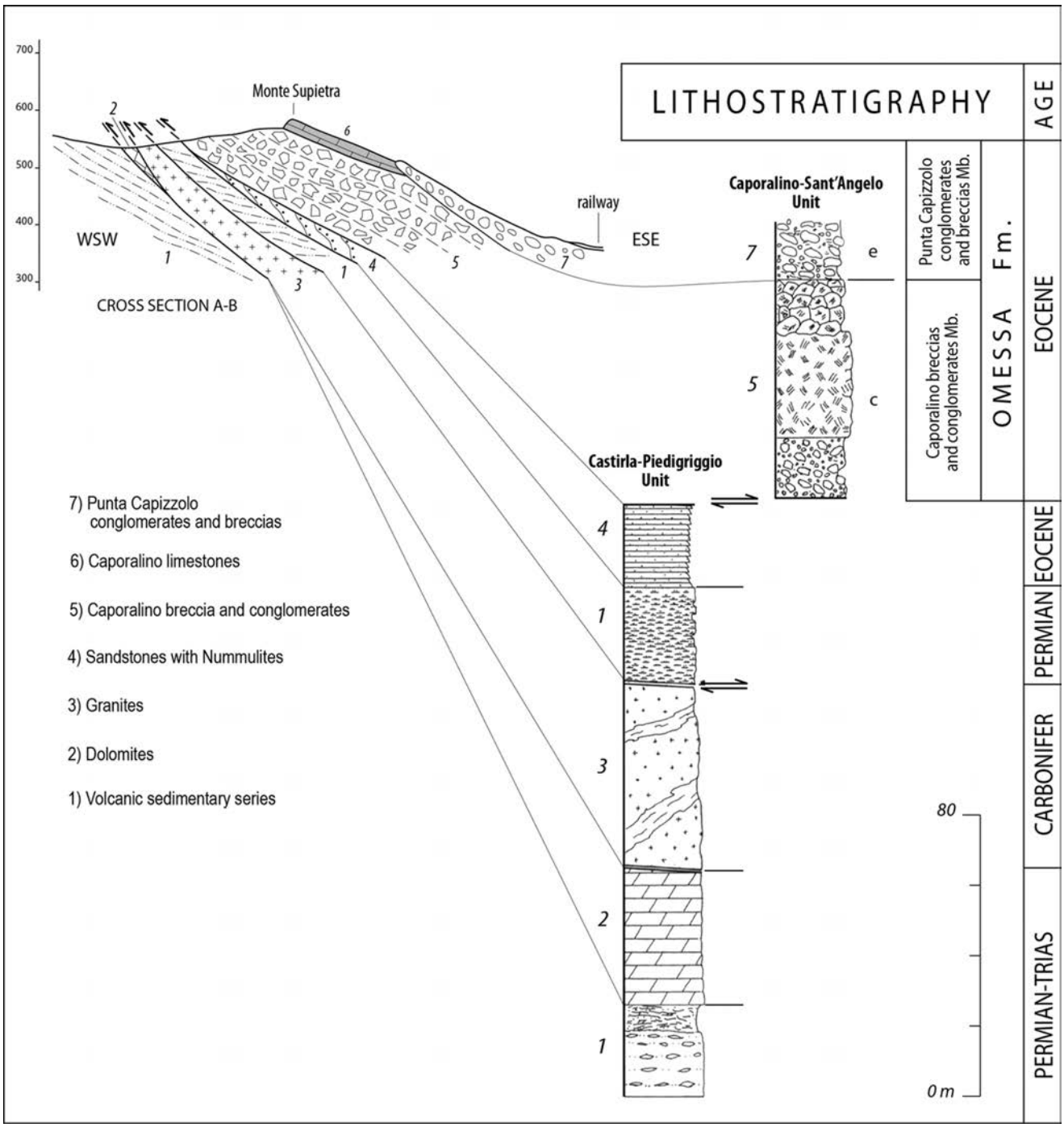


Fig. 12 - Schematic geological cross section (A-B of Fig. 5) and composite lithostratigraphic section showing the tectonic relationship between the Castirla-Piedigriggio Unit and the Omessa Fm. of the Caporalino-Sant'Angelo Unit (see also Fig. 10). For symbols of the cross-section see Fig. 5.

along with Upper Cretaceous genera (*Globotruncana*, *Rotalipora* and *Hedbergella*). The observed calcareous nannofossils consist of the long ranging Cenozoic taxon *Coccolithus pelagicus*, and reworked specimens of the Upper Cretaceous taxa (*Micula decussata*, *Lucianorhabdus cajeuxii*, *Calculites obscurus* and *Ceratolithoides aculeus*). So that, on the bases of the presence of *Globorotalia* sp. and *Coccolithus pelagicus,* the Caporalino marls Mb. is not older than Lower Paleocene.

Upper clastic interval

Sant'Angelo sandstones formation

This formation is up to 250 m thick. It is exposed at the Cima l'Orzale section, where it consists of a well-bedded and monotonous succession of coarse- to fine-grained, turbiditic arkosic sandstones, intercalated with dark thin pelitic interbeds more abundant in the upper part of the succession. The lithics of the sandstones are granites, rhyolites, metamorphic rocks and slates (Pl. 1).

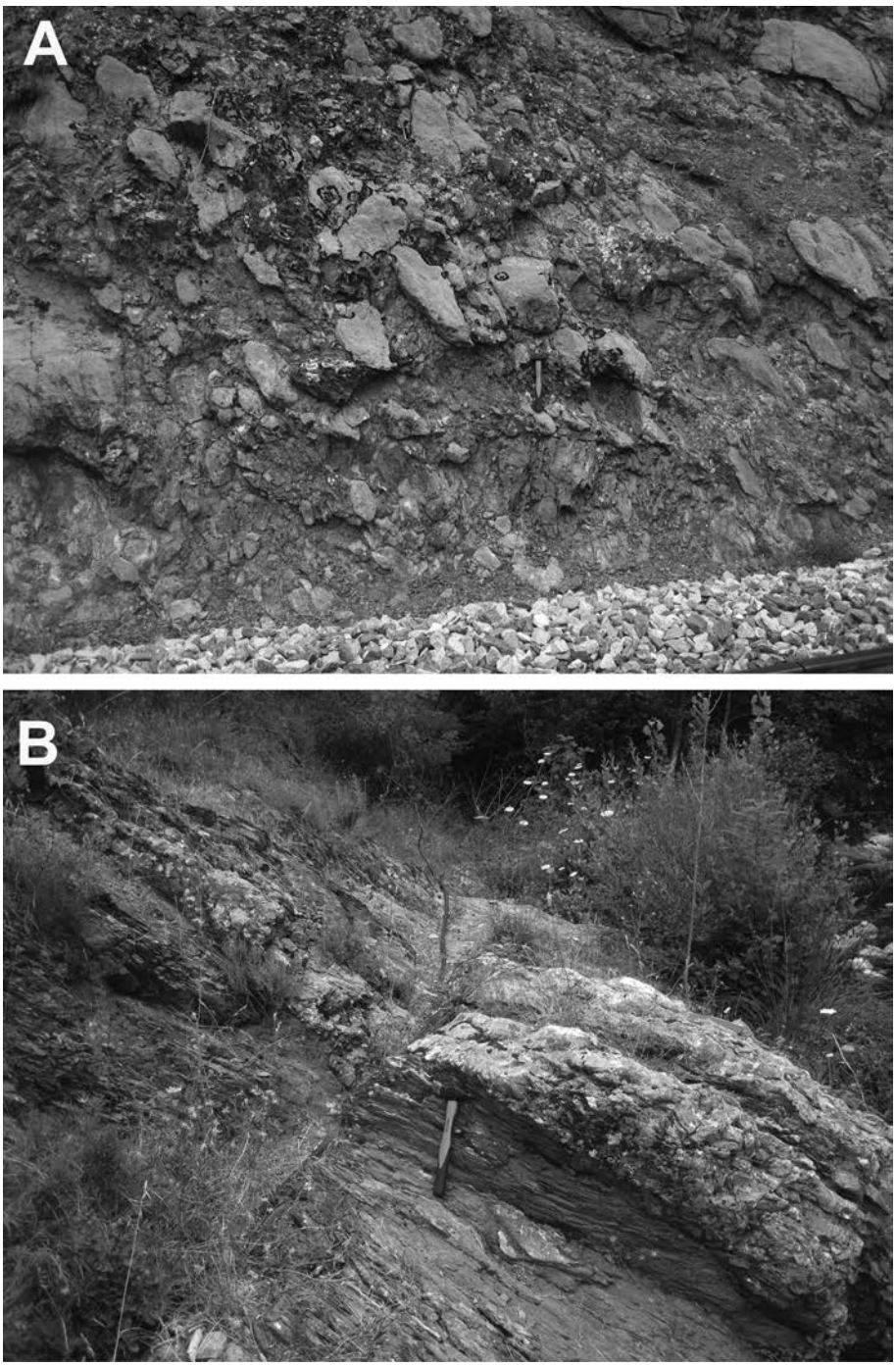


Fig. 13 - A - Punta Capizzolo conglomerates and breccias Mb. dominated by the large rounded carbonatic clasts; along the railway, 100 south of m the Omessa train station. B - Caporalino marls mb. showing the conglomeratic intercalations; along the creek between the Omessa train station and the Caporalino village.

The thick to very thick (1-5 m) turbiditic beds show gradation, load casts, soft-clasts, ripple marks, convolutions and bioturbations (e.g. Punta Capizzolo and Cima l'Orzale). Conglomerates, coarse-grained bioclastic limestones and calcareous sandstones are present at the bottom of the Sant'Angelo sandstones Fm. or are intercalated within the turbidites. The clasts of massive conglomerates are mainly represented by limestones, including nummulitic limestones. The presence of *Nummulites* remains (within the clasts or the matrix) makes easy to distinguish between the conglomerates rich of the carbonatic clasts belonging to the Sant'Angelo sandstones Fm. and those present in the underlying members. Furthermore, the lens-shaped conglomerates intercalated within the Sant'Angelo sandstones Fm. show a crude stratification, and megabeds with nummulitic limestone clasts; clasts are more angular and smaller than those that characterize the Punta Capizzolo conglomerates and breccias Mb. The few fossiliferous samples collected at Cima l'Orzale and Punta Capizzolo sections, revealed poorly preserved, and not identifiable calcareous nannofossils. In thin sections we recognized scattered remains of the Cenozoic planktonic foraminifera of the genus *Globorotalia*, and broken specimens of the macroforaminifera genus *Nummulites*.

Discussion

The recovered calcareous nannofossil and foraminifera assemblages and the reconstructed lithostratigraphic record support a new interpretation of the Caporalino-Sant'Angelo Unit (Fig. 8), though the observed lithological features of the several mapped units are comparable with the units described by the majority of previous authors (Figs 3, 4; Tab. 2). Excluding Mattauer & Proust (1975), the lower and upper portion of the Caporalino-Sant'Angelo Unit described in literature correspond to our lower, i.e. Merlongo and Setonia sandstones Fms, and upper, i.e. Sant'Angelo sandstones Fm., clastic intervals (Tab. 2). According to Amaudric du Chaffaut (1980) and Rieuf (1980) the arkosic turbidites, i.e. Setonia sandstones and Sant'Angelo sandstones Fms, show the same petrographic composition of the lower coarse-grained deposits, i.e. Merlongo Fm. Significant differences exist as far as the stratigraphic reconstruction of the middle portion of the Caporalino-Sant'Angelo Unit, i.e. Omessa Fm. (Fig. 7). For Rieuf (1980) it is a platform succession characterized by Oxfordian shallow-water carbonates overlaid by conglomerates and transgressive shallow-water marls, whilst for Amaudric du Chaffaut (1980) the middle portion of the Caporalino-Sant'Angelo Unit is mainly represented by deep clastic and pelagic deposits. Moreover, for the majority of the authors, during the sedimentation of the middle portion of the studied unit, the sedimentary basin was affected by a strong extensional tectonic activity, which caused the remarkable thickness variations and the sharp facies changes, characterizing this sedimentary interval (Amaudric du Chaffaut 1977, 1980; Rieuf 1980; Durand-Delga 1984; Rossi et al. 1994). In contrast with the literature, the achieved data point out that Omessa Fm. is a clastic unit mainly composed of olistoliths of Mesozoic carbonates (Caporalino limestones) and coarse-grained, mass-gravity deposits rich of carbonatic clasts similar to the huge olistoliths. Concerning the age of the studied succession, for almost all the previous authors the Caporalino-Sant'Angelo Unit is a Middle Jurassic-Middle Eocene succession, with the sedimentation time intervals very short in comparison with the time intervals represented by sedimentary hiatus (Tab. 1). According to the calcareous nannofossil and the foraminifera assemblages that we recovered from the Setonia sandstones Fm. and the Caporalino marls Mb., the entire Caporalino-Sant'Angelo Unit is a Cenozoic succession. Actually this clastic wedge is not older than Middle Eocene for to the presence of *Dictyococcites bisectus,* as its first occurrence (41 Ma) lies within the Bartonian (Fornaciari et al. 2010). This dating hence definitively proves that the Caporalino limestones are olistoliths and the coarse-grained deposits rich of Mesozoic carbonatic clasts are mass-gravity deposits, both intercalated within Middle Eocene siciliclastic deposits. So, the hypothesis that considered the Caporalino-Sant'Angelo Unit as a Middle Jurassic-Middle Eocene sedimentary succession characterized by Mesozoic carbonates, settled on the European passive continental margin should be rejected. Our data set confirmed that the Caporalino-Sant'Angelo Unit is an Eocene clastic wedge with blocks and olistoliths of basements rocks and Mesozoic carbonates, as speculated by Mattauer & Proust (1975). Differently from these authors which postulated a distensive basin, we suggested that the studied unit accumulated in a confined synorogenic compressive basin during the Bartonian time interval, because the overlying undeformed deposits are Priabonain in age (Ferrandini et al. 2010). Furthermore, the clastic wedge was fed by two clastic fractions. The siliciclastic input of mass-gravity deposits and turbidites was furnished by the erosion of emerged and subemerged areas of the "Hercynian" Corsica basement. More arduous is to establish the source area of the lithologies which characterize the Omessa Fm., including the blocks and olistoliths of Mesozoic carbonates. They could be the remnants of a totally eroded and/or subducted sedimentary cover, because similar lithologies are nowadays unknown in the nearby outcropping sedimentary successions of the "Hercynian" or the "Alpine" Corsica.

Conclusion

Our results support a new stratigraphic interpretation of the Caporalino-Sant'Angelo Unit, which challenges all the previous hypotheses about the stratigraphy of this unit. Based on the lithostratigraphic features, including the composition of the coarse-grained deposits of the mapped units, the Caporalino-Sant'Angelo Unit is a thick and coarse- to fine-grained siliciclastic succession, stuffed with Mesozoic olistoliths (e.g. Caporalino limestones) and coarse-grained deposits rich of carbonatic clasts (e.g. Punta Capizzolo conglomerates and breccias) similar to the Mesozoic olistoliths. According to the calcareous nannofossils, the entire Caporalino-Sant'Angelo Unit is a Bartonian (late Middle Eocene) clastic wedge. Consequently, these results allowed us to reject the hypothesis which postulated for this unit the existence of a long-lived (Middle Jurassic-Middle Eocene) and small sedimentary basin, with an irregular morphologies caused by a synsedimentary tectonic activity. Our new interpretation coincides partially with the hypothesis of Mattauer & Proust (1975) which speculated that Caporalino-Sant'Angelo Unit is an Eocene clastic wedge accumulated in a distensive basin of the European continental margin Corsica, because differently from these authors the studied

Int.	Units	Metres	Sinonimies	Metres	Missing in the studied sections	Metres	Authors
Upper clastic interval	Sant'Angelo sandstones Fm.	0-250	cfr. arkose et conglomérats (level m)	0-200			Aumadric du Chaffaut 1980;
			cfr. calcaire (level l)	0-40			Aumadric du Chaffaut 1980;
			cfr. conglomérats et calcaires (level k)	0-60			Aumadric du Chaffaut 1980;
			cfr. les grès (ge) Eocène	0-300			Rieuf 1980;
			cfr. les marnes (me) Eocène	0-20			Rieuf 1980;
			cfr. Les conglomérats (cg-e) Eocène	0-10			Rieuf 1980;
			cfr. Flysch de Tonda (12a Eocène détritique p.p.)	0-300			Durand-Delga 1984;
			cfr. pelites et marnes (12 Eocène détritique p.p.)	0-50			Durand-Delga 1984;
			cfr. conglomérats (12 Eocène détritique p.p.)	0-20			Durand-Delga 1984;
			cfr. Flysch gréseux (em-s)	0-300			Rossi et al. 1994;
			cfr. Flysch gréseux de Tonda (em-s p.p.)	0-300			Rossi et al. 1994;
			cfr. marnes pélitiques ou gréseuses (em-s p.p.)	0-20			Rossi et al. 1994;
			cfr. conglomérats (em-s p.p.)	0-50			Rossi et al. 1994;
					conglomérats et calcaries (upcgl)	0-50	Rieuf 1980;
					calcaries gréseux (11 Upper Paleocene)	0-20	Durand-Delga 1984;
					calcaries et conglomérats (ei)	0-50	Rossi et al. 1994;
Middle clastic interval	Caporalino marls Mb.	0- 30	cfr. calcaire argileux (level j)	0-50			Aumadric du Chaffaut 1980;
			cfr. marnes (ukm) Crétacé supérieur	0-30			Rieuf 1980;
			cfr. marno-calcaires (10 p.p.)	0-50			Durand-Delga 1984;
			cfr. marnes (cs1)				Rossi et al. 1994;
	Punta Capizzolo conglomerates and breccias Mb.	0-120	cfr. brèches (level i) p.p.	0-100			Aumadric du Chaffaut 1980;
			conglomérats (ukcg) Crétacé supérieur	0-30			Rieuf 1980;
			cfr. conglomérats néocrétacés (10 Crétacé supérieur)	0-50			Durand-Delga 1984;
					La Chapelle de Sant'Angelo olistolith	0-12	Aumadric du Chaffeaut 1980;
			cfr. Conglomérats (cs)	0-40			Rossi et al. 1994

Int.	Units	Metres	Sinonimies	Metres	Missing in the studied sections	Metres	Authors
Middle clastic interval					cfr. jaspes et calcaires (h)	0-12	Amaudric du Chaffeaut 1980;
					tèrme calcaréo-siliceux	0-30/50	Amaudric du Chaffeaut 1980;
	Caporalino limestones Mb.	0-100	cfr. calcaires de Caporalino (g)	0-30/50			Amaudric du Chaffeaut 1980;
			cfr. calcaire de Caporalino (cc)	0-50			Rieuf 1980;
			cfr. calcaires de Caporalino p.p. (Malm calcaries 9)	0-100			Durand-Delga 1984;
			cfr. calcaires de Caporalino p.p. (js)	0/20-100			Rossi et al. 1994;
	Caporalino breccias and conglomerates Mb.	0-250	cfr. brèches p.p. (f)	0-< 10			Amaudric du Chaffeaut 1980;
			cfr. les conglomérats intermediaries (cgi)	0-< 10			Rieuf 1980;
			cfr. calcaires de Caporalino p.p. (9 Malm calcaries): conglomérats	0-20			Durand-Delga 1984;
			cfr. calcaires de Caporalino p.p. (js): conglomérats	0-20			Rossi et al. 1994;
					cfr. jaspes et calcaires (e)	0-12	Amaudric du Chaffeaut 1980;
					cfr. series calcaire et siliceuse intermédiaires (csi)	0-50	Rieuf 1980;
					cfr. formation calcaréo-siliceuse	0-50	Durand-Delga 1984;
					cfr. calcaire à lit siliceuse (jm6)	0-50	Rossi et al. 1994;
Lower clastic interval	Setonia sandstones Fm.	0-250	cfr. pélites micacées (d)	0-12			Amaudric du Chaffeaut 1980;
			cfr. grés et brèches a ciment calcaire (c) p.p.	0-25			Amaudric du Chaffeaut 1980;
			cfr. flysch greséux (b)	0-100			Amaudric du Chaffeaut 1980;
			cfr. les arkoses (a)	0-200			Rieuf 1980;
			cfr. flysch arkosic (8c Dogger-Malm inférieur p.p.)	0-200			Durand-Delga 1984;
			cfr. arkoses de Setonia (jm5)	0-250			Rossi et al. 1994;
	Merlongo Fm.	0-350	cfr. brèches et conglomérats (a) p.p	0-300			Amaudric du Chaffeaut 1980;
			cfr. les brèches p.p. (b)	0->300			Rieuf 1980;
			cfr. formation de Setonia (8b Dogger-Malm inférieur p.p.)	0-300			Durand-Delga 1984;
			cfr. brèches de Francardo (jm4) p.p.	0-300			Rossi et al. 1994

Tab. 2a, b - Correspondence between the distinguished unit (see Fig. 8) with estimated thickness with the lithological assemblages and thickness reported in literature. Int. = Intervals

deposits accumulated in a synorogenic compressive basin, during the ongoing deformation of the complex "Corsican" accretionary wedge.

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