

Italian micropaleontologic contributions issued from 1960 to 1965

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ALBANDAKIS, N., 1964, *La successione delle microfacies a Saccocoma e Tintinnidi al limite Giurese-Cretaceo, nei Sette Comuni (Veneto occidentale)*: Boll. Soc. Geol. Italiana, vol. 83, fasc. 1, pp. 35-38, tavv. 1-3.

Saccocoma and Tintinnida microfacies have been studied and illustrated from samples collected in the limestones at the Jurassic-Cretaceous boundary in the Sette Comuni upland (Vicenza).

ANGELUCCI, A., DEVOTO, G. & FARINACCI, A., 1963, *Le « argille caotiche » di Colle Cavallaro a Est di Castro dei Volsci (Frosinone)*: Geologica Romana, vol. 2, pp. 305-329, tavv. 1-3, 10 figg. testo.

The results of a micropaleontological and stratigraphic study of the so called « chaotic clay » in the Colle Cavallaro region (Castro dei Volsci, near Frosinone, central Apennines) are expounded.

Microfacies have been examined both by washings and thin sections.

ASCOLI, P., 1961, *Contributo alla sistemazione degli Ostracodi italiani*: Riv. Italiana Paleont. Strat., vol. 67, n. 1, pp. 45-52.

Two lists are presented of homonyms of the Ostracod species from Italian localities described or listed as new until 1960. The first one concerns the so called « objective homonyms », the second one the « subjective homonyms ». References of each species and their type localities and type-levels are given.

A complete bibliography follows at the end.

ASCOLI, P., 1964, *Preliminary ecological study on Ostracoda from bottom cores of the Adriatic sea*: Staz. Zool. Napoli, vol. 33 suppl., pp. 213-246, tav. 1-4, 3 figg. testo.

Ostracoda from 16 bottom cores of the Adriatic sea ranging in depth from 20 to 1192 mt. have been examined. With the current data available four bathymetric zones (agreeing with bathymetric data of the Bay of Naples) have been established which coincide with those erected by means of foraminifera (Chierici, Busi e Cita, 1962 and Chierici e Cita 1962). The great advantage of studying together bathymetric ostracod and foraminiferal assemblages, is evident considering benthonic ostracoda as the best ecological indicators for shallow water and upper neritic environments, while benthonic and planktonic foraminifera are better indicators for deep neritic and bathyal environments.

ASSERETO, R., CASATI, P. & ZANIN BURI, C., 1965, *Il Trias in Lombardia: XIV: Sulla presenza di una scogliera anisica nella bassa Val Camonica*: Riv. Italiana Paleont. Strat., vol. 71, n. 3, pp. 805-836, tavv. 77-81, 4 figg. testo.

The presence of Anisian reef deposits in the Val Camonica (Northern Italy) is pointed out. The formation is heterotropical to the median-upper portion of the « Angolo limestone ». Seven algal species found in this unit are described and illustrated.

AZZAROLI, A., 1962, *Affioramento di calcare permiano presso Potenza*: Boll. Soc. Geol. Italiana, vol. 81, fasc. 1, pp. 85-86.

(*) Arabic numbering is here always adopted instead of roman original numbering system.

An outcrop of a fossiliferous limestone referred on micropaleontological evidence to Permian age is noticed in the mountains South of Potenza (southern Italy). A. proposes for this formation the « Abriola limestone » denomination.

AZZAROLI, A. & REICHEL, M., 1964, *Alveoline e Crisolidine neocretacee del « calcare di Mola » in terra di Bari*: Boll. Serv. Geol. d'Italia, vol. 85, pp. 3-9, Tav. 1.

The most significant elements of a microfauna from the « Calcare di Mola » formation [Mola, Bari (Southern Italy)] have been described and illustrated. The inside structure of the genus *Chrysalidina* and the connection with related genera have been discussed. The formation is referred to an Upper Cenomanian-Lower Turonian age.

BARBIERI, F., 1964, *Micropaleontologia del Lias e Dogger del Pozzo Ragusa 1 (Sicilia)*: Riv. Italiana Paleont. Strat., vol. 70, n. 4, pp. 709-830, tavv. 56-66, 20 figg. testo, 1 tab.

Eighteen cores from a Liassic and Dogger sequence drilled in the Ragusa 1 bore by the Gulf Co. in Sicily have been studied from the micropaleontologic (foraminifera and ostracods assemblages), lithologic, lithostratigraphic and chronological standpoint.

The studied sequence ranges from Lotharingian (Lower Liassic) to a probable Bathonian (Middle Jurassic) age. Microfaunas have been compared with the well known ones from Lias-Dogger sediments of France and Germany. Three species of foraminifera are proposed as new: *Lingulina dilatata* n. sp., *Trochammina minima* n. sp., *Jaculella anulata* n. sp.

BARBIERI, F., 1964, *Osservazioni micropaleontologiche sugli scisti rossi di Passo del Bocco (Appennino ligure-emiliano)*: Boll. Soc. Geol. Italiana, vol. 83, fasc. 1, pp. 3-7, tavv. 1-2.

A microfacies from samples collected in the shales overlying the « Arenarie superiori » at Passo del Bocco (Apennines of Liguria-Emilia region) is illustrated. In the interbedding limestone levels foraminifera assemblages of Turonian age occur.

BARBIERI, F., 1964, *Hungarella hyblea, nuovo Ostracode del Domeriano*: « L'Ateneo Parmense », vol. 35, suppl. 1, pp. 3-7, tav. 1.

A new species of ostracod, *Hungarella hyblea*, from the Domerian of the Ragusa (Sicily) subsurface is described and illustrated.

BARBIERI, F. & MEDIOLI, F., 1964, *Nota preliminare sullo studio micropaleontologico della serie pliocenica Vernasca-Castell'Arquato (Piacenza)*: Boll. Soc. Geol. Italiana, vol. 83, fasc. 1, pp. 207-212.

Preliminary notice of detailed micropaleontologic study of the Pliocene sequence Vernasca-Castell'Arquato is given.

BARBIERI, F. & MEDIOLI, F., 1964, *Significato paleoecologico di alcuni generi di Foraminiferi nella serie pliocenica Vernasca-Castell'Arquato*: « Ateneo Parmense », vol. 35, suppl. 1, pp. 8-34, tav. 1.

A micropaleontologic-statistical study of microfaunas from the pliocenic sequence Vernasca-Castell'Arquato allowed range diagrams concerning some foraminifera genus (*Bolivina*, *Bulimina*, *Uvigerina* and *Cassidulina*) to be constructed. Diagrams have been compared with some significative data from ecological standpoint.

BARBIERI, F. & MOSNA, F., 1963, *Bolivina apenninica nuova specie del Pliocene Italiano*: Atti Ist. Geol. Univ. Pavia, vol. 14, pp. 17-19, tav. 2.

A new species of foraminifera *Bolivina apenninica* n. sp., occurring in the Pliocene of Italy is described and illustrated.

BARBIERI, F. & MOSNA, S., 1964, *Segnalazione di una microfacies comune nel Flysch dell'Appennino*: Atti Ist. Geol. Univ. Pavia, vol. 16, pp. 12-16, tavv. 2-5, 2 figg. testo.

A characteristic microfacies of several formations in the northern Apennines, roughly referred to the Helmintoid Flysch, is described, illustrated and compared with microfacies from similar formations in the western Alps and southern Apennines.

BARBIERI, F. & PETRUCCI, F., 1963, *I foraminiferi del Tortonian di Casatico (Parma)*: Boll. Soc. Geol. Italiana, vol.

82, fasc. 3, pp. 3-59, tavv. 1-2, 2 figg., 1 tab. testo.

The Tortonian microfauna from a sample collected in the Parma hills between T. Parma and T. Baganza is described and compared with coeval microfaunas from northern and southern Italy and from other European basins.

BARBIERI, F. & ZANZUCCHI, C., 1963, *La stratigrafia della Valle di Roccaferara (Appennino Parmense). Contributo alla Geologia dell'Appennino Emiliano, Nota II: Atti Soc. Italiana Sc. Nat. e Mus. Civ. St. Nat. Milano*, vol. 102, fasc. 2, pp. 155-210, tavv. 18-35, 10 figg., 1 tab. testo.

The stratigraphic study of a sequence of lithostratigraphic units often in anomalous contact, outcropping in the Rio Roccaferara Valley (a few Kms west of Corniglio, Apennines of Parma) has been carried out. Stratimetric, lithological and micropaleontologic data are given, foraminifera and microfacies are illustrated.

BERTOLANI MARCHETTI, D., 1960, *Reperti paleobotanici in un «inghiottitoio fossile» dei gessi bolognesi: Atti Soc. Nat. Mat. Modena*, vol. 91 (38 S. VI), pp. 60-68, tav. 1.

Pollen analysis have been carried out on some samples from a fossil swallow-hole in the gypseous layers in the neighbourhood of Bologna.

BERTOLANI MARCHETTI, D., 1962, *Prime ricerche paleobotaniche sulla formazione gessosa messiniana nel Bolognese: Atti Soc. Nat. Mat. Modena*, vol. 93 (40 S. 6), pp. 1-3, 3 figg. testo.

First results are given of a palynologic study of the messinian gypseous-marly formation in the neighbourhood of Bologna.

BOCCALETTI, M. & PIRINI, C., 1965, *Ritrovamento di Shackoina nel complesso argilloso-calcareo di S. Fiora: Palaeontographia italica*, vol. 54 (n. ser. vol. 29), pp. 53-61, tavv. 20-21, 7 figg. testo.

Shackoinae from several samples of the shaly-calcareous formations outcropping in the area co-

vered by the Sheet 129, S. Fiora of C.G.I. are described and illustrated. Occurrence of *Shackoina cenomana tappanae* and *S. cenomana multispinata* is noticed for the first time in cenomanian-turonian sediments.

BOLLI, H., CITA, M. B. & SCHAUB, H., 1962, *Il limite Cretaceo-Terziario nella catena del Monte Baldo: Mem. Soc. Geol. Italiana*, vol. 3, pp. 149-168, 5 figg. testo.

Three stratigraphic sequences at the Cretaceous-Tertiary boundary on the southern and eastern side of the chain of Baldo M. have been studied from the paleontologic stand-point. The occurrence of very rich pelagic foraminifera assemblages in all the levels of the series allowed us to apply the same zonal subdivision used by the authors for Central America and to correlate pelagic foraminifera assemblages with macroforaminifera ones.

BONADONNA, F. P., 1963, *Studi sul Pleistocene del Lazio. Il bacino diatomitico di Prima Porta: Geologica Romana*, vol. 2, pp. 179-198, tavv. 1-2, 7 figg. testo.

A quaternary diatomitic basin, included in the «tufaceous diatomitic formation» found near Prima Porta (Rome) is described. The number of varves and a complete diagram of them is given.

The author describes the most important species of diatoms found in the basin and the new methods of preparation.

BONADONNA, F. P., 1964, *Studi sul Pleistocene del Lazio. II. Il bacino diatomitico di Cornazzano (Bracciano, Roma): Geologica Romana*, vol. 3, pp. 383-404, 18 figg. testo, 2 tab.

The study of a diatomitic flora found in the Cornazzano basin (Bracciano, Rome) allowed the reconstruction of the environments of sedimentation of the three members defined in the basin.

A description of the defined species and of a new subsp. *Rhopalodia gibba* γ *iugalis* mh. is given.

BONADUCE, C., 1964, *Contributo alla conoscenza e correlazione sistematica nell'ambito della famiglia Polycopidae (Ostracoda, Cladocopa) con particolare riferimento alle relazioni tra parte molle e carapace: Staz. Zool. Napoli*, vol. 34, pp. 137-159, 22 figg. testo.

An attempt is made at a subdivision into natural related groups, of the genus *Polycopse* Sars, by the helps of selected characters of the soft parts and carapace.

The marginal denticulation and partly the form allow the genus *Polycopse* to be subdivided.

The systematic relations between *Polycopse*, *Paropolycopse* and *Polycopsis* are discussed.

BORSETTI, A. M., 1962, *Micropaleontologia del Pozzo M. Stillo 1 (Foggia)*: Boll. Soc. Geol. Italiana, vol. 81, fasc. 4, pp. 387-400, tavv. 1-6, 1 fig. testo.

The foraminifera assemblages from 29 bottom cores from Stillo 1 well (Masseria Romano, Foggia) made it possible to define the age of the drilled series. From bottom to top cretaceous limestones, followed by 80 mt thick miocenic limestones lying in a transgressive position, and 2935 mt. thick pliocenic and calabrian clays have been recognized.

BORSETTI, A. M., 1962, *Foraminiferi planctonici di una serie cretacea dei dintorni di Piobbico (prov. di Pesaro)*: Giornale di Geol. Ann. Mus. Geol. Bologna, s. 2, vol. 29, pp. 19-75, tavv. 1-7, 245 figg. testo, tab. 1-2.

The planktonic foraminifera assemblages from a cretaceous stratigraphic section in the Marche region, have been studied, with particular regard to Globotruncanas. A biostratigraphic and chronostratigraphic subdivision has been attempted. Description and illustration of 46 species is given. A new subspecies *Rotalipora apenninica primitiva* n. subsp. is instituted and the name *Rotalipora apenninica marchigiana* n. nov. for *R. apenninica* (Gand) is proposed.

BORSETTI, A. M., 1962, *Una microfauna oligocenica delle marne variegata di Vigoleno (Piacenza)*: nota preliminare: Mem. Soc. Geol. Italiana, vol. 3, pp. 379-393, 1 tab. 2 figg. testo.

A preliminary list of Foraminifera (with related stratigraphic range in Europe and America) from the « marne variegata » of Vigoleno, neighbourhood of Piacenza is given. The microfauna indicates a Lower Oligocene age.

BORSETTI, A. M., 1963, *I Foraminiferi del Tortoniano del Colle di Vigoleno (Preappennino piacentino)*: Paleont. Ita-

lica, vol. 58 (n. ser. vol. 28), pp. 215-227, tav. 58, 2 figg. testo, 1 tab.

Foraminifera assemblages from six samples from the lower beds of the Colle Vigoleno section (Preapennines of Piacenza province) have been studied. Assemblages indicate a Middle Miocene age, probably Tortonian, in littoral facies.

BORSETTI A. M., 1964, *Una microfauna a Globotruncana del Flysch alloctono di Castel di Casio (Bologna)*: Giornale di Geol. Ann. Mus. Geol. Bologna, S. 2, vol. 32, fasc. 2, pp. 667-685, tav. 79, 15 figg. testo.

Thirteen species of Globotruncanas found in an allocthonous formation of the Northern Apennines (district of Bologna) have been described and illustrated. The microfauna makes it possible to refer the formation to the Maastrichtian age.

BORSETTI, A. M., 1965, *Microfaune del Langhiano superiore nel « Macigno » di Lizzano in Belvedere (Appennino Bolognese)*: Giornale di Geol., Ann. Mus. Geol. Bologna, S. 2, vol. 33, fasc. 1, pp. 131-142, tavv. 13-14, 1 fig. testo.

The upper part of the « Macigno » formation outcropping in Lizzano in Belvedere (Apennines of Bologna) has been ascribed to the Upper Langhian, on micropaleontological evidence. Two planktonic foraminifera assemblages are described and illustrated.

BORTOLOTTI, V., 1962, *Contributo alla conoscenza della stratigrafia della serie Pietraforte-Alberese*: Boll. Soc. Geol. Italiana, vol. 81, fasc. 2, pp. 225-304, tavv. 8-11, 7 figg. testo.

Some Upper Cretaceous-Eocene sequences of the allocthonous cover of the northern Apennines (Pietraforte-Alberese formations) outcropping in the Florence area, in the Parma Apennines and in southern Tuscany have been studied.

Microfaunas, collected from each formation, yielded significant age data. Thin sections of more significant microfacies are illustrated by photos.

BRAGA, G., 1960, *Sull'età del calcare di Montu Berchielli (Appennino Pavese)*: Boll. Soc. Geol. Italiana, vol. 79, fasc. 3, tav. 1-3.

Microfaunas (with radiolaria, tintinnida and planktonic foraminifera) from samples from the calcareous series of Montù Berchielli (Apennines of Pavia) make it possible to refer the series to the Jurassic-Cretaceous age.

BRAGA, G., 1965, *Primo contributo alla conoscenza dei nannofossili calcarei dell'alberese*: Atti Ist. Geol. Univ. Pavia, vol. 16, pp. 185-195, tav. 1, 5 figg. testo.

Occurrence of Discoasterids and Coccoliths in the paleocene flysch-like formation of « calcareo alberese tipo Pietra dei Giorgi » (Northern Apennines) is pointed out for the first time. Methods of preparation of samples and results of a preliminary study of the assemblages are given, its oecological and stratigraphic value is discussed.

BRANCACCIO, L., 1964, *Microfauna del lembo di Flysch tortoniano di Piano Sazzano presso il lago Laceno M.te Cervialto (Bagnoli Irpino)*: Boll. Soc. Nat. Napoli, vol. 73, pp. 77-99, tavv. 1-2.

A foraminifera assemblage of about 90 species has been described from a clayey layer in the tortonian Flysch of Piano Sazzano (prov. Avellino, southern Apennines). Occurrence of a rich microfauna in a flysch facies sediments is emphasized.

CAMPISI, B., 1962, *Una formazione diatomitica nell'altipiano di Gangi (Sicilia)*: Geologica Romana, vol. 1, pp. 283-288, tavv. 1-2, 2 figg. testo.

Flinty-clayey limestones outcropping at the Gangi upland (Nebrodi Mountains, northern Sicily) are studied from the petrographic and micropaleontologic stand-point. A typical foraminifera association of upper oligocene age is included in the clayey levels of the formation.

CANUTI, P. & PIRINI, C., 1964, *Microfossili liassici in ciottoli negli « Scisti policromi » dei Monti del Chianti*: Palaeontographia Italica, vol. 59 (n. ser. vol. 29), pp. 35-52, tavv. 13-14, 2 figg. testo.

A foraminiferal microfauna from calcareous pebbles contained in the « Scisti policromi » formation (Cretaceous-Eocene) of the Chianti Hills (Tuscany) is described and illustrated. Foraminifera of the genera ? *Robuloides* and *Pachyploia* (hitherto known in the Permian only) have been found associated with a typical liassic assemblage.

CASTELLARIN, A., 1962, *Serie stratigrafiche paleogeniche dei dintorni di Rovereto*: Mem. Soc. Geol. Italiana, vol. 3, pp. 169-183, tavv. 1-3.

Five eocene series near Rovereto (Trento) are described and correlated. Paleontologic, stratigraphical and lithologic data are given. The sedimentary environments are discussed.

CATALANO, R. & LIMA, N., *Distribuzione di alcune Calpionelle nel Malm e nel Neocomiano di Castellammare del Golfo*: Riv. Min. Siciliana, A. XIV, n. 82-84, pp. 1-8, tav. 1, 4 figg. testo.

Data concerning sixteen species of tintinnids from 41 samples from the Calabranca series (Castellammare del Golfo, north-western Sicily) ranging from Tortonian to Barremian age are given.

CATENACCI, E. & MANFREDINI, M., 1963, *Osservazioni stratigrafiche sulla Civita di Pietrarcia (Benevento)*: Boll. Soc. Geol. Italiana, vol. 82, fasc. 3, pp. 65-81, tavv. 1-5, 10 figg. testo.

The Barremian-Albian age of « calcari selciferi e ittiolitiferi di Pietrarcia » formation is defined on micropaleontological evidence. The heterotropical character of the formation in respect to the carbonatic coeval reef horizons of neighbouring Matese is demonstrated.

CATI, F., 1960, *Due nuove forme di Lituolidi del Senoniano vicentino*: Giornale di Geologia, Ann. Mus. Geol. Bologna, S. 2, vol. 28, pp. 195-200, tav. 9.

A new species and a new subspecies of the Foraminifera genus *Recurvoides* (*R. manfredii* n. sp., *R. manfredii lobatulum* n. subsp.) found in the upper part of « Scaglia rossa » formation outcropping in the Vicenza district (Northern Italy) are described and illustrated.

CATI, F., 1964, *Una microfauna Campaniana dei M. Berici (Vicenza)*: Giorn. di Geol., s. 2, vol. 32, fasc. 1, pp. 201-271, tavv. 34-42.

A foraminiferal fauna from the upper part of « scaglia rossa » at Berici M. (Vicenza) has been referred to the Campanian age. 107 species are described and illustrated, seven of which (*Pseudogaudryina vicentina* n. sp., *Falsopalmula barbaranensis*

sis n. sp., *Fronicularia mossanensis* n. sp., *F. senoniana* n. sp., *Lagena dicotomo-costata* n. sp., *L. veneta* n. sp., *Bolivina berica* n. sp.), are proposed as new.

CHIERICI, M. A., BUSI, M. T. & CITA, M. B., 1962, *Contribution à une étude écologique des Foraminifères dans la mer adriatique*: *Révue de Micropaléontologie*, vol. 5, n. 2, pp. 123-142, tav. 1 e 2, figg. 1-7.

Distribution of planktonic and benthonic foraminifera of eleven submarine cores (samples) from the Adriatic sea has been studied.

Four zones of depth can be distinguished on the basis of benthonic forms.

The factors affecting distributions of foraminifera are discussed. In the studied zone they are temperature and depth.

CITA, M. B., 1962, *Il Paleogene in Lombardia*: *Mem. Soc. Geol. Italiana*, vol. 3, pp. 213-232, figg. 1-3.

A micropaleontologic study of the Paleogene in « Lombardia » made it possible to distinguish the presence of all levels and therefore to establish a detailed stratigraphic range.

Lithological facies are represented by the « scaglia » (pelagic sedimentation) followed by the nummulitic limestones and by the detrital formation of the « Gonfolite ».

CITA, M. B. & BOLLI, H. M., 1961, *Nuovi dati sull'età paleocenica dello Spilecciano di Spilecco*: *Riv. Italiana Paleont. e Strat.*, vol. 67, n. 4, pp. 369-392, tav. 29-30.

The authors analyse stratigraphic position and microfaunas of beds outcropping at the type locality of « Spilecco » (near Verona, N. Italy) dated by Fabiani to the Lower-Eocene (Spilecciano). Microfaunas with assemblages rich in some species of *Globorotalia* and *Globigerina* restricted to the upper part of the Paleocene, support an upper Paleocene rather than an Eocene age. The authors propose the abolition of the term Spilecciano as a stage name.

CITA, M. B. & CHIERICI, M. A., 1962, *Crociera Talassografica adriatica 1955. Ricerche sui Foraminiferi contenuti in 18 carote prelevate sul fondo del Mare Adriatico*: *Arch. di Oceanografia e Lim-*

nologia, vol. 12, fasc. 3, pp. 297-359, figg. 1-27, tab. 1-9, tavv. 1-8.

A statistical study of the foraminifera has been accomplished on 49 selected samples from 18 submarine cores from the Adriatic sea, ranging in depth from 23 to 853 mt.

Planktonic foraminifera are quite absent at depths 40 mt; are present in very low percentages between 40 and 100 mt; represent 22% of the whole fauna in the core at 166 mt. This percentage gradually increases in deeper cores. Cores from 166 and 172 mt show fluctuations in vertical sense both in benthonic assemblages and in the plankton/benthos ratio. Two hypotheses are formulated in order to explain these fluctuations. In the core of 853 mt the prevalence of warm and temperate-water species in the upper part, and of cold-water indicators in the lower part of core has been observed.

This is interpreted as an effect of the climatic fluctuations that occurred in the Adriatic sea during the Pleistocene age.

CITA, M. B. & ELTER, G., 1960-61, *La posizione stratigrafica delle marne a Pteropodi delle Langhe e della Collina di Torino ed il significato cronologico del Langhiano*: *Atti Acc. Lincei, Rend. Cl. Sc. Fis. Mat.*, vol. 29, fasc. 5, pp. 360-369, 1 fig. testo.

The authors refer the marly sediments with Pteropoda outcropping in the « Langhe » region (previously referred by the authors to the Langhian age) to the Helvetian age, on the evidence of the foraminifera assemblages. Stratigraphic terminology and subdivision of the Italian Miocene is discussed.

CITA, M. B. & PALMIERI, V., 1960, *Prima segnalazione in Italia dei generi di Foraminiferi Aragonia Finlay e Clavigerinella Bolli, Loeblich e Tappan*: *Boll. Soc. Paleont. Italiana*, vol. 1, n. 1, pp. 74-83, 4 figg.

The foraminiferal species *Clavigerinella eocanica* (Nuttall) and the new species *Aragonia anauna* n. sp. are described and illustrated from an outcrop of Middle-Eocene age, in the northern Val di Non (Trentino, Italy). Both the genera, of peculiar stratigraphic significance, are recorded for the first time in Italy.

CITA, M. B. & PREMOLI SILVA, I., 1960, *Pelagic Foraminifera from the type Lan-*

ghian: Intern. Geol. Congress, Reports XXI Ses., Part. XXII, Proceedings Intern. Paleont. Union, pp. 39-50 (1-15), 4 figg. testo.

A Langhian type-section, outcropping in the « Langhe » between the rivers Belbo and Bormida di Millesimo (Monferrato, Piemonte NW Italy) is described. The micropalaeontological study made it possible to distinguish five biozones (three of them corresponding to the Langhian age) based on planktonic foraminifera.

A comparison is made with the Cipero and Lengua formations in Trinidad (Bolli, 1951) and the age subdivision of European Miocene is discussed.

CITA, M. B., PREMOLI SILVA, I. & ROSSI, R., 1965, *Foraminiferi planctonici del tortoniano-tipo*: Riv. Italiana Paleont. Strat., vol. 71, n. 1, pp. 217-308, tavv. 18-31, 9 figg. testo.

The planktonic Foraminifera fauna (58 species) from the type-section of tortonian stage is described and illustrated. Correspondence of the Tortonian with the foraminiferal zones *Globorotalia mayeri*, *G. linguaensis* (pars), *G. mayeri-Globigerina nepenthes*, *Globorotalia menardii-Globigerina nepenthes* is demonstrated. Two new species: *Globigerina microstoma* n. sp., *Globorotalia pseudo-pachyderma* n. sp. and one subspecies *Globigerinoides sacculifera subsacculifera* n. subsp. are erected.

CITA, M. B. & SCIPOLO, C., 1961, *Chapmanina gassinensis (Silvestri) dans l'Oligocene du Monte Baldo (Italie)*: Rev. Micropaleont., vol. 4, n. 3, pp. 121-134, tavv. 1-3, 5 figg. testo.

Several samples of *Chapmanina gassinensis* (Silvestri) from an oligocenic outcrop at Baldo M. (northern Italy) have been described.

A critical analysis of the taxonomy of Chapmanininae and of the stratigraphic distribution of gen. *Chapmanina* is given.

COLACICCHI, R., 1964, *La facies di transizione della Marsica Nord-Orientale. I serie della Serra Sparvera e della Rocca di Chiarano*: Geologica Romana, vol. 3, pp. 93-119, tavv. 1-2, 17 figg. testo.

Three stratigraphic series from the transitional zone from the typical central-southern Apennines calcareous-detrital-organic facies and the Mo-

lise pelagic facies in the north-eastern Marsica basin, have been studied. Micropaleontologic data allowed the reconstruction of the complete stratigraphic succession from Lias to Turonian and made it possible to establish the connection between the two types of sedimentation.

COLACICCHI, R. & ROMEO, M., 1960, *La sedimentazione miopliocenica nel territorio di Pachino (Studio geologico e micropaleontologico)*: Atti Acc. Gioenia Soc. Nat. in Catania, ser. 6, vol. 13, pp. 1-38, tavv. 1-3.

Differences between the Mio-Pliocenic sedimentation in the farthest southern headland of Sicily and that of the M. Iblei massif, are pointed out. In the former, the thick Lower-Miocene series, widely occurring farther North is lacking. The series examined ranges from a transgressive conglomerate of Tortonian age to a transgressive Lower-Pliocene quite similar to the « trubi » facies.

The chronological attributions and environmental considerations are based on microfaunal assemblages.

COLALONGO, M. L., 1962-63, *Sellialveolina viallii n. gen. n. sp. di Alveolinide cenomaniano dell'Appennino meridionale*: Giornale di Geologia, Ann. Mus. Geol. Bologna, ser. 2, vol. 30, pp. 1-10, tav. 1, 2 figg. testo.

A new genus and a new species of Alveolinida *Sellialveolina viallii* n. gen. n. sp. are described and illustrated.

COLTRO, R., 1963, *La facies di Polizzi dell'Eocene alloctono della Sicilia centro-settentrionale*: Riv. Italiana di Paleont. e Strat., vol. 69, n. 2, pp. 167-232, tavv. 12-16, 2 figg. testo, 3 tab.

The marly-limestone « Polizzi facies » from the stratigraphic « Polizzi » section (Central northern Sicily) is described. The author distinguishes four zones to be correlated with the *Globorotalia aragonensis*, *G. palmerae*, *Hantkenina aragonensis*, *Globigerapsis kugleri* zones of Trinidad (Bolli 1957), dated from Lower to Middle-Eocene on the evidence of the foraminifera assemblages.

In the underlying « Lower Argille scagliose » a lower eocenic assemblage (correlatable with « *Globorotalia formosa formosa* » zone of Trinidad) occurs, while the overlying « Argille Scagliose superiori » show a planktonic cenomanian association.

CONATO, V., 1964, *Alcuni Foraminiferi nuovi nel Pliocene nordappenninico. Contributo I*: Geologica Romana, vol. 3, pp. 279-302, tavv. 1-2, 9 figg. testo.

Seventeen species and subspecies of foraminifera found in Lower Pliocene sediments of northern Apennines are described, illustrated, proposed as new: *Buliminella inauris* n. sp., *B. aldrovandii* n. sp., *Bolivina gladiiformis* n. sp., *B. lucido-punctata* n. sp., *Bolivinoidea oenotrius* n. sp., *Spiroloxostoma croarae* n. sp., *S. savenae*, n. sp., *Angulogerina punctifera* n. sp., *Felsinella diaphana* n. sp., *Valvulinera marmorea* n. sp., *V. mira* n. sp., *Epistominella savenae* n. sp., *E. bathyalis* n. sp., *Cassidulina subglobosa emiliana* n. subsp., *Ehrenbergina punctifera* n. sp., *Cibicides ferasini* n. sp., *Globorotalia scitula subscitula* n. subsp.

CONATO, V., 1965, *Loxostoma beccarii, nuova specie del Pliocene nordappenninico*: Boll. Soc. Geol. Italiana, vol. 84, fasc. 2, pp. 43-56, tav. 1, 1 fig. testo.

A new species of Foraminifera (Buliminidae) *Loxostoma beccarii* n. sp. is described and illustrated, variability of the species in relations to micro- and macrosphaeric forms is put in evidence. Some conclusions about age and environmental conditions of sediments are given.

CORTEMIGLIA, G. C., 1964, *Gli argilloscisti con intercalazioni di calcari palombini della zona di Ottone (Val. Trebbia)*: Atti Ist. Geol. Univ. Genova, vol. 2, fasc. 2, pp. 206-310, 28 figg. testo.

The results of a stratigraphic study of a « Palombini » formation in the area of Ottone (Trebbia Valley, Apennines of Liguria) are given. The chronological attribution of the complex is based on micropalaeontological data. A description of the microfaunal assemblages (Tintinnidae, Radiolaria, Fibrosphaerae, Globigerinae, Globigerinellae) is given.

CRESCENTI, U., 1964, *Note biostratigrafiche sul Miocene medio del Molise occidentale*: Boll. Soc. Paleont. Italiana, vol. 3, n. 1, pp. 13-19.

Micropaleontological studies carried out on several stratigraphic sections from miocenic outcrops of western Molise (central-southern Apennines) have made it possible to recognize two main biostratigraphic units. The upper one, *Globorotalia menardii*

cenozoone has been referred to Tortonian age. the lower one, *Orbulina universa* cenozoone, dated as Helvetian age, can be divided into two subzones: an upper subzone with or without very rare specimens of the genus *Globoquadrina* and a lower subzone with very abundant specimens of *Globoquadrina*.

CRESCENTI, U., 1964, *Praerhapydionina murgiana n. sp. (Foraminifera) e Neomacroporella cretacea n. gen. n. sp. (Alga calcarea Dasycladacea), nuovi microfossili del Cretacico dell'Italia meridionale*: Boll. Soc. Geol. Italiana, vol. 83, fasc. 1, pp. 3-7, tavv. 1-2.

Two new cretaceous microfossils found in southern Italy *Praerhapydionina murgiana* n. sp. (late Cenomanian-Lower Turonian age) and *Neomacroporella cretacea* n. gen. n. sp. (Upper Aptian age) are described and illustrated.

CRESCENTI, U. & FOLLADOR, U., 1965, *Il Pleistocene a Hyaline balthica (Schroeter) nella parte orientale dell'Italia centro meridionale*: Boll. Soc. Geol. Italiana, vol. 84, fasc. 2, pp. 57-62, 1 fig. testo.

The geographical distribution of Pleistocenic sediments with *Hyalinea balthica* in the eastern belt of central and southern Italy is given.

CRESCENTI, U. & SARTONI, S., 1964, *Sintesi biostratigrafica del Mesozoico dell'Italia Meridionale*: Mem. Soc. Geol. Italiana, vol. 4, pp. 1-8.

Ten cenozoones have been distinguished on the basis of microfaunas and microfloras of neritic and biostromal environment in the sediments ranging from the Triassic to the Lower Eocene in southern Apennines. Some palaeocological considerations are made.

CUSCANI POLITI, P., 1963, *Prove paleontologiche della « Pliocenità » della formazione argillosa in cui sono stati rinvenuti resti di Rhinoceros etruscus nel Senese*: Atti Acc. Fisiocratici Siena, s. 2, vol. 10, pp. 5-39, tavv. 1-4, 1 fig. testo.

Foraminiferal assemblages from the clay sediments of « the Sodi » in the neighbourhood of Castelnuovo Berardenga Scalo (Siena) confirm the

attribution of the sediments to the marine Pliocene and probably to the most ancient part of this period.

DALLAN, L., 1962, *Contributo alla Geologia dell'Appennino Tosco-Emiliano. II - Ricerche micropaleontologiche nel Flysch dei dintorni di Pievepelago (Appennino Modenese)*: Boll. Soc. Geol. Italiana, vol. 81, fasc. 3, pp. 77-115, tav. 1-6 3 figg. testo.

Results are given of a study of some species collected in the formations of the Pievepelago-zone (Apennines of Modena).

- 1) The lower formation, the Tuscan « macigno », is dated to the Oligocene age for its stratigraphic position (no fossils found).
- 2) The complex of M. Modino follows, with a level of « argille scagliose » containing a Lower-Middle-Cretaceous microfauna followed by red clays and gray marls with Oligocenic microfauna. The « argille scagliose » level interbedded in the oligocenic series is interpreted as a submarine flow.
- 3) The Pievepelago formation at the top of the series contains a rich oligocenic foraminiferal assemblage.

DALLAN, L., 1963, *Studio paleontologico di una microfauna paleocenica ritrovata nel Flysch calcareo dei Monti di Massarosa (F. 104, I SE)*: Boll. Soc. Geol. Italiana, vol. 82, fasc. 2, pp. 405-438, tavv. 1-4, 1 fig. testo.

A planktonic foraminifera assemblage from the clay of the basal layers of the calcareous-marly flysch outcropping in the Massarosa Mountains (north-western Tuscany, F. 104 C. G. I, tav. I SE) is illustrated.

The microfauna indicates a Paleocene age and precisely the Montiano (Middle-Paleocene).

DALLAN, L., 1964, *I Foraminiferi miocenici dell'Isola di Pianosa. (Nota preliminare)*: Boll. Soc. Geol. Italiana, vol. 83, fasc. 2, pp. 165-182.

The Burdigalian age of the miocenetic sediments of the Isle of Pianosa (Tyrrhenian Sea) is proved on micropaleontological evidence (foraminifera assemblage).

The sediments have been attributed by former authors to the Middle-Miocene age (on the macrofossils basis).

DALLAN, L. & NARDI, R., *Polymorphinidae nel Retico delle Alpi Apuane (zona ad Avicula contorta Portl.)*: Boll. Soc. Geol. Italiana, vol. 83, pp. 1-11, tav. 1, 1 fig. testo.

Some species of *Eoguttulina* and the new species *Pyrulinoides apuana* n. sp. are described and illustrated from marls interbedded in rhetic marlstones with *Avicula contorta*, outcropping near Castelnuovo di Garfagnana (Alpi Apuane).

DALLAN, L. & RAGGI, G., 1961, *Sull'età delle formazioni dell'Alberese e dell'Arenaria superiore nell'Appennino settentrionale (Val di Taro e Alta Valle dello Scoltenna)*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 2, pp. 151-174, 4 fig. testo.

The microfaunas of two allochthonous complexes have been studied: 1) the Alberese complex 2) the Ophiolitiferous complex. The first one may be attributed to a Middle Cretaceous-Eocene age, the second one to an age from Upper-Titanic to Albian-Cenomanian.

In consequence the age of the lower part of the upper bedding « Arenaria superiore » cannot be younger than Albian.

D'ARGENIO, B., 1961, *Sul Miocene autoctono del Monte Camposauro (gruppo del Taburno-Benevento)*: Boll. Soc. Nat. in Napoli, vol. 70, pp. 3-5.

The author notices the presence of some outcrops of a miocenetic series transgressive on Upper-Cretaceous limestones on Mt. Camposauro (Taburno Mountains, Benevento, Italy).

A correlation is possible with the series of the Maggiore Mountains (Caserta) and of the « Matese zone » respectively described by Ogniben and Selli.

D'ARGENIO, B. & DE CUNZO, T., 1963, *Sulla presenza di pollini e resti d'insetti nelle bauxiti della Marsica (Appennino centrale)*: Rend. Acc. Sc. Fis. Mat. Soc. Naz. Sc. Lett. Arti in Napoli, s. 4, vol. 30, pp. 353-365, tavv. 1-2, 4 figg. testo.

Pollen grains and insect remains found for the first time in Italy in the bauxite from Cretaceous sediments in the Marsica district (Abruzzi) have been studied. Lithostratigraphic, paleoenvironmental and paleogeographic data are given.

DE CASTRO, P., 1961, *Nota preliminare sulla presenza del Lias negli scisti silicei di Giffoni Vallepiiana nel Salernitano*: Boll. Soc. Nat. in Napoli, vol. 70, pp. 152-155.

A micropaleontological study of some samples from a series in the « scisti silicei » formation of Giffoni Vallepiiana (Salerno) made it possible to date the only one fossiliferous layer found in the lower part of the series to the Lias age.

DE CASTRO, P., 1962, *Sulla presenza del Lias negli « scisti silicei » di Giffoni Vallepiiana nel Salernitano*: Boll. Serv. Geol. Italiano, vol. 83, pp. 3-32, tavv. 1-9, 3 figg. testo.

A foraminiferal fauna from samples of a stratigraphic sequence in the « scisti silicei » formation of Giffoni Vallepiiana (Salerno) makes it possible to refer the formation to the Lias age. The importance of the result of the study (made by thin sections) from the geological stand-point is also emphasized.

DE CASTRO, P., 1962, *Il Giura-Lias dei Monti Lattari e dei rilievi ad ovest della Valle dell'Irno e della Piana di Montoro*: Boll. Soc. Nat. Napoli, vol. 71, pp. 3-34, tav. 1-19, fig. 5.

The presence of jurassic and of new liassic outcrops in the area included among Salerno, Avellino and the Isle of Capri is noticed.

The stratigraphic sequence of the whole Jura-Lias system with the following zones *Paleodasycladus mediterraneus* zone, *Pfenderina neocomiensis* zone, *Cladocoropsis mirabilis* zone, *Clypeina jurassica* zone, *Vaginella striata* zone is described and illustrated.

DE CASTRO, P., 1963, *Kilianina Pfender ed Orbitammina Berthelin (?) (Foraminifera) nella zona a Pfenderina (Batoniano) dell'Appennino Meridionale*: Boll. Soc. Naturalisti Napoli, vol. 72, pp. 93-95, tav. 1.

The Bathonian age previously ascribed by the A. to the Jurassic levels with *Pfenderina*, outcropping in the Lattari Mountains (southern Apennines) is confirmed from the occurrence of *Kilianina blancheti* and of probable specimens of *Orbitammina*.

DE CASTRO, P., 1963, *Cuneolina scarsellai n. sp. nel Cretacico dell'Appennino Meri-*

dionale: Boll. Soc. Naturalisti Napoli, vol. 72, pp. 71-74, tavv. 1-2, 1 fig. testo.

A new Foraminifera species, *Cuneolina scarsellai* n. sp. is described and illustrated from cretaceous sediments of the southern Apennines.

DE CASTRO, P., 1964, *Su di un nuovo foraminifero del Cretacico inferiore dell'Appennino Meridionale*: Boll. Soc. Naturalisti Napoli, vol. 73, pp. 55-60, tavv. 1-6, 2 figg. testo.

The new genus *Campanellula* n. gen. and a new species *C. capuensis* n. sp. of Foraminifera of the Trochamminidae family are described and illustrated.

DECIMA, A., 1962, *Ostracodi del gen. Cyprideis Jones del Neogene e del Quaternario italiani*: Paleont. Italica, vol. 57, pp. 81-133, tavv. 24-38, 11 figg. testo.

Cyprideis assemblages from sediments in Tuscany, Romagna, Calabria, Sicily from Miocene (mostly Messinian) to Recent age, have been studied and compared with pannonian ostracodfaunas from the Vienna and Pannonian basins.

Variabilities of some characters are discussed, criteria to distinguish different forms are given, range limitation of some species is recognized, ipohaline significance of *Cyprideis* assemblages is confirmed.

Seventeen species and subspecies are described and illustrated, among them seven are proposed as new: *Cyprideis pannonica agrigentina*, *C. pannonica pseudoagrigentina*, *C. pannonica crotonensis*, *C. ruggierii*, *C. torosa paraobesa*, *C. tuberculata calabra*, *C. versiliaensis*.

DECIMA, A., 1962, *Osservazioni sulle argille ritenute plioceniche del versante meridionale delle Madonie (Sicilia centro-settentrionale)*: Riv. Italiana Paleont. e Strat., vol. 68, n. 3, pp. 389-428, tav. 29-30, tab. 1-3, 3 figg. testo.

A late Tortonian age is proved on the evidence of the foraminifera assemblages for blue clays interposed between tortonian and messinian sediments in the Petralia area (north-central Sicily). Former authors attributed them to the Pliocene age and hypotheses about a tectonic emplacement of them were made.

DECIMA, A., 1963, *Il Pleistocene in facies levantina di Montallegro (Sicilia sud-*

occidentale): Geologica Romana, vol. 2, pp. 59-118, tavv. 1-5, 15 figg. testo.

The Pleistocenic Montallegro formation, outcropping along the south-western coast of Sicily between Sciacca and Agrigento is described. A description of the main outcrops of the Foraminifera and Ostracod assemblages compared with other Italian pleistocenic microfaunas, and ecological and chronological considerations are given.

DE ROSA, E., 1964, *Sulla datazione dell'« Alberese di Farini d'Olmo » (Appennino settentrionale)*: Riv. Italiana Paleont. Strat., vol. 70, n. 2, pp. 279-304, tavv. 22, 2 figg. testo.

Micropaleontologic study has been carried out on washed residues of several samples from shales of probably pelagic deposition, interbedded with calcareous turbidites in the « Alberese di Farini d'Olmo » (Nure valley, Apennines of Piacenza). Foraminifera assemblages allow to ascribe the unit to the Paleocene.

DEVOTO, G., 1964, *Il passaggio Cretaceo-Paleocene nei Monti Lepini e il problema relativo a Keramosphaera tergestina (Foraminifera)*: Geologica Romana, vol. 3, pp. 49-55, tavv. 1-4, 2 figg. testo.

Foraminifera fauna from layers at the Cretaceous-Eocene boundary in Lepini Mountains (southern Latium) has been studied. Systematic position and stratigraphic value of *Keramosphaera tergestina* (Stache) (for the first time found in the calcareous central Apennines) are discussed.

DEVOTO, G., 1964, *Zone ad Alveolinidae nel Cretaceo e Paleocene del Lazio ed Abruzzo centro-meridionale*: Geologica Romana, vol. 3, pp. 405-409, tavv. 1-2.

A zonation based on the Alveolinidae has been established in upper-cretaceous and paleocenic limestones of Latium and central-southern Abruzzi. Five biozones have been recognized.

DEVOTO, G., 1965, *Lacustrine Pleistocene in the Lower Liri Valley*: Geologica Romana, vol. 4, pp. 291-368, 61 figg. testo.

Results of a study of the pleistocenic lacustrine basin in the lower Liri Valley extending from Ceprano as far as the Garigliano river, are exposed. The malacofauna, ostracofauna and diatoms found

in the sediments of the lacustrine sequence and of the travertine, point out a deposition during a cold period connected with a glacial stage. The Ostracod assemblage (35 spp.) has been illustrated, a subgenus and a species [*Leptocythere (Amnicythere) fallax* n. subgen, n. sp.] are described as new.

DE ZANCHE, V., 1965, *Le microfacies eoeciche nella valle del Chiampo tra Arzignano e Mussolino (Lessini orientali)*: Riv. Italiana Paleont. Strat., vol. 71, n. 3, pp. 925-948, tavv. 88-92, 3 figg. e 1 tab. testo.

The study of the microfacies of the eoecic limestones in the Chiampo Valley (eastern Lessini, Venetian Alps) made it possible to reconstruct their environmental conditions of sedimentation and to correlate calcareous outcrops in the considered region. Occurrence of the epiphyte algal genus *Solenomeris* Douvillé is for the first time noticed in the Venetian region.

DIECI, G., 1964, *Foraminiferi delle marne langhiane a Pteropodi di Montegibbio (Appennino settentrionale modenese)*: Paleont. Italica, vol. 59, (n.s., vol. 29), pp. 13-34, tavv. 11-12.

A foraminiferal assemblage from the Pteropodes horizon of Montegibbio (northern Apennines) has been described, illustrated and referred to the Langhian age and compared with classic burdigalian foraminiferal faunas.

DIECI, G., 1964, *Radiolari cretacei delle « argille scagliose » di Puianello (Modena)*: Boll. Soc. Paleont. Italiana, vol. 3, n. 2, pp. 182-191, tav. 33.

Thirteen Radiolaria species from the « argille scagliose » formation outcropping near Puianello (northern Apennines, Modena) are described and illustrated. Most of the species found are restricted to the Cretaceous age.

DIECI, G., 1965, *Età luteziana delle « argille di Rio Giordano » (Appennino settentrionale modenese): documentazione micropaleontologica*: Boll. Soc. Paleont. Italiana, vol. 4, n. 1, pp. 9-27, tavv. 1-2, 1 tab. testo.

Marly sediments in Rio Giordano formation (neighbourhood of Pavullo, northern Apennines)

are referred on micropaleontological evidence to the Middle-Eocene age. Of the sixty-seven studied Foraminifera species, the planktonic forms are described and illustrated. A comparison with Italian eocene foraminiferal faunas is made.

DIECI, G. & RUSSO, A., 1964, *Alcune specie nuove di Ostracodi tortoniani dell'Appennino settentrionale*: Atti Soc. Nat. Mat. Modena, vol. 95 (42 s. 6, pp. 78-94, tavv. 1-4, 1 fig. testo.

Eleven species and one subspecies of Ostracoda from tortonian type-localities of Tortona (prov. Alessandria), Montegibbio and Castelvetro (prov. of Modena) are described and illustrated as new: *Cytherelloidea circuminflata* n. sp., *Bairdia montanaroae* n. sp., *Callistocythere apenninica* n. sp., *C. mutinensis* n. sp., *Mutilus (Aurila) politus* n. sp., *Urocythereis laevigata* n. sp., *Carinocythereis zibinica* n. sp., *Hermanites papillatus* n. sp., *Cuncocythere ariminensis elongata* n. subsp., *Cushmanidea miocenica* n. sp., *Krithe interrupta* n. sp., *Xestoleberis subtruncata* n. sp.

DIECI, G. & RUSSO, A., 1964, *Ostracodi tortoniani dell'Appennino settentrionale (Tortona-Montegibbio-Castelvetro)*: Boll. Soc. Paleont. Italiana, vol. 3, n. 1, pp. 38-88, tav. 9-17, 6 figg. testo.

The authors describe and illustrate eighty three (83) species of ostracods from the Tortonian (Middle Miocene) of three localities of the northern Apennines.

All the fifty - seven species from Montegibbio (Modena) and the five species from Castelvetro (Modena) are first described from the deposits. Fifty six species are from Tortona: 50 of them are new for the locality.

Paleontological and paleoecologic discussions on the different assemblages are given.

DIENI, I. & MASSARI, F., 1963, *Il Cretaceo dei dintorni di Orosei (Sardegna)*: atti Acc. Naz. Lincei, Rend. Sc. fis. mat. nat., vol. 35, fasc. 6, pp. 575-580.

First results of a study about Cretaceous formations outcropping in the area covered by sheet Orosei (C.G.I.) are given. Sediments range from the lowermost part of Cretaceous to the Santonian. Chronological attribution is based on micropaleontological evidence.

DIENI, I. & MASSARI, F., 1964, *Osservazioni sulla struttura del guscio di alcuni rappre-*

sentanti della famiglia Spirillinidae Reuss 1862: Boll. Soc. Paleont. Italiana, vol. 3, n. 2, pp. 219-226, tavv. 39, 3 figg. testo.

Results of a study of the structures of the test and of the relations between the various types of structures of several species of Upper-Valanginian and Recent Spirillinidae are exposed. A hypothesis is formulated on the relations between structural characters and phenomena of the reproductive cycle of *Spirillina lucida* Sidebottom.

DIENI, I. & MASSARI, F., 1965, *Osservazioni sul genere Paalzowella Cushman 1933 (Foraminifera)*: Acc. Lincei, Rend. Cl. Sc. Fis. Mat. Nat., S. 8, vol. 39, fasc. 1-2, pp. 113-117, 3 figg. testo.

Results of studies on genus *Paalzowella* Cushman 1933 are given. *Trocholina feifeli* Paalzow 1932 and *T. elevata* Paalzow 1932 are referred to the gen. *Patellina*.

DIENI, L., MASSARI, F. & MOULLADE, M., 1963, *Sur quelques Orbitolinidae des calcaires a facies « urgonien » du Crétacé inférieur des environs d'Orosei (Sardegna)*: Boll. Soc. Paleont. Italiana, vol. 2, n. 2, pp. 3-8, tav. 1, 2 figg. testo.

A level of bioclastic limestones in « urgonian » facies, very rich in Orbitolinidae, from a mesozoic series outcropping in the neighbourhood of Orosei (Sardinia) is particularly described. The micropaleontological association is made up mostly of foraminifera and algae. Two new species: *Orbitolinopsis elongatus* n. sp., and *Orbitolinopsis subkilianii* n. sp. are described and illustrated. The attribution of the level to the upper-most part of the Barremian is analyzed and discussed.

DIENI, I. & PROTO DECIMA, F., 1961, *Studio paleontologico-stratigrafico di un pozzo perforato nell'Orto Botanico dell'Università di Padova*: Mem. Acc. Patav. SS.LL.AA.: Cl. Sc. Mat. Nat., vol. 73, pp. 3-20.

Samples from a well drilled through quaternary sediments in the botanic garden of the University of Padova have been studied.

Micro- and macrofaunal assemblages show an alternation of sediments of marine, brackish and continental environment.

Climatological conditions of sedimentation are deduced chiefly on the basis of pollen study.

DIENI, I. & PROTO DECIMA, F., 1962, *Eruzioni sottomarine con lave a cuscini nell'Eocene superiore dei Colli Euganei*: Mem. Acc. Patavina di SS.LL.AA.: Cl. Sc. Mat. Nat., vol. 74, (1961-62), pp. 3-12, fig. 1-2, tavv. 1-4.

Grey-yellow marls enclosing pillow-lavas have been studied from an outcrop near Castelnuovo (Euganean Hills). They contain, besides macrofossils, a rich foraminiferal fauna. The microfaunistic association makes it possible to date the marls to the Upper-Eocene age. The presence of a *Cribrohantkenina* population is noticed.

DIENI I. & PROTO DECIMA, F., 1964, *Cribrohantkenina ed altri Hantkeninidae nell'Eocene superiore di Castelnuovo (Colli Euganei)*: Riv. Italiana Paleont. e Strat., vol. 70, n. 3, pp. 555-592, tavv. 43-46, 8 figg. testo.

A high number of Hantkeninidae (*Pseudohantkenina*) from the Upper-Eocene of Castelnuovo (Euganean Hills, northern Italy) have been examined and the genus *Cribrohantkenina* has been described and illustrated in detail. Among the several data arising from the study of 600 specimens of Hantkeninidae (497 of which can be referred to the genus *Cribrohantkenina*) the proof that genus *Cribrohantkenina* is not a monotypic genus (v. Spraul), but contains at least three well differentiated species is of great importance.

Hypotheses about the evolutive phylum of Hantkeninidae are made.

DIENI, I. & PROTO DECIMA, F., 1964, *Analisi statistica multidimensionale di due gruppi di Cribrohantkenina dell'Eocene superiore di Castelnuovo (Colli Euganei)*: Acc. Naz. Lincei, Rendic. Cl. Sc. Fis. Mat. Nat., s. 8, vol. 36, fasc. 3, pp. 395-399, 2 figg. testo, 1 tabella.

A statistical analysis has been carried out on 50 *Cribrohantkenina inflata* (Howe) specimens and 54 specimens of *Cribrohantkenina* sp. It follows that all specimens are included in the wide variability's field of *Cribrohantkenina inflata* (Howe).

DIENI, I. & SPAGNULO, G., 1964, *Alghe calcaree nell'Anisico del Dosso dei Morti (Adamello sud-orientale)*: Mem. Acc. Pa-

tavina SS.LL.AA., Cl. Sc. Mat. Nat., vol. 76, pp. 3-13, tavv. 1-2, 1 fig. testo.

Dasycladacea from a calcareous algal reef dated to the Anisian age, outcropping in the M. Corona-Dosso dei Morti group (southern Adamello) are described and illustrated.

DI NAPOLI ALLIATA, E., 1964, *Il Miocene superiore nella Valle dell'Orte presso Bolognano (Pescara)*: Geologica Romana, vol. 3, pp. 3-40, tavv. 1-3, 14 figg. testo.

Five lithological units have been identified in the upper part of the Miocene sequence outcropping in the Orte Valley near Bolognano (Pescara). The four upper units (II-V) ranging from Tortonian to Messinian age are studied in detail from paleontological and sedimentological standpoint. Percentages of the main genera and families, quantitative relationships between planktonic and benthonic forms have been calculated for ostracoda and foraminifera and their average amount per sq. cm.

Reconstruction of the environmental conditions, of the mechanisms of the Miocene sedimentation as far as the evaporitic facies is given on the basis of paleontological and sedimentologic data. The author puts in evidence the geological evolution of the Miocene sequence and compares the mechanisms and the deposition conditions of the « marnoso-arenacea » formation in Romagna with the calcarenitic sequences of the foothills of the Maiella.

DONDI, L., 1962, *Nota paleontologico-stratigrafica sul Pedepennino Padano* (da Agip Mineraria: contributo alle conoscenze geologiche del Pedepennino padano): Boll. Soc. Geol. Italiana, vol. 81, fasc. 4, pp. 113-198, tavv. 1-27, 25 gg. testo.

Micropaleontologic data are given of sediments outcropping or drilled in the Apennine foothills of Po Valley. The stratigraphic sequences are described and illustrated. The foraminifera species *Globorotalia baroniensis* n. sp. is proposed as new.

DONDI, L. & PAPETTI, I., 1965, *Sul ritrovamento di una microfacies con Miogypsina e Lepidocyclina al fondo del pozzo Contursi 1 (m 5478) nel Cilento*: Geologica Romana, vol. 4, pp. 7-20, tavv. 1-9, 6 figg. testo.

A detailed stratigraphy is given of the Contursi 1 well (Campania) drilled by Agip Mineraria. At the depth of 3478 m a calcareous breccia of miocenic age has been found below sediments of older age. The abnormal position of the sediments is discussed.

FARINACCI, A., 1962, *Nuovo genere di Verneulinidae (Foraminifera) marker di zona del Senoniano inferiore*: Geologica Romana, vol. 1, pp. 5-10, tavv. 1-5.

A new genus of Foraminifera: *Accordiella conica* n. gen., n. sp., from samples collected in the southern Lazio, near Alatri and Frosinone is described and illustrated. It characterizes the Lower-Senonian in neritic-biostromal facies of the central and southern Apennines. The *Accordiella conica* n. gen., n. sp., microfacies is associated to more or less fragmented Rudista.

FARINACCI, A., 1963, *L'« organismo C » Favre 1927 appartiene alle Teredinidae?*: Geologica Romana, vol. 2, pp. 151-178, tavv. 1-5, 6 figg. testo.

After a brief discussion about different systematic attributions given from former authors of « Organism C » J. Favre 1927, the author identifies it with the pellets of *Bankia* (*B. striata* Carozzi) (Fam. Teredinidae, Lamellibranchia). The systematic study has been carried out on many specimens from the Portlandian of Castro dei Volsci (Frosinone, central Apennines).

FARINACCI, A., 1964, *Sulla posizione sistematica e stratigrafica di Protopenneroplis striata Weynschenk, 1950 (Foraminifera)*: Geologica Romana, vol. 3, pp. 41-48, 5 figg. testo.

A new investigation from a systematic and stratigraphic standpoint of *Protopenneroplis striata* Weynschenk and *Ventrolamina cribrans* Weynschenk, occurring in the jurassic calcareous-dolomitic series of southern Latium, is made.

The author eliminates the genus *Ventrolamina* and amends the genus *Protopenneroplis* from the fam. Peneroplidae to the family Lagenidae Schultze.

FARINACCI, A., 1964, *Microrganismi dei calcari « maiolica » e « scaglia » osservati al microscopio elettronico (Nannoconidi e Coccolithophoridi)*: Boll. Soc. Paleont. Italiana, vol. 3, n. 2, pp. 172-181, tavv. 29-32, 1 fig. testo.

The skeletal origin of the « maiolica » and « scaglia » micrites (consisting respectively of Nannoconus and Coccolithophorides) is pointed out by observations with the electron microscope. The high magnifications allowed to tackle the problem of the classifications of the Nannocones. A description of the method of chrome-carbon replication for electron microscopy is given.

FARINACCI, A., 1965, *Breccias and laminated dolomites of the Gavignano exposure*: Geologica Romana, vol. 4, pp. 129-144, 12 figg. testo.

A stratigraphic study of the breccias outcropping at Valvario Hill (neighbourhood of Gavignano, Lepini mountains, 50 Km SE of Rome) has been carried out. The Cenomanian age of the breccias is confirmed.

FARINACCI, A., 1965, *I Foraminiferi di un livello marnoso nei calcari diasprigni del Malm (Monti Martani, Umbria)*: Geologica Romana, vol. 4, pp. 229-258, 47 figg. testo.

A foraminiferal microfauna from a marly level of the Malm of Monti Martani (Umbria, central Italy) has been described, and some considerations about environment of sedimentation have been made. Forty-six species have been studied, seven of which have been described and illustrated as new species and subspecies: *Lingulina umbra* n. sp., *Lenticulina* (*Lenticulina*) *aeolia* n. sp. L. (L.) *omphalovorticosa* n. sp., L. (L.) *semilunata* n. sp. *Dentalina barbula* n. sp., *Turrispirillina nodulosa* n. sp., *T. amoena crassatella* n. subsp.

FARINACCI, A. & SIRNA, G., 1960, *Livelli a Saccocoma nel Malm dell'Umbria e della Sicilia*: Boll. Soc. Geol. Italiana; vol. 79, fasc. 1, pp. 59-70, tavv. 1-6, 2 figg. testo.

Saccocoma from jasper limestones referred to the Malm outcropping at the Martani M. (Umbria) and Nebrodi M. (Sicily) have been studied from stratigraphic and paleontologic standpoint.

FARINACCI, A. & RADOICIC, R., 1964, *Correlazione fra serie giuresi e cretacee dell'Appennino centrale e delle Dinaridi esterne*: La ricerca Scientifica, 34 (II A), vol. 7, n. 2, pp. 269-300, tavv. 1-15, 2 figg. testo.

Correlations between some series ranging from Lower Lias to Maastrichtian, outcropping in Lepini and Itri M. (southern Lathium) and Zeta-Skadar Plain and Vojnik M. (Montenegro) evidenced a close palaeocological analogy in the sequence of the biozones and of lithostratigraphic complexes during the evolution of the biostromal and neritic facies.

FAZZINI, P. & MANTOVANI, M. P., 1965, *La geologia del gruppo di M. Subasio*: Boll. Soc. Geol. Italiana, vol. 84, pp. 71-128, figg. 1-28, 2 carte.

The geological study of M. Subasio area (Assisi) is carried out. Descriptions of the formations ranging from Lias to Miocene are given. Their chronological attributions are based on the microfaunas and microfacies, the most typical of which are described and illustrated.

FERRARI ARDICINI, L., 1962, *Studi geologici sulle Isole del Dodecanneso (Mar Egeo). Notizie stratigrafiche sulla catena Monte Profeta Elia-Monte Sperioli nell'isola di Rodi*: Riv. Italiana Paleont. Strat., vol. 68, n. 3, pp. 377-388.

A stratigraphic study is presented of allochthonous, mesozoic sedimentary rocks of Prophet Elias-Sperioli Range, on the middle northern side of Rhodes Island.

Different formations, their chronological attribution and fossil finding are discussed. Stratigraphy of the surrounding autochthonous cenozoic rocks is mentioned.

FERRO, R., 1962, *I Foraminiferi del Miocene di Capo San Marco (Golfo di Oristano, Sardegna centro-occidentale)*: Rendiconti Sem. Fac. Sc. Univ. Cagliari, vol. 32, pp. 1-8.
Nota preliminare.

Thirteen samples from the miocenic series of « Capo San Marco » have been examined. The microfaunas confirm the attribution of the formation to a Tortonian age given by Mariani and Parona.

FERRO, R., 1963, *Nuovi dati micropaleontologici sul Pliocene di Orosei (Sardegna centro-orientale)*: Ist. Geol. Paleont. Univ. Cagliari. Anno 1962-63, A. 2, n. 11, pp. 1-39, tav. 1-3, 1 tab., 1 fig.

Foraminifera species from Piacenziano in Orosei have been first described and illustrated and comparisons between the microfaunas of the Sardinian and Corsican Pliocene have been made.

FIERRO, G., 1963, *Ritrovamento di « Disticoplax » o altrimenti « Rabdopleura » nei calcari marnosi di Monte Carevolo* (Foglio Rapallo): Atti Ist. Geol. Univ. Genova, vol. 1, fasc. 1, pp. 197-203, 1 fig. testo.

Occurrence of *Disticoplax* or *Rabdopleura* is noticed in the Mt. Carevolo marly limestones (tav. St. Stefano d'Aveto) referred to the Lower Eocene on the microfacies evidence. Stratigraphic value of the microfossil is pointed out.

FORTI, A. & NOCCHI, M., 1963, *Su alcuni Conodonti devoniani rinvenuti nelle Alpi Carniche*: Riv. Italiana Paleont. Strat., vol. 69, n. 3, pp. 309-334, tavv. 19-20, 6 figg. testo.

Nineteen Conodont species are described for the first time from two supposed Silurian-Devonian calcareous formations outcropping in the Italian Carnic Alps. Five conodont assemblages from the « calcari mandorlati rossastri » unit make it possible to date some beds of supposed Silurian age to the Lower Devonian.

FUGANTI, A. & MOSNA, S., 1963-64, *Il Cretaceo nel Trentino centrale. I Parte - Stratigrafia, Petrografia, Sedimentologia* (Fuganti). II Parte - Micropaleontologia stratigrafica (Mosna): Atti Ist. Geol. Univ. Pavia, vol. 14, pp. 81-116, tavv. 3-19.

In the second part of the work, the author describes the stratigraphy of seven cretaceous series outcropping in the neighbourhood of Trento (northern Italy). Correlations are made among the series ranging, on microfacies evidence, from Upper Jurassic to Upper Cretaceous age.

FUGANTI, A. & MOSNA, S., 1965, *Studio stratigrafico-sedimentologico e micropaleontologico delle facies giurassiche del Trentino occidentale. P. I° e II°*: Studi Trentini Sc. Nat., Sez. A, vol. 43, n. 1, pp. 25-105, tavv. 1-7, 32 figg. e 1 tav. testo.

In the second part of the work the biostratigraphy of five rhaetic-jurassic series outcropping in

the western area of Trento region (northern Italy) is studied on micropaleontological evidence.

GASPARINI, M. G., 1962, *Le microfaune del Quaternario di Spinagallo (Siracusa)*: Geologica Romana, vol. I, pp. 237-254, tavv. 1-3.

The microfaunistic assemblage of shallow-water outcrops, (consisting of yellow sand alternating with an organogenous « panchina ») and the microfauna of the clay levels outcropping under them are described, from samples collected in the area of Spinagallo cave (Siracusa).

Statistical criterion allowed an attribution of the clay levels to the Sicilian age. The overlying discordant shallow-water complex contains a very littoral microfauna of Milazzian age.

GELMINI, R., 1965, *Osservazioni sulle breccie a Miogypsine rinvenute alla base delle arenarie di Monte Cervarola (Appennino modenese)*: Atti Soc. Nat. e Matem. Modena, vol. 96, pp. 3-12, 5 figg. testo.

Occurrence of Lepidocyclinae and Miogypsinae in a fine calcareous breccia at the basis of the M. Cervarola sandstone formation (northern Apennines) proves the Lower-Miocene age of the « breccia » formation.

GHELARDONI, R., LUCCHETTI, L., PIERI, M. & PIRINI, C., 1962, *I rapporti tra « macigno » e « marnoso arenacea » tra le valli del Dolo e dell'Idice (Appennino tosco-emiliano)*: Boll. Soc. Geol. Italiana, vol. 81, fasc. 3, pp. 195-212, figg. 1-21.

Sediments lying on the « Macigno » formation have been studied from a stratigraphic stand-point. The microfaunas found in the sampled sections allowed to refer the four recognized units to Oligocene-Lower-Middle Miocene age.

GHIZZONI, G. D., 1961, *Nota micropaleontologico-stratigrafica sui terreni terziari della Valle del Tresinaro (Reggio E.)*: Boll. Soc. Geol. Italiana, vol. 80 fasc. 2, pp. 135-144, 2 figg. testo.

The micropaleontologic study of a section through an Oligocene-Miocene parautochthonous formation in Tresinaro Valley (near Reggio Emilia, northern Apennines) made it possible to refer a part

of the formation (signed as « Elveziano » in the C. G. Italia) to the Langhian age (Lower-Miocene).

Montanaro's opinion (1931) based on coral faunas is then confirmed by the foraminiferal fauna.

GIANNELLI, L., SALVATORINI, G. & TAVANI, G., 1965, *Notizie preliminari sulle formazioni neogeniche di Terra d'Otranto (Puglie)*: Atti Soc. Tosc. Sc. Nat., S. A., vol. 72, pp. 3-19, 6 figg. testo.

First results of a study concerning neogenic sediments in « Terra d'Otranto » zone (southern Italy) are given. Paleontological and micropaleontologic studies made it possible to recognize a Tortonian age for a miocenic sequence outcropping at Capo d'Otranto, and the presence of Lower-Pliocene sediments in the zone.

GIANNELLI, L., SALVATORINI, G. & TONGIORGI, M., 1963, *Studio micropaleontologico dei depositi marini neogenici del complesso neoautoctono di Perolla (Massa Marittima Grosseto)*: Atti Soc. Toscana Sc. Nat. vol. 70 S. A., pp. 1-52, tavv. 1-3.

The foraminifera assemblages of the neogenic series of the Perolla basin (Massa Marittima, Grosseto) have been studied. A rich microfauna (141 species) from the clayey formation from the upper most part of the series is particularly described from the stratigraphic stand-point and makes it possible to refer the series to the Lower Pliocene. Environmental conditions of sedimentation are discussed.

A new subspecies of *Textularia mexicana* Cushman is described.

GIANNINI, E. & NARDI, R., 1962, *Sul ritrovamento di microfossili eocenici negli scisti policromi metamorfici associati allo pseudomacigno sul versante Nord-Orientale del Monte Pisano*: Boll. Soc. Geol. Italiana, vol. 81, pp. 1-7, tavv. 1 e 2, 1 fig. testo.

The attribution to a probable Triassic age of the metamorphic polychrome schists associated to the « pseudomacigno » at the western side of M. Pisano is invalidated by the finding of an eocenic microfauna here illustrated by the authors.

GIRELLI, M., 1960, *Considerazioni stratigrafiche e micropaleontologiche preliminari*

sui banchi rossi nell'Appennino Tortonese-Pavese: Boll. Soc. Geol. Italiana, vol. 79, fasc. 3, pp. 181-193, tavv. 1-2.

Foraminifera from samples from the Red Beds formations in the Northern Apennines have been studied. The formation is referred to the Eocene age and the Tongrian formation to the Lower Oligocene.

GIRELLI, M., 1960, *Microfauna langhiana nella «Pietra da Cantoni» di Moletto (Monferrato orientale)*: Boll. Soc. Geol. Italiana, vol. 79, fasc. 1, pp. 89-95, tavv. 1-2.

Foraminiferal assemblage from «Pietra da Cantoni» formation of Moletto (eastern Monferrato) described and compared with many miocenic ones shows a remarkable similarity with microfaunas referred to the Langhian age.

GIRELLI, M. & PIZZOCHERO, M. L., 1960, *La serie mediomiocenica di Pomaro Monferrato*: Boll. Soc. Geol. Italiana, vol. 79, fasc. 3, pp. 203-221, tavv. 1-5, 2 figg. testo, 1 tab.

A micropaleontologic study of a series from the Middle-Miocene outcrop of Pomaro Monferrato has been carried out.

Three biozones and two subbiozones have been distinguished in the series.

GREKOFF, N. & MOLINARI, V., 1963, *Sur une faune d'Ostracodes saumâtres du Neogène de Castell'Arquato (Emilia)*: Geologica Romana, vol. 2, pp. 1-6, tavv. 1-22, 2 figg. testo.

Eight genera and thirteen species of Ostracoda are described and illustrated from samples from a marly-clay formation at Miocene-Pliocene boundary, in the Castell'Arquato region. Six species are compared with species found in central-eastern Europe and in Transcaucasia.

GRIGNANI, D. & MANTOVANI, M., P., 1964, *Les Chitinozoaires du sondage Oum Doul 1 (Maroc)*: Rev. Micropaleont., vol. 6, n. 4, pp. 243-258, tavv. 1-4, 2 figg. testo.

Chitinozoa microfaunas from upper and middle devonian cores and cuttings from Oum Doul 1

well (Maroc) (from 2250 and 2990 m deepness) have been described and illustrated. Two genera: *Haplochitina* n. gen., *Stephanochitina* n. gen. and nine species: *Lagenochitina saacensis* n. sp., *L. crassa* n. sp., *L. draensis* n. sp., *L. tartayensis* n. sp., *L. amottensis* n. sp., *Haplochitina oumdoulensis* n. sp., *H. glabra* n. sp., *Sphaerochitina brevispinosa* n. sp., *Stephanochitina africana* n. sp. are proposed as new.

IACCARINO, S., 1963, *Il Pliocene inferiore del Rio Lombasino (S. Andrea Bagni, Parma)*: Riv. Italiana Paleont. Strat., vol. 69, n. 2, pp. 261-284, tavv. 18, 1 fig. testo, 1 tab.

The results of a micropaleontologic study carried out on a statistical and biostratigraphic basis of a short stratigraphic section, Lower-Pliocene in age are given. Two zones have been identified by the author.

IACCARINO, S., 1964, *Ricerche preliminari sui foraminiferi contenuti in 3 carote prelevate nel Mare Ligure (La Spezia)*: Boll. Soc. Geol. Italiana, vol. 83, fasc. 1, pp. 3-17, tavv. 1-2, 3 figg. testo, 1 tab.

Foraminifera of three samples cored from the seafloor several miles west of Palmaria Island, at a depth from 25 to 80 meters have been studied from a micropaleontological and statistic stand-point.

IACCARINO, S., 1964, *Nuova specie di Globorotalia del Paleocene friulano: «L'Ate-neo parmense»*, vol. 25, suppl. 1, pp. 3-7, tav. 1.

The new species *Globorotalia lenticularis* from a Palcocenic outcrop at Iuris (Friuli, North Italy) is described and illustrated.

IACCARINO, S. & ROVERI, E., 1963, *Sull'età della scaglia nella media valle dell'Arzino in destra Tagliamento (Udine)*: Boll. Soc. Geol. Italiana, vol. 83, fasc. 3, pp. 285-302, tavv. 1-5.

Results of a stratigraphical and micropaleontologic study on Cretaceous-Eocene sediments (with special regard to the Scaglia) in the Arzino Valley (Udine) are given. The authors refer the Scaglia previously dated as Senonian to the Upper-Paleocene (Ilerdiano) on foraminifera evidence.

IMBESI SMEDILE, M., 1960, *Sui Foraminiferi tortoniani di Cessaniti (Catanzaro)*: Atti Soc. Peloritana Sc. fis. mat. nat., vol. 6, fasc. 3-4, pp. 383-441, tavv. 1-4.

The microfauna (Foraminifera) of a sample from tortonian limestones outcropping at Cessaniti (Catanzaro) is partly described and illustrated. The attribution to the Tortonian age is confirmed.

LAZZAROTTO, A. & MAZZANTI, R., 1964, *Stratigrafia delle formazioni alloctone della Toscana marittima*: Boll. Soc. Geol. Italiana, vol. 83, fasc. 2, pp. 125-148, tavv. 1-5.

Micropaleontologic study made it possible to refer the three following formations: clays and so called « palombini limestones », silty-clayes with interbedded limestones, and so called « alberesi » limestones, distinguished in the « argille scagliose cfiolitifere » complex in the sea-region of Tuscany, respectively to a Titonic-Valanginian, Cenomanian-Turonian, Turonian-Senonian age.

LAZZAROTTO, A., MAZZANTI, R. & SALVATORINI, G., 1964, *Stratigrafia neogenica toscana: esame geologico e micropaleontologico di alcune sezioni del complesso neoautoctono delle Valli di Cornia e di Milia (Province di Pisa e Grosseto)*: Boll. Soc. Geol. Italiana, vol. 83, pp. 1-60, tav. 1, 11 figg. e 4 tab. testo.

Three stratigraphic series in the neoautochthonous formations of the Cornia and Milia basins (Prov. of Pisa and Grosseto) have been studied in detail. Chronological attributions to the Upper-Miocene and Lower-Pliocene are made on micropaleontological evidence.

LONA, F., 1962, *Prime analisi pollinologiche sui depositi terziari-quadernari di Castell'Arquato: reperti di vegetazione a clima freddo sotto le formazioni calcaree ad Amphistegina*: Boll. Soc. Geol. Italiana, vol. 81, fasc. 1, pp. 89-91.

Pollen analysis of marine sediments of Castell'Arquato (Piacenza) ascribed to the Middle- and Upper-Pliocene indicate fresh and sometimes cold climatic conditions for the layers underlying « *Amphistegina* limestone » formation.

LONGINELLI, A. & TONGIORGI, E., 1960, *Frequenza degli individui destrorali in di-*

verse popolazioni di Rotalia beccarii Linneo: Boll. Soc. Paleont. Italiana, vol. 1, n. 1, pp. 5-16, 3 figg. testo.

The frequency of right coiled specimens of *Rotalia beccarii* Linneo has been studied from forty-five samples from Upper-Tertiary, Quaternary and Recent marine or lagoon sediments of the zone from La Spezia to Vada (Livorno). The authors suppose that one of the main causes of the higher frequency of right coiled specimens is high water temperature. But the action of genetic factors also has to be considered. Influence of frequency variations of right- and leftcoiled specimens on paleotemperatures determinations with O^{18}/O^{16} ratios is also emphasized.

LORIGA, C., 1960, *Foraminiferi del Permiano superiore delle Dolomiti (Val Gardena, Val Badia, Val Marebbe)*: Boll. Soc. Paleont. Italiana, vol. 1, n. 1, pp. 33-73, tavv. 3-7, 14 figg. testo.

The Upper Permian (Bellerophon formation of Dolomites) foraminiferal fauna from limestone-samples from the Gardena, Badia and Marebbe valleys, has been studied on thin sections. Thirty-three species and subspecies are described and illustrated, six of them are proposed as new: *Geinitzina leonardii* n. sp., *Monogenerina conica* n. sp., *Nodosaria montanaroe* n. sp., *Pachyphloia elegans* n. sp., *P. reicheli* n. sp., *Geinitzina spandeli dolomitica* n. subsp.

LUPERTO, E., 1962, *L'Oligocene della Terra d'Otranto*: Mem. Soc. Geol. Italiana, vol. 3, pp. 593-609, tavv. 1-5, 1 fig. testo.

The author confirms the presence of Lower-Tertiary rocks in the peninsula of « Salento », from Cape d'Otranto to Cape St. Maria di Leuca. A detailed study on several thin sections and separated fossils made it possible to identify outcrops of bioclastic limestones of Eocene age and widest outcrops of reef limestones of Cretaceous age with *Lepidocyclinae*, echinoids and corals.

LUPERTO, E., 1962, *Faune mesozoiche di Pignola (Potenza)*: Paleont. Italica, vol. 57, (n.s. vol. 27), pp. 1-9, tavv. 1-5, 1 fig. testo.

Two foraminiferal assemblages respectively referred to the Malm and to the Lowermost-Cretaceous have been studied from sediments outcropping in the hills between Pignola and Abriola (Potenza, southern Apennines).

LUPERTO, E., 1963, *Nuovo genere di foraminifero nel Permiano di Abriola (Potenza)*: Boll. Soc. Paleont. Italiana, vol. 2, n. 2, pp. 83-88, tavv. 6-8, 1 fig. testo.

A new genus of foraminifera: *Abriolina* n. gen. (*Abriolina mediterranea* n. sp.) found in the « Abriola limestone » formation (neighbourhood of Potenza, southern Italy) referred to the Upper-Permian age on microfauna evidence, is described and illustrated. Some of the most characteristic foraminifera found in the « Abriola limestone » are also illustrated.

LUTERBACHER, H. P. & PREMOLI SILVA, I., 1962, *Note préliminaire sur une révision du profil de Gubbio, Italie*: Riv. Italiana Paleont. Strat., vol. 68, n. 2, pp. 253-288, tavv. 19-23.

Preliminary results are exposed of a detailed study of the classic Gubbio section, in Umbrian Apennines.

In the first part of the work, stratigraphic results are exposed, concerning above all the Aptian-Albian-Lower Cenomanian part of the sequence and the tertiary levels from Cretaceous-Tertiary boundary as far as a probable Lower Oligocene at the top of the series.

Stratigraphic subdivisions are based on planktonic foraminifera. The second part concerns the taxonomic study of some Cretaceous planktonic foraminifera. Topotypes of *Rotalipora apenninica* (Renz) are described and figured. A nomen novum is proposed for a variety of *R. apenninica* and for a subspecies of *Schackoina cenomana*.

The occurrence and systematic position of some species of Schackoinidae are described.

Biticinella breggiensis (Gandolfi) is redescribed and figured, the validity of the genus is confirmed.

LUTERBACHER, H. P. & PREMOLI SILVA, I., 1964, *Biostratigrafia del limite Cretaceo-Terziario nell'Appennino centrale*: Riv. Italiana Paleont. Strat., vol. 70, n. 1, pp. 67-128, tavv. 2-7, 12 figg. testo.

The Cretaceous-Tertiary boundary in pelagic facies has been studied in detail from 21 localities of the Scaglia formation of the central Apennines. Most of the sections show a complete sequence: Bolli's zonation of the Paleocene by means of planktonic Foraminifera is confirmed. In the basal part of Paleocene a new zone, older than the Danian of the type-sections in Denmark and southern Sweden, and representing the lowermost

known Tertiary is defined and named *Globigerina eugubina* zone. This zone is characterized by an assemblage of extremely small Globigerinids with a stock of primitive forms from which the tertiary Globigerinacea seem to have evolved. Five new species: *Globigerina eugubina* n. sp., *G. umbrica* n. sp., *G. anconitana* n. sp., *G. sabina* n. sp., *G. minutula* n. sp., have been described and illustrated. The extremely small Globigerinids occurring in the lowermost Tertiary show the presence of the most complete Danian ever found, not even in the type localities.

Problems of correlation of planktonic foraminifera zones with stages are discussed.

MACCAGNO, A. M., 1962, *Il genere Cyclotella nei depositi diatomitici di Riano (Roma)*: Geologica Romana, vol. 1, pp. 133-144, tav. 1, 3 figg. testo.

The species of diatoms genus *Cyclotella* Kz. from two outcrops (Valle dell'Inferno quarry, Il Crocifisso) of the tufaceous-diatomitic formation of Riano (neighbourhood of Rome) are described. Variability of relative frequency is illustrated by diagrams and environmental considerations are exposed.

MARROCU, R. & PIRINI, C., 1961, *Nota micropaleontologica della serie di Monte Acuto (Perugia)*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 1, pp. 155-161, tavv. 1-4, 1 fig. testo.

The micropaleontologic study of the « Scisti varicolori » formation, unconformably lying on the « marnoso arenacea » formation (Lower Miocene age), allowed its attribution to the Oligocenic age. Some microfaunistic observations are exposed, compared with those by O. Renz (1936).

MARTINIS, B., 1962, *Notizie geologiche e paleontologiche sui terreni dei dintorni di Corigliano d'Otranto*: Riv. Italiana Paleont. Strat., vol. 68, n. 1, pp. 67-96, tavv. 6-8, 3 figg. testo.

Geological features of outcrops in the neighbourhood of Corigliano d'Otranto (southern Puglia) with detailed examinations on Cretaceous and Miocene formations, are given. The former, lacking typical microfossils is referred to the Cenomanian age on the basis of Rudist fauna. The latter, known as « pietra leccese » can be referred to the Helvetian on the basis of a foraminiferal assemblage. A description of the most typical foraminifera from the « Pietra leccese » is given.

MARTINIS, B., 1962, *Ricerche geologiche e paleontologiche sulla regione compresa tra il T. Idrio ed il F. Timavo (Friuli Orientale)*: Riv. Italiana Paleont. Strat., Mem. 8, pp. 1-200, tavv. 1-20, 41 figg. testo, tab. 1-6, 1 carta.

The author examines the geological features of the region between the Indrio and Timavo Rivers (western Friuli). The chronological attribution of the three lithostratigraphic units defined in the region besides quaternary formations is based on the microfaunas and microfacies. In the first unit: « St. Michele Mt. limestones » five assemblages zones, ranging from Cenomanian to Middle-Eocene have been recognized (a detailed examination on Cretaceous-Tertiary boundary has been carried out). The second unit: « Sabotino Mt. scaglia rossa » with *Globotruncanae* has been referred to the Maestrichtian age. The third one: « Cormons flysch » contains a middle eocenic microfauna.

A description of the foraminifera is given and a comparison is made with microfaunas from other eocenic formations in northern Italy.

MASPERONI BASTIANUCCI, C., 1964, *Studio micropaleontologico della serie di terreni priaboniano-langhiani del Trevigiano occidentale*: Mem. Ist. Geol. Miner. Univ. Padova, vol. 24, pp. 3-65, tavv. 1-4, 3 figg. testo.

Foraminifera assemblages from forty three samples from the three stratigraphic series ranging from Upper Priabonian to Langhian age, outcropping in the localities Valle Organa, Bocca di Serra, S. Giustina in the region between Paderno del Grappa and Cornuda (Treviso) have been studied. The results of the study made it possible to define the age of the sediments and to give some ecological interpretation.

MEDIOLI, F., 1963, *Foraminiferi ed Ostracodi del Calabrian della Val Rovacchia presso Tabiano (Parma)*: Boll. Soc. Geol. Italiana, vol. 81, fasc. 4, pp. 262-286, tavv. 1-2, 2 figg., 2 tab. testo.

Foraminifera and ostracod assemblages from a quaternary outcrop containing *Cyprina islandica* in the uppermost part, have been studied in the Rovacchia Valley near Tabiano (Apennines of Parma).

MEDIZZA, F., 1965, *Ricerche micropaleontologico-stratigrafiche sulle formazioni al limite tra Cretaceo e Terziario nell'alta*

Valle del Chiampo (Lessini Orientali): Mem. Ist. Geol. Miner. Univ. Padova, vol. 25, pp. 3-41, tavv. 1-3, 5 figg. testo.

A stratigraphic study on the formations at the Cretaceous-Tertiary boundary in the high Chiampo Valley (eastern Lessini M., Venetian region) has been carried out. The chronological attributions of the sediments are based on the planktonic Foraminifera assemblages.

MICARELLI, A., 1960, *Ricerche micropaleontologiche sulle formazioni cretacee dell'Appennino marchigiano*: Rc. Ist. Sc. Univ. Camerino, vol. 1, fasc. 3, pp. 263-269, tav. 1, 2 figg. testo.

Preliminary results of the study of a rich foraminiferal fauna from marl samples from the formation of « Scisti a fucoidi » near Precicchie (Map. n. 117, III SW I. G. M.) are given. They enable to make analogies with the microfauna found in the « Canton Ticino » sediments referred to the Aptian-Albian age by Gandolfi.

MICARELLI, A., 1965, *Ricerche micropaleontologiche e stratigrafiche del tratto Barremiano-Eocene Medio del Monte Giove (Appennino Marchigiano)*: Boll. Soc. Geol. Italiana, vol. 84, fasc. 4, pp. 3-61, tavv. 1-8, 1 tab. e 11 figg. testo.

Results of the micropaleontologic stratigraphic study of a series ranging from Barremian to Middle-Eocene ages, outcropping in the Upper Chianti basin (Sheet 124, III SW C. G. I.) are given.

Paleontological elements in the sediments at the Cretaceous-Eocene boundary have not been sufficient to identify the Danian of the authors. The rich and well-preserved microfauna of the « Scisti a fucoidi » formation made it possible to individuate (at least in a hypothetical way) the Aptian and Albian stages.

MISTRETTA, F., 1962, *Foraminiferi planctonici del Pliocene Inferiore di Altavilla Milicia (Palermo, Sicilia)*: Riv. Italiana Paleont. Strat., vol. 68, n. 1, pp. 97-114, tavv. 8-11, 1 fig. testo.

Planktonic foraminifera of a microfaunistic assemblage from an outcrop of Lower-Pliocene, near Altavilla (Palermo) have been studied. A standard orientation of specimens for an easier comparative examination is suggested. The new species *Globorotalia (Turborotalia) pliocenica* n. sp. and a neo-

type of *Globigerina gomitulus* Seguenza 1880 from the type locality Riace (Calabria) are described and illustrated.

MOLINARI, V., 1962, *Un nouveau sous-genre d'ostracode du néogène de la Toscane: Cyprideis (Toscanella) belfortensis* n. subgen. n. sp.: *Révue de micropal.*, vol. 4, n. 4, pp. 249-255, tavv. 1-2.

A new subgenus and a new species of ostracod: *Cyprideis (Toscanella) belfortensis* n. subgen. n. sp., from the Neogene of Tuscany is described and illustrated. The distinction of the new subgenus is based on comparison and detailed study of generic characters, mainly of hing's elements.

MONCHARMONT ZEI, M., 1962, *I foraminiferi del Banco delle Vedove (Golfo di Napoli)*: *Staz. Zool. Napoli*, vol. 32 (Suppl.), pp. 1-13, tavv. 1-3, 1 fig., 5 tab. testo.

Three bottom samples have been studied, collected at the « Banco delle Vedove » in the bay of Naples at the depths of 180, 200-250, 315 mt. respectively. Their lithologic and microfaunistic peculiarities vary with the bathimetric positions. 242 species of foraminifera have been studied and statistically analyzed. In the second sample the 60% population of 1912 specimens found in 0.5 cm³ of non selected residue, are planktonic forms. The microfauna is of open-sea of limited depth environment. The foraminiferal associations of the three samples have been compared with those of some bottom samples collected in the Tyrrhenian sea as well as with the microfauna of Ammontatura, in the Bay of Naples.

MONCHARMONT ZEI, M., 1964, *Studio ecologico sui Foraminiferi del Golfo di Pozzuoli (Napoli)*: *Staz. Zool. Napoli*, vol. 34, pp. 160-184, 8 figg., 2 tab. testo.

A quantitative and qualitative study of the foraminifera from samples from the uppermost part of 13 cores collected in the Pozzuoli Bay near Naples, made it possible to recognize three different assemblages related to the environments of sedimentation.

MONTANARI, L., 1961, *Das Nummulitikum von Sciacca (Sizilien)*: *Ecl. Geol. Helvetiae*, vol. 54, n. 2, pp. 569-579, tavv. 1-3, 4 figg. testo.

The author refers to the Middle-Oligocene age the sediments of Sciacca (Sicily) previously referred

by authors to the Eocene age. A clarification is given on the species *Nummulites ramondiformis* De la Harpe.

MONTANARI, L., 1964, *Orbitolina praecursor, nuova specie del Cretaceo Inferiore della Sicilia*: *Riv. Italiana Paleont. Strat.*, vol. 70, n. 2, pp. 265-276, tavv. 19-21, 2 figg. testo.

A new foraminiferal species, *Orbitolina praecursor* n. sp., from Mt. Pellegrino of Palermo, (Sicily) is described and illustrated.

MONTANARI, L., 1964, *Orbitolites lehmanni, nuova specie del Cuisiano di Sicilia*: *Riv. Italiana Paleont.*, vol. 70, n. 3, pp. 537-544, tavv. 40-41, 2 figg. testo.

A new species of *Orbitolites*, *O. lehmanni* n. sp. from the lowermost Cuisien of Mt. Pellegrino (Palermo, Sicily) is described and illustrated. The new species is related to *O. latimarginalis*-*O. contentinensis* lineage.

MONTANARI, L., 1964, *Alveolina obtusa, nuova specie del Lutetiano*: *Riv. Italiana Paleont. Strat.*, vol. 70, n. 3, pp. 547-552, tav. 42.

A new species of *Alveolina*, *A. obtusa* n. sp. is described and illustrated from the Upper-Lutetian of Mt. Pellegrino (Palermo, Sicily). The new species is related to the *A. canavarii*-*A. elongata* lineage.

MONTANARI, L., 1964-65, *Geologia del Monte Pellegrino (Palermo)*: *Riv. Min. Siciliana*, A. 15, n. 88-90, A. 16, n. 91-93, pp. 3-64, tavv. 1-20, 17 figg. testo.

Three hetheropic series outcropping at Mt. Pellegrino (neighbourhood of Palermo, Sicily) made it possible to reconstrue the stratigraphic sequence (ranging from the Upper-Trias to the Middle-Eocene) of this relief. Chronological attributions are based on the micropaleontologic study of Algae, Tintinnida and Foraminifera assemblages.

MOSNA, S., 1963, « *Globigerine* » in termini calcarei del Cretaceo inferiore basale affioranti nell'area del Trentino centrale: *Studi trentini Sc. Nat., Mus. St. Nat. Venezia Tridentina*, A. 40, n. 2, pp. 167-175, tavv. 1-5.

A « Globigerinae » assemblage from Lower-Cretaceous outcrops in the Trento area (northern Italy) is described and compared with « Globigerinae » assemblages from pelagic limestone of the Mediterranean basin referred to the Middle- and Upper-Jurassic ages.

MOSNA, S., 1963, *Contributi micropaleontologici per la stratigrafia dei terreni miocenici e pliocenici affioranti nell'area del F.° Pavia*: Mem. Soc. Geol. Italiana, vol. 4, pp. 1-18, tavv. 1-3.

A micropaleontologic study of samples from Miocene and Pliocene outcrops in the area covered by the sheet Pavia (C.G.U.) made it possible to refer sediments previously assigned to the Pliocene or Mio-Pliocene age to the Miocene. New stratigraphic data are given and old tertiary blocks are noticed in the region for the first time.

MOSNA, S., 1964, *Frequenti rinvenimenti di Robulus brevispinosus (Nuttall) in termini del Miocene inferiore (Aquitano e Langhiano) del bacino terziario piemontese*: Boll. Soc. Geol. Italiana, vol. 33, fasc. 1, pp. 63-69, tav. 1.

Chronostratigraphic value of *Robulus brevispinosus* (Nuttall) occurring very frequently in clayey-marly layers referred to the Aquitanian and Middle-Lower-Langhian age, outcropping in the Bormida and Monferrato basins (north-western Italy) is emphasized.

MOSNA, S., 1965, *Contributi micropaleontologici stratigrafici allo studio dell'Oligocene del bacino terziario ligure-piemontese*: Atti Ist. Geol. Univ. Pavia, vol. 16, pp. 81-113, tavv. 16-20, 1 fig. testo.

A biostratigraphic study of the oligocenic sediments outcropping in the tertiary basin of Liguria and Piemonte (northern Italy) has been carried out. The sediments mapped as Tongriano have been referred on microfauna evidence to a Lower-Middle Oligocene.

NARDI, R., 1963, *Sul ritrovamento di Nummuliti nello « pseudomacigno » del versante Nord Orientale delle Alpi Apuane*: Boll. Soc. Geol. Italiana, vol. 82, fasc. 2, pp. 439-444, 3 figg. testo.

A foraminiferal assemblage with *Nummulites* is mentioned for the first time from the « pseudo-

macigno » formation outcropping in the « Serchio di Minucciano » Valley (Alpi Apuane, north-eastern side).

NEVIANI, I., 1960, *Le facies a Clypeina jurassica in Italia e nel bacino mesogeo*: Riv. Italiana Paleont. Strat., vol. 66, n. 4, pp. 525-542, tavv. 50-52, 3 figg., 1 tab. testo.

The occurrence of the algal genus *Clypeina* has been recognized in Upper-Triassic limestones of central-southern Italy. *Clypeina jurassica* is here described for the first time from peninsular Italy and from Sardinia. A comparison is made between Italian and mesogean basin' similar facies.

NEVIANI, I., 1961, *Sulla possibilità di determinazione di Pinus mugo e Pinus silvestris in pollini fossili della torbiera di Fonteghe (Colli Euganei)*: Riv. Italiana Paleont. Strat., vol. 67, n. 1, pp. 53-75, 16 figg. testo.

The structural and sculptural characters of sporoderm of *Pinus mugo* and *Pinus silvestris* pollen being insufficient for a specific determination, the author proposes the application of the statistic method for this pollen determination.

NOCCHI, M., 1960, *Osservazioni sulla stratigrafia e cenni sulla tettonica della parte meridionale dei Monti del Chianti*: Boll. Soc. Geol. Italiana, vol. 79, fasc. 2, pp. 216-256, tavv. 1-7, 2 figg. testo.

The results of the geological mapping in the southern part of the Chianti Mountains (central Apennines) are given. The micropaleontologic study of some samples has pointed out a Cretaceous-Eocene age for the « Scisti policromi » formation and the occurrence of eocenic foraminifera in the calcareous marls at the uppermost part of the formation.

NOCCHI, M., 1961, *Sui rapporti fra la serie toscana e la serie umbra a sud di M. Acuto e di M. Filoncio (Perugia)*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 2, pp. 181-230, tavv. 1-5, 5 figg. testo.

Relations between the Tuscan series (Scisti policromi, Nummulitico, Macigno) and the marno-so-arenacea formation (series of Umbria) are exposed. Foraminiferal microfaunas from samples from both the series have been studied.

OERTLI, H. G., 1961, *Ostracodes du Langhien-type*: Riv. Italiana Paleont. Strat., vol. 67, n. 1, pp. 17-44, tavv. 1-5, 2 figg. testo.

Twenty-three species of ostracods from samples of the pelagic series of the type Langhian are described. Five of them: *Cytherella postdenticulata*, *Krithe langhiana*, *K. citae*, *K. contracta*, *Henryhowella ruggierii*, are described and illustrated as new species.

OLIVIERI, R., 1963, *Rapporti quantitativi fra i Foraminiferi recenti delle spiagge di Rimini, Porto Corsini e Lido di Venezia*: Boll. Soc. Paleont. Italiana, vol. 2, n. 2, pp. 94-108, 3 figg., 3 tab. testo.

Foraminiferal assemblages from samples collected from the beaches of Rimini, Porto Corsini and the Lido of Venice have been studied from a quantitative-comparative stand-point. In order to study the problem of faunal contamination by reworking of tertiary apenninic foraminifera, a series of samples collected along the Marecchia River from Ponte Verrucchio to 3 Km. from the beach of Rimini, and some samples collected from the Adriatic floor off Rimini, Porto Corsini and the Lido of Venice have been examined. The different density of some families, genera and species occurring in the three localities is pointed out by three diagrams, and discussed from ecological stand-point.

OLIVIERI, R., 1965, *L'aspetto della fauna a Conodonti nel Devoniano superiore del Gerrei (Sardegna)*: Boll. Soc. Paleont. Italiana, vol. 4, n. 1, pp. 28-63, tavv. 3-6, 1 tab. testo.

A conodont fauna from a horizon of Corona Mizziu spike rock near Villasalto, belonging to the Upper Devonian *Clymenia* Zone of Gerrei (Sardinia) is described and illustrated. Fifty-seven species belonging to twenty-nine genera have been recognized and are here described and fully illustrated. The Conodont microfauna makes it possible to state a Famennian age for the horizon studied.

PALLA, P., 1965, *Prima segnalazione del genere Lancicula Maslov (Alga calcarea) nel Devoniano inferiore della Carnia (Alpi Orientali)*: Riv. Italiana Paleont. Strat., vol. 71, n. 1, pp. 3-10, tav. 1, 1 fig. e 1 tab. testo.

A calcareous alga *Lancicula wolfi* Johnson found in a sample from a Lower Devonian outcrop in the Carnic Alps (north-eastern Italy) is described and illustrated. Occurrence of the genus *Lancicula* Maslov is for the first time mentioned in Europe.

PAPANI, G. & PELOSIO, G., 1962, *La serie plio-pleistocenica del T. Stirone (Parmense occidentale)*: Boll. Soc. Geol. Italiana, vol. 81, fasc. 4, pp. 293-335, tavv. 1-7, 10 figg. testo.

Foraminiferal (and molluscal) faunas are described from a plio-pleistocenian series about 970 mt thick, outcropping in the Stirone T. (Parma). A probable stratigraphic gap in Middle-Pliocene and the stratigraphic continuity between the Upper-Pliocene and the Calabrian are pointed out. A Plio-Pleistocene boundary is established on paleontologic basis.

PAPETTI, I. & TEDESCHI, D., 1965, *Nuovo genere di foraminifero del Santoniano Superiore*: Geologica Romana, vol. 4, pp. 119-128, 8 figg. testo.

A new genus and new species of Foraminifera: *Cuvillierinella salentina* n. gen. n. sp. is described and illustrated. The holotype and the described paratypes are from a limestone of Upper-Santonian age in the Salentina Peninsula (southern Italy).

PASINI, M., 1963, *Alcuni Fusulinida del Monte Auernig (Alpi Carniche) e loro significato stratigrafico*: Riv. Italiana Paleont. Strat., vol. 69, n. 3, pp. 337-382, tavv. 21-26, 3 figg. testo.

Fusulinida from samples from calcareous and arenaceous beds of M. Auernig section (Italian side of the Carnic Alps) are examined. Basal beds of the section (*Wedekindellina* zone and *Pseudofusulina* (*Daixina*) *alpina alpina* nom. nov. beds) are assigned to Upper-Carboniferous while upper beds are believed to belong to Lower-Permian age owing to the presence of *Staffella* cfr. *moellerana* Thompson and *Sphaerulina* aff. *crassispira* Lee. A new species: *Fusulinella pramollensis* n. sp. is described and illustrated.

PASINI, M., 1964, *Chusenella sosioensis nuova specie di Fusulinide del Permiano della Valle del Socio*: Riv. Italiana Paleont. Strat. vol. 70, n. 2, pp. 169-182, tavv. 10-11, 4 figg. testo.

A new description is given of a fusulinid species here proposed as a new species: *Chusenella sosioensis* n. sp., described in 1933 by A. Silvestri as *Fusulina prisca* Ehrenberg.

PASQUARÈ, G., 1960, *Sulla presenza di Nannoconus e Saccocoma nei livelli superiori del « Rosso ad Aptici » di Bellavista (Canton Ticino)*: Ecl. Geol. Helvetiae, vol. 53, n. 2, pp. 501-504, tav. 1, 1 fig. testo.

Microfaunas with *Nannoconus*, *Saccocoma* and *Calpionella* are noticed and studied, from titonic sediments at the « Rosso ad Aptici » « Majolica » formations boundary, outcropping in the Bellavista section (Canton Ticino).

PASSERINI, P. & PIRINI, C., 1964, *Microfaune paleoceniche nelle formazioni dell'arenaria del M. Ramaceto e degli argilloscisti di Cichero*: Boll. Soc. Geol. Italiana, vol. 83, fasc. 4, pp. 211-214, tavv. 1-2.

A lowermost tertiary foraminifera assemblage is studied from the upper beds of the M. Ramaceto sandstones and in the overlying Cichero shales.

PASSERINI, P. & PIRINI, C., 1965, *Stratigrafia del Mesozoico e dell'Eocene della « Serie Toscana » nella zona di Manciano e Montemerano (Grosseto)*: Boll. Soc. Geol. Italiana, vol. 84, pp. 331-354, tavv. 1-14, 3 figg. testo.

The microfaunas from the Mesozoic and Eocene formations of the Tuscan series, outcropping in the Montemerano and Manciano zone (Grosseto, central Italy) are described and illustrated. The chronological attributions of the sediments are based on microfaunistic assemblages.

PAVAN, G. & PIRINI, C., 1963, *Microfossili cretacei ed eocenici nella zona di M. Falpato (Lucania)*: Mem. Soc. Geol. Italiana, vol. 4, pp. 1-6, tavv. 1-6, 2 figg. testo.

Microfaunas from cretaceous and eocenic sediments outcropping in the M. Falpato zone (Lucania, southern Italy) are described and illustrated.

PERRELLA, G., 1964, *Stratigrafia di un affioramento cretaceo in una parte delle Murge di Gravina (Puglie)*: Boll. Soc. Geol. Italiana, vol. 83, fasc. 1, pp. 93-102, 2 figg. testo.

Micropaleontologic study of some samples from the limestones forming the Murge upland in the neighbourhood of Spinazzola and Poggiorsini makes it possible to establish that they are peri-reefal and range from Cenomanian to Maastrichtian age.

PESCATORE, T., 1961, *Una serie stratigrafica nel Flysch a Sud-Est del Matese (Sannio)*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 3, pp. 3-7, tavv. 1-2.

A stratigraphic series is described, ranging from the upper part of Lower Cretaceous (Aptian) to the Oligocene. At the basis a bedded chert formation outcrops, followed by a chert limestones, then by a calcareous and calcareous-marly formation. At the top a transgressive conglomerate of basal Miocene age and a « molassa like » sandstone of Upper-Miocene close the series.

PESCATORE, T., 1961, *Ulteriori osservazioni sul Flysch a Sud-Est del Matese*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 4, pp. 132-139, tavv. 1-5.

A series has been studied, ranging from Middle-Cretaceous to the Eocene, outcropping in the localities M. La Difensa and Mass. Traverse, to the east of Pietraroia. In this series isopic with the formerly described one outcropping in Guardia Sanframondi, bedded chert limestone, limestones, conglomerates and red marls succeed from bottom to the top. Lithologic and paleontologic analogies are pointed out with the series of Pescopagano and the series of S. Fele. (s. Zoya).

PETRUCCI, F., 1960, *Osservazioni sulla zona collinare tra il T. Taro e il T. Recchio (Parma) con particolare riguardo al limite mio-pliocene*: Atti Soc. Italiana Sc. Nat. e Mus. Civ. St. Nat. Milano, vol. 49, fasc. 4, pp. 314-334, tavv. 18-22, 1 fig. testo.

The Mio-Pliocene boundary in the hilly area between the River Taro and Recchio Torrent (Parma) is circumstantially studied from the macro- and micropaleontologic stand-point. A note is given of an « olistostroma » referred to the Lower-Pliocene age.

PETRUCCI, F., 1963, *Segnalazione del genere Cuvillierina Debourle nel Flysch eoecenico della Val Baganza (Parma)*: Atti Soc. Italiana Sc. Nat. e Mus. Civ. St. Nat. Milano, vol. 52, fasc. 1, pp. 75-81, tav. 12, 1 fig. testo.

The occurrence of the genus *Cuvillierina* Debourle (foraminifera) is for the first time reported in Italy, from samples of a stratigraphic section in the marly-calcareous flysch of M. Sporno (Baganza Valley, Parma).

PEZZANI, F., 1963, *Notizia preliminare sullo studio micropaleontologico di un campione del Messiniano Superiore di Tabiano Bagni (Parma)*: Boll. Soc. Geol. Italiana, vol. 82, fasc. 1, pp. 3-7.

A preliminary note is given of a micropaleontologic study of a clayey sample from the bottom of a messinian lens of gypsum behind the termal baths of Tabiano (Parma).

PEZZANI, F., 1963, *Studio micropaleontologico di un campione della serie messiniana di Tabiano Bagni (Parma)*: Riv. Italiana Paleont. Strat., vol. 69, n. 4, pp. 559-662, tavv. 29-38, 4 figg. testo.

A rich foraminiferal fauna from a sample collected in a clayey stratum in contact with gypsum at the top of the « Messiniano » of Tabiano Bagni (Parma) is considered and compared with other microfaunas from similar strata. Some hundred species are described, nine of which are new species: *Globorotalia apertura* n. sp., *G. involuta* n. sp., *Catapsydrax apenninicus* n. sp., *Spiroloculina tabianensis* n. sp., *Triloculina virgula* n. sp., *Lagena villicostata* n. sp., *Nonion parmense*, n. sp., *Bolivina dentellata elongata* n. subsp., *Cymbalopora vitrea* n. sp.

PICCOLI, G. & PROTO DECIMA, F., 1962, *Studio micropaleontologico di una serie nel Flysch di Capodistria*: Mem. Soc. Geol. Italiana, vol. 3, pp. 9-48, figg. 1-5.

Results of a micropaleontologic study of samples from a series of the flysch near Capodistria are exposed. Samples were collected from the northeastern limb of the anticline whose core is represented by the *Alveolina* limestone near Isola. The attribution of the formation to an Upper-Eocene

age is based on the microfaunal assemblage of foraminifera (macrofossils are lacking). Up to now it was believed somewhat younger.

PIERONI, P. G., 1965, *Lepidocyclina and Miogypsina from Opi, Sangro Valley (Central Apennines)*: Geologica Romana, vol. 4, pp. 161-180, tavv. 1-3, 10 figg. testo.

A micropaleontologic study of Lepidocyclinae and Miogypsinae from a carbonate series outcropping near the village of Opi (Abruzzi, central Italy) has been carried out following the biometric methods of investigations proposed by Van der Vlerk and Drooger.

PIRINI, C., 1961, *Contributo paleontologico allo studio dell'Appennino settentrionale*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 1, pp. 111-126, tavv. 1-6, 1 carta.

Formations outcropping in the Apennines of Emilia are studied from the stratigraphic standpoint. Microfaunas allowed the chronological attribution of the formations, ranging from Upper-Cretaceous to Lower-Middle-Miocene.

PIRINI, C. & MOSNA, S., 1962, *Nota micropaleontologica per i terreni ad Est e a Sud del Lago Trasimeno*: Mem. Soc. Geol. Italiana, vol. 3, pp. 533-541, tavv. 1-7.

Data resulting from the micropaleontologic study of strata outcropping on the eastern and southern side of Trasimeno Lake are exposed. The two following distinct formations are present: 1) Umbrian marly-sandstone of Miocene age; 2) Tuscan sandstone-calcareous-clayey variegated formation, resting on the former. The authors chiefly remark that the overlapping stratigraphic succession is included between Upper-Cretaceous and Lower-Miocene.

PIRINI, C. & MOSNA, S., 1963, *Microfaune triassiche rinvenute nella zona di Ponte Arverino (Umbria)*: Mem. Soc. Geol. Italiana, vol. 4, pp. 1-7, tavv. 1-16, 1 fig. testo.

A preliminary notice is given of a triassic microfauna from marly layers with Bactrilli and grey dolomitic limestones, outcropping in the neighbourhood of Ponte Arverino (Umbria). Some specimens of *Fronicularia* and *Nodosaria* are described in detail.

PIRINI, C. & RADRIZZANI, S., 1962, *Stratigrafia del Foglio 118 (Ancona)*: Boll. Serv. Geol. Italia, vol. 83, pp. 71-200, tavv. I-45, 5 figg. testo.

Results of a stratigraphic study of the formations outcropping in the area covered by the sheet 118 « Ancona » (new mapping of C.G.U.) are exposed. Several biostratigraphic zones and the corresponding ages of the units have been identified in the sedimentary sequence, on the basis of the foraminifera assemblages.

POMESANO CHERCHI, A., 1962-63, *I primi Conodonti della Sardegna nei calcari neo-devonici del Gerrei*: Ist. Geol. Paleont. Univ. Cagliari, A. 2, n. 7, pp. 3-11, tavv. 1-2.

Conodonts found for the first time in Sardinia, are noticed and studied, from the new-devonian series of Gerrei (*Clymenia* limestones). The presence of the genera: *Belodus*, *Bryanthodus*, *Lonchodina*, *Hindeodella*, *Ozarkodina*, *Spathognathodus*, *Ancyrodella* and *Elsonella* confirms the Upper Devonian age of the formation.

POMESANO CHERCHI, A., 1964, *Microfacies eoceniche di Is Cantonis (M. Gennas, Sardegna Sud Orientale)*: Ric. Sci., 34 (2 A), vol. 7, n. 3, pp. 601-612, tavv. 1-6, 2 figg. testo.

The eocenian outcrop at Is Cantonis (south-eastern Sardinia) has been referred to the Cuisian-Lutetian age on the microfacies evidence. Occurrence of fossil assemblages of typical littoral facies has been pointed out.

PRATURLON, A., 1963, *Dasycladaceae from Upper Permian of the Dolomites*: Geologica Romana, vol. 2, pp. 119, 150, tavv. 1-5, 3 figg. testo.

Dasycladaceae in the algal floras from the uppermost levels of « Bellerophon-zone » (Upper Permian) in the Dolomites (north-eastern Alps) are described and illustrated. The genus *Physoporella* is first mentioned in European Permian. Two species: *Macroporella preromangica* n. sp., *Physoporella laevis* n. sp., and a subspecies *Vermiporella nipponica longipora* n. subsp. are proposed as new.

PRATURLON, A., 1963, *Una nuova Teutloporella (Alga calcarea) nel Giurese Superiore di Monte Corno (Parco Nazionale degli Abruzzi)*: Geologica Romana, vol. 2, pp. 199-206, tav. 1, 1 fig. testo.

A new dasycladacean species *Teutloporella socialis* n. sp. from an Upper Jurassic series at M. Corno (central Apennines) is described and illustrated. The species represents the most specialized and evolved euspondyl type of *Teutloporella*, parallel to the aspondyl coeval form *Teutloporella obsoleta* Carozzi.

PRATURLON, A., 1964, *Calcareous Algae from Jurassic-Cretaceous limestone of Central Apennines (Southern Latium, Abruzzi)*: Geologica Romana, vol. 3, pp. 171-202, 34 figg. testo.

Nine algal species from Upper-Jurassic and Lower-Cretaceous sediments in central Apennines have been examined and illustrated. Two species are first mentioned in Italy, two genera: *Acroporella* (Dasycladaceae) and *Pseudocodium* (inc. sedis) and six species: *Actinoporella maslovi*, *Acroporella radioicici*, *Diploporella johnsoni*, *Triploporella marsicana*, *Acicularia endoi*, *Pseudocodium convolvens*, are proposed as new.

PRATURLON, A., 1965, *A new Linoporella (Dasycladaceae) from Middle Cretaceous of Marsica (Central Apennines)*: Geologica Romana, vol. 4, pp. 3-6, 3 figg. testo.

A new species of Dasycladaceae: *Linoporella elliotti* n. sp. from Middle-Cretaceous limestone of Marsica (Abruzzi, central Italy) is here described and illustrated.

PREMOLI SILVA, I., 1960, *Le Buliminidae del Langhiano delle Langhe*: Riv. Italiana Paleont. Strat., vol. 46, n. 4, pp. 551-588, tavv. 53-54, 3 figg. testo.

Four different assemblages have been identified in the Buliminidae from Bricco della Croce type-section for the Langhian stage. Twenty-seven species are described and illustrated.

PREMOLI SILVA, I., 1964, *Citaella julia n. gen. n. sp. del Trias inferiore della Carnia*: Riv. Italiana Paleont. Strat., vol. 70, n. 4, pp. 657-670, tavv. 48-51.

A new genus and a new species of foraminifera *Citaella julia* n. gen. n. sp. incertae familiae

(possibly fam. Moravaminidae) from Lower-Triassic of Carnic Alps (northern Italy and Austria) is described and illustrated. It occurs also in Middle-Triassic of South Szechuan (China).

PREMOLI SILVA, I., 1964, *Le microfaune del Pliocene di Balerna (Canton Ticino)*: Ecl. Geol. Helvetiae, vol. 57, n. 2, pp. 731-741, tav. 1.

Foraminifera assemblages from five samples collected in a pliocenic outcrop in the neighbourhood of Castel di Sotto (West of Balerna, Canton of Ticino) have been studied and compared with pliocenic assemblages from Italian localities.

PREMOLI SILVA, I., 1965, *Permian Foraminifera from the Upper Hunza Valley: Italian expeditions to the Karakorum (K²) and Hindukush*, dir. Ardito Desio. Scientific Reports, IV: Paleontology. Ed. E. J. Brill, Leiden, pp. 89-125, tavv. 10-18, 1 fig. testo.

Microfacies of two samples from the Low Chapursan Valley, in the upper basin of the Hunza River (West Karakorum, Pakistan) have been studied. Several foraminifera species have been identified, described and illustrated. Two of them: *Hemigordius ? pakistanus* n. sp. and *Hemigordius ?* n. sp. (no specific name is given for lack of specimens) are proposed as new species.

PREMOLI SILVA, I. & PALMIERI, V., 1962, *Osservazioni stratigrafiche sul Paleocene della Val di Non (Trento)*: Mem. Soc. Geol. Italiana, vol. 3, pp. 191-212, figg. 1-6 testo.

Two sections of the paleogenic « scaglia » outcropping in Non Valley (Trento) have been studied from stratigraphic and micropaleontologic point of view. Microfaunistic assemblages, rich in planktonic foraminifera, present many analogies with the microfaunas found at Paderno d'Adda and Trinidad. Danian associations are lacking. In spite of the hiatus of sedimentation the series looks lithologically continuous.

PROTO DECIMA, F., 1965, *Precisazioni sull'età di una formazione marnosa e sul limite Cretaceo-Terziario nella zona tra Possagno e Pederobba (Trevigiano occidentale)*: Boll. Soc. Geol. Italiana,

vol. 84, fasc. 1, pp. 3-9, 1 tab. e 1 fig. testo.

A tertiary marly formation outcropping in the western Treviso zone (north-eastern Italy) has been referred on micropaleontological evidence to the Ilirdian and Lower-Cuisian. The age of the formation (included between *Globorotalia pseudomenardii* and *G. aragonensis* zones) had been recently called into question.

PROTO DECIMA, F. & ZORZI, P., 1965, *Studio micropaleontologico - stratigrafico della serie cretaceo-terziaria del Molinetto di Pederobba (Trevigiano occidentale)*: Mem. Ist. Geol. Min. Univ. Padova, vol. 25, pp. 1-44, tavv. 1-5, 1 tab. testo.

A detailed micropaleontologic study of the sequence ranging from the Upper-Cretaceous to the Lower-Eocene, outcropping at Molinetto of Pederobba (Treviso) has been carried out. A large stratigraphical gap including Danian, Monthian and Thanetian is demonstrated. Thirty-seven species of planktonic Foraminifera are described and illustrated.

PURI, H. S., BONADUCE, G. & MALOY, J., 1964, *Ecology of the Gulf of Naples*: Staz. Zool. Napoli, vol. 33, suppl., pp. 87-199, 67 figg., 1 tab. testo.

Results of a study of the ostracod population of the Gulf of Naples in relation to nine environmental factors (temperature, depth, dissolved oxygen content, hydrogen ion concentration, alkalinity, salinity, total phosphate, transparency and substrate), are given. No single factor seems to control ostracod distribution in this area, but rather an interrelation of the three major (and possibly other) factors: depth, substrate and possibly salinity. Eight major ostracod assemblages are defined in the Gulf of Naples. The 100 mt bottom contour line was chosen as an approximate boundary between near-shore and offshore assemblages.

The interpretation of the ecology of ostracoda and of the causes of their distribution patterns is extended also to the ostracod assemblages around the islands of Capri and Ischia.

REUTTER, K. J. & SERPAGLI, E., 1961, *Micropaleontologia stratigrafica sulla « Scaglia rossa » di Val Gordana (Pontremoli, Appennino Settentrionale)*: Boll. Soc. Paleont. Italiana, vol. 1, n. 2, pp. 10-30, tavv. 9-14, 2 figg. testo.

The micropaleontologic study of sixty-one samples collected in a stratigraphic sequence of the « Scaglia rossa » of the Gordana Valley (Pontremoli, northern Apennines) made it possible to become aware of a stratigraphic gap between the Lower-Turonian and the Lower-Eocene. Upper cretaceous layers are interbedded in the Eocene sequence. Some hypotheses on the interpretation of the stratigraphic situation are discussed.

RICCIARDI, E., 1961, *Considerazioni preliminari sui pollini fossili rinvenuti in un deposito lacustre quaternario contenente materiali vulcanici (Gruppo Cimini-Sabatini)*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 4, pp. 129-132.

Pollen analysis on a lacustrine diatomaceous clayey deposit connected with the activity of the ancient Cimini-Sabatini volcanoes (near Rome) make it possible to refer the deposit to a cold or cool climatic phase of Mindel or Mindel-Riss, or Riss.

RICCIARDI, E., 1963, *Pollini fossili terziari nell'Italia del Nord (Piemonte) e loro significato paleoclimatico*: Boll. Soc. Geol. Italiana, vol. 82, fasc. 1, pp. 111-112, tav. 1.

Palaeofloristic assemblage from a small swampy lake deposit in Piemonte (northern Italy) made it possible to refer it to the Middle-Late Tertiary age, and showed an almost sub-tropical climate.

RIGASSI, D. & ROVEDA, V., 1964, *Quelques microfossiles peu connus du Jurassique supérieur et du Crétacé inférieur ultrabelvétiques*: Arch. des Sc. Phys. Nat. Genève, vol. 17, fasc. 1, pp. 114-118, 2 figg. testo.

Microscopic and submacroscopic « rhyncholites » (Cephalopods' jawbone's bells) have been identified in the marly series ranging from Oxfordian to Barremian age of Veveyse de Châtel (Fribourg), and their stratigraphic significance is discussed. A new species *Rhynchoteuthis (Gonatocheilus) sigali* is described and illustrated.

RODA, C., 1965, *Il calcare portlandiano a Dasycladaceae di Mutolo (Reggio Calabria)*: Geologica Romana, vol. 4, pp. 259-290, 32 figg. e 3 tab. testo.

Micropaleontological assemblages occurring in the M. Mutolo limestones (Reggio Calabria) make

it possible to refer them to the Portlandian age (Upper Jurassic) and to a reef and near-reef environment.

ROVEDA, V., 1961, *Contributo allo studio di alcuni macroforaminiferi di Priabona*: Riv. Italiana Paleont. Strat., vol. 67, n. 2, pp. 153-224, tavv. 14-19.

Some large foraminifera from the typical locality « Priabona hill » and from samples of the stratigraphic series in the locality « Boro Grenella » are studied and described here. In the series all the Priabonian age is present and, at the top some specimens of *Nummulites intermedius* seem to indicate a transition to the Oligocene. A new species *Nummulites stellatus* is described and illustrated. At the present time the species is considered as characteristic of Priabonian age.

RUGGIERI, G., 1961, *Alcune zone biostratigrafiche del Pliocene e del Pleistocene italiano*: Riv. Italiana Paleont. Strat., vol. 67, n. 4, pp. 405-417, 1 fig. testo.

The author distinguishes a sequence of paleontological zones in the Italian marine Pliocene-Lower-Pleistocene and he discusses the relations between these zones and the commonly accepted stratigraphic subdivisions.

RUGGIERI, G., 1961, *Alcuni Ostracodi quaternari e recenti pertinenti al genere Costa Neviani*: Boll. Soc. Paleont. Italiana vol. 1, n.2, pp. 3-9, tav. 8, 2 figg. testo.

A new description of the type species of the genus *Costa Neviani* 1928, *Costa edwardsii*, and the descriptions of some Mediterranean Neogene- to Recent related species of marine ostracoda are given. A new species *Costa punctatissima* from the Upper Pliocene of Castellarquato (Piacenza) is proposed.

RUGGIERI, G., 1961, *Frammenti di stratigrafia siciliana*: Riv. Min. Siciliana, A. 12, n. 70-72, pp. 3-8, tav. 1, 4 figg. testo.

Stratigraphic data that resulted during geological work carried out in some areas of Sicily are given. The data are fragmentary and concern oligocenic, helvetian, tortonian, lower quaternary and calabrian levels.

RUGGIERI, G., 1961, *Gli Ostracodi marini del Tortoniano (Miocene-medio-superiore) di Enna, nella Sicilia centrale*: Palaeont.

Italica, vol. 56, mem. 2, pp. 1-68, tavv. 11-17, 15 figg. testo.

About 50 species and subspecies from two marine ostracod faunas from Tortonian (Middle Miocene) outcrops in the neighbourhood of Enna (central Sicily) are described and illustrated. The environment of sedimentation is discussed.

Two genera (*Chrysocythere* n. gen. and *Verucocythereis* n. gen.) and 31 species and subspecies are proposed as new: *Cytherella vulgava*, *Bairdia nigrescens*, *B. octopunctata*, *Parakrithe dactylomorpha*, *Krithe compressa dertonensis*, *Hermanites haidingeri minor*, *H. haidingeri rectangularis*, *Chrysocythere cataphracta*, *Quadracythere* (?) *sulcatopunctata mediterranea*, *Carinocythereis pokorny*, *Falunia ruida*, *Mutilus* (*Mutilus*) *keiji*, *M. (Aurila) longus*, *Caudites ungeri depauperata*, *Ruggeria rotundata*, *Protocytheretta obtusa*, *Eucytheretta triebeli*, *Buntonia sublatissima multicostata*, *Callistocythere rotundata*, *C. ennensis*, *Payenborchella solitaria*, *Eucytherura protracta*, *E. calcarata*, *E. textilis*, *E. textilis subtextilis*, *E. poliphylla*, *Loxoconcha antoniettae*, *L. variesculpta*, *L. terebrata*, *L. quadricornis*, *Xestoleberis geometra*.

RUGGIERI, G., 1963, *Globigerinelloides algeriana nell'Aptiano della Sicilia*: Boll. Soc. Paleont. Italiana, vol. 2, n. 2, pp. 75-78, 3 figg. testo.

Occurrence of *Globigerinelloides algeriana* Cushman and Ten Dam in a planktonic assemblage of Aptian age in western Sicily (Montagna Grande di Calatafimi) is pointed out. The paleontologic, stratigraphic and palaeogeographic significance of the finding is briefly discussed.

RUGGIERI, G., 1964, *Ecological remarks on the present and past distribution of four species of Loxoconcha in the Mediterranean*: Staz. Zool. Napoli, vol. 33, Suppl. p. 515-528, 11 figg. testo.

Four species of the genus *Loxoconcha* living in the Mediterranean sea, three of which recorded from the Miocene and one from the Pliocene, are studied from the ecological stand-point, bearing in mind the known palaeoecology. The species *Loxoconcha rubritincta* Ruggieri is described for the first time.

RUGGIERI, G. & PUMO, M., 1964, *Cribrorobulina serpens* (Seg.) del Tortoniano della Calabria, neotipo, e *Cribrorobulina taustoma* n. sp.: Riv. Italiana Paleont.

vol. 70, n. 4, pp. 887-898, tav. 67, 4 figg. testo.

A neotype specimen of *Robulina serpens* Seguenza 1879 is described from the tortonian type locality in the neighbourhood of Benestare (Calabria, Southern Italy). The new species *Cribrorobulina taustoma* n. sp. from Upper-Oligocene of Donnalucata (Sicily) is described and illustrated.

RUGGIERI, G. & SPROVIERI, R., 1964, *Streblus punctatogranosus* (Seguenza) del Tortoniano della Calabria, neotipo: Riv. Italiana Paleont. Strat., vol. 70, n. 1, pp. 131-136, tav. 8, 2 figg. testo.

A neotype specimen of *Rotalia punctato-granosa* Seguenza 1879, is described from the tortonian type locality in the neighbourhood of Benestare (Calabria, southern Italy). According to the opinion of the authors the species is valid and belongs to the genus *Streblus* Fischer 1917.

RUGGIERI, G. & SPROVIERI, R., 1965, *Alcuni neotipi di specie di Foraminiferi tortoniani istituiti da G. Seguenza nel 1879*: Riv. Italiana Paleont. Strat., vol. 71, n. 3, pp. 951-964, tav. 93, 5 figg. testo.

Neotypes of some Foraminifera species are described on topotypes specimens from the tortonian clays outcropping near Benestare (Calabria). A revision of the species usually called *Vaginulinopsis inversa* is proposed, with the denomination of *Vaginulinopsis soluta soluta* (Silvestri 1899) for the strongly keeled subspecies. The subspecies without or nearly without keel is proposed as *Vaginulinopsis soluta subcarinata* new subspecies.

RUSSO, A., 1964, *Ostracodi langhiani del Pescale* (Appennino settentrionale modenese): Boll. Soc. Paleont. Italiana, vol. 3, n. 2, pp. 227-251, tavv. 40-47, 5 figg. e 1 tab. testo.

Twenty-nine Ostracods species from Lower-Miocene (Langhian) outcrops in the Pescale Valley [Sassuolo (Modena), northern Apennines] are described and discussed from the paleontological and palaeoecological point of view. Four species are described and illustrated as new: *Bradleya? saxolensis* n. sp., *Buntonia minima* n. sp., *Carinocythereis ruggierii* n. sp., *Saida? pulchra* n. sp.

SARTONI, S. & CRESCENTI, U., 1960-61, *Ricerche biostratigrafiche nel Mesozoico del-*

l'Appennino Meridionale: Giorn. Geol. vol. 29, pp. 161-304, tavv. 11-52, 1 tab. testo.

Sixteen stratigraphic series in mesozoic and paleocene autoctonous sediments in neritic and biostromal facies, outcropping in southern Apennines from southern Molise to Calabria, are described. Ten cenozones and three subzones ranging from Lias to the Paleocene have been defined on microfossil evidence. One algal genus and two species and three foraminifera species are described and illustrated as new: *Selliporella* n. gen., *S. donzellii* n. gen. n. sp., *Salpingoporella apenninica* n. sp., *Cuneolina camposaurii* n. sp., *C. laurentii* n. sp., *Pfenderina salernitana* n. sp.

SCANDONE, P., 1964, *Nota preliminare sui foraminiferi delle scogliere triassiche della Lucania*: Boll. Sc. Nat. Napoli, vol. 78, pp. 267-269.

A preliminary note is given about a triassic foraminiferal fauna from reef-limestones outcropping in Lucania. The occurrence of some genera usually considered by authors as paleozoic foraminifera only is pointed out.

SCANDONE, P. & SGROSSO, I., 1962, *Considerazioni su una presunta lacuna liassica nei Monti Picentini (Salerno)*: Rc. Acc. Sc. Fis. Mat. Soc. Naz. Sc. Lett. Arti Napoli, pp. 3-7, tavv. 1-2.

Paleontologic data resulting from a study in the Picentini M. area (Salerno) make it possible to prove the presence of the Lias. The existence of Infralias however is probable, but not unquestionably proved. The current idea of a hiatus in line with the Rhaetic and Lias must then be revised.

SCARSELLA, F., 1961, *Sulla presenza del Lias nell'Isola di Capri*: Acc. Sc. Fis. Mat. Soc. Naz. Sc. Lett. Arti Napoli, s. 4, vol. 28, pp. 391-394.

Grey limestones with « *Lithotis problematica* » of Middle- to Upper-Lias age, formerly found in several outcrops in the central and southern Apennines, have been found at Capri also, along the eastern and southern side of Solaro M. They present the characteristic facies and faunal associations of such beds. Structural conditions make it possible to suppose the outcropping in Capri of infralias or upper triassic levels also.

SERPAGLI, E., 1961, *Contributo alla conoscenza dei terreni oligo-miocenici del subappennino modenese*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 2, pp. 127-134, 1 fig. testo.

A thin marly bed lying between langhian arenaceous limestones and « argille scagliose », referred on foraminifera assemblage evidence to the Upper-Oligocene-Aquitania age is noticed for the first time in the region of Pescale-M. Scisso-M. St. Andrea (Apennines of Modena). This horizon lying in regular sequence with langhian sediments makes it possible to refer the local series overlying « argille scagliose » formation to an older age.

SERPAGLI, E., 1962, *Età paleogenica e non miocenica della formazione di Rio Giordano tra Pavullo e Lama Mocogno (Appennino Settentrionale Modenese)*: Nota: Acc. Naz. Lincei Rc. Cl. Sc. Fis. Mat. Nat., S. 8, vol. 33, fasc. 3-4, pp. 153-157, 1 fig. testo.

The first results of a micropaleontologic study of many samples from molassic sediments between Pavullo and Lama Mocogno (Apennines of Modena) are exposed. The molassic complex formerly considered as miocenica has to be placed in the Paleogene (probably Upper-Eocene) because of the occurrence of *Nummulites*, *Discocyclinae*, *Hantkeninae*, *Globorotalia aragonensis*.

SERPAGLI, E., 1963, *Livello ad argille variegiate del Cenomaniano Superiore-Turoniano, alla base del Flysch ad Elmintoidi (Appennino Settentrionale)*: Acc. Naz. Lincei, Rc. Cl. Sc. Fis. Mat. Nat., S. 8, vol. 35, fasc. 6, pp. 1-10.

The foraminifera assemblages of some samples from a varicoloured shaly horizon, 100-150 mt. thick, underlying the senonian calcareous flysch of Serramazzoni (Flysch ad Elmintoidi) make it possible to refer this horizon to Upper-Cenomanian-Turonian, and to correlate it with other similar shaly horizons in the northern Apennines.

SERPAGLI, E., 1964, *Ritrovamento di Flysch tipo M. Sporno nell'Appennino modenese: osservazioni geologiche*: Boll. Soc. Paleont. Italiana, vol. 3, n. 1, pp. 20-37, tavv. 5-8, 2 figg., 1 carta testo.

Some calcareous flysch outcrops in the Panaro Valley (South of Modena) are referred on micropaleontologic evidence to the Lower-Eocene, and an attempt at correlation is made with some similar flysch formations of the northern Apennines. Some microfaunistic characters are also discussed.

SERPAGLI, E., 1964, *Primo studio di Dinoflagellati e Istricosferidi del Mesozoico Italiano (Cretaceo Superiore, Appennino Settentrionale)*: Boll. Soc. Paleont. Italiana, vol. 3, n. 1, pp. 89-109,

Sixteen species of Dinoflagellates (including Hystrichosphaeres) and Acritarchs (of uncertain systematic position) from Upper-Cretaceous (Cenomanian-Turonian) of the northern Apennines are described and illustrated, and their stratigraphic significance is discussed.

SERPAGLI, E. & GRECO, A., 1964, *Osservazioni preliminari su alcuni Conodonti ordoviciani e siluriani delle Alpi Carniche italiane*: Boll. Soc. Paleont. Italiana, vol. 3, n. 2, pp. 192-211, tavv. 34-37, 1 fig. testo.

Twenty-eight Conodonts species from two lower-paleozoic horizons of the Italian Carnic Alps are described and illustrated. The Conodonts assemblages make it possible to refer the two horizons respectively to an Upper-Ordovician (Ashgillian) and a Silurian age.

SERPAGLI, E. & GRECO, A., 1965, *Documentazione paleontologica di Ashgilliano (Ordoviciano superiore) nel versante sud del M. Zermula (Alpi Carniche italiane)*: Atti e Mem. Acc. Naz. Sc. Lett. Arti Modena, S. 6, vol. 7, pp. 3-12, tavv. 1-2.

A conodont assemblage is studied from a series outcropping in the southern side of Zermula M. (Italian Carnic Alps). The assemblage confirms the occurrence of a Ashgillian horizon in the zone.

SGANGA, P., 1964, *La sezione stratigrafica calabriana di Naso (Messina)*: Riv. Min. Siciliana, A. 14, n. 82-84, pp. 3-23, tavv. 1-11.

Foraminiferal microfauna from the stratigraphic section of Contrada Feudo (Naso, Messina, Sicily) makes it possible to refer the section to an Upper-Calabrian age. Comparison with similar calabrian assemblages is made.

SGROSSO, I., 1962, *Calcari a Cladocoropsis: orizzonte guida del Malm nell'Appennino Meridionale*: Rc. Acc. Sc. Fis. Mat. Soc. Naz. Sc. Lett. Arti Napoli, S. 4, vol. 29, pp. 3-6, tav. 1.

Cladocoropsis limestones are mentioned for the first time in Italy, from several localities of the southern Apennines. *Cladocoropsis* limestones represent a very good marker of the Malm in many countries of the mediterranean basin and in Japan.

SIGNORINI, R. & DEVOTO, G., 1962, *Il Paleogene nell'alto Molise*: Mem. Soc. Geol. Italiana, vol. 3, pp. 461-511, tavv. 1-3.

Structural and stratigraphic conditions of the zone between Isernia and Frosolone (Molise, southern Italy) are studied and exposed by Signorini. Samples from four sections have been studied from a micropaleontologic stand-point by G. Devoto. The most significant Paleogenic species are described. Two species and one subspecies: *Karrerella bulloides*, *Orthomorphina molisana*, *Spiroplectamina apenninica spinosa*, are described and illustrated as new.

SIRNA, G., 1962, *Stratigrafia e microfacies dei lembi mesozoici della Valle di Galati Mamertino (Sicilia Nord-Orientale)*: Geologica Romana, vol. 1, pp. 191-203, tavv. 1-4.

Stratigraphy and microfacies of two mesozoic nappes in the area of Galati Mamertino (northeastern Sicily): « Longi nappe » and « Galati nappe » are studied and exposed. The former ranges from Lower-Lias to Upper-Cretaceous, the latter from Middle-Lias to Middle-Malm. Stratigraphic conclusions are based on the study of microfaunistic assemblages and their comparison with some coeval ones.

SIRNA, G., 1963, *Aptian Charophyta of Southern Latium*: Geologica Romana, vol. 2, pp. 279-290, 13 figg. testo.

Occurrence of *Atopochara trivolis* Peck and *Clavator harrisi* Peck among many remains of Charophyta is noticed for the first time in Italy. The two species make it possible to refer the clayey-marly level interbedded with limestones and dolomitic limestones of the « Laziale-Abruzzese » mesozoic series (Lepini, Ausoni and Aurunci ranges, southern Latium Apennines) from which they come, to the Aptian age. A new species, *Atopochara reti-*

culata n. sp. is described and illustrated. Sedimentary environment of the clayey-marly horizon is discussed.

TEDESCHI, D., 1961, *Nota paleontologica introduttiva allo studio stratigrafico del versante appenninico padano eseguito dal 1955 al 1959 dai paleontologi dell'Agip Mineraria*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 1, pp. 105-110.

Geological mapping of the apenninic side of the Po Valley, based on formational criteria and carried out by Agip Mineraria during a wide programme of oil research in northern Italy, allowed the stratigraphic-paleontologic study of « autochthonous and allochthonous » formations outcropping in the zone. A great number of surface samples has been examined, chronostratigraphic correlations between autochthonous and allochthonous sections and comparisons between Italian and foreign faunas have been made.

TEDESCHI, D. & COCOCETTA, V., 1961, *Stratigrafia della serie di Costa Merlassino*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 1, pp. 139-145, tavv. 1-4.

Results of a micropaleontologic study of the formations outcropping near Costa Merlassino (Apennines of Liguria-Piemonte) are given. The formations studied range from the eocenic « M. Dosso limestones » and the oligocenic « Poligenic conglomerate ».

TEDESCHI, D. & PAPETTI, I., 1964, *On the occurrence of Pseudolituonella in Libya*: Rév. Micropaleont., vol. 7, n. 3, pp. 180-187, tavv. 1-2, 2 figg. testo.

Occurrence of *Pseudolituonella reicheli* Marie in Middle-Eocene well samples in Libya is pointed out. *Pseudolituonella* has been found up to now in cretaceous formations only. The inner structure of this species is examined in detail on oriented thin sections of free specimens.

VANOSI, M., 1963, *Segnalazione di una microfauna di età titonica nei calcari a facies di « Guillestre » della Val Tanarello (Alpi Marittime)*: Boll. Soc. Geol. Italiana, vol. 82, fasc. 3, pp. 3-9, tav. 1, 1 fig. testo.

A microfauna from samples from limestones in analogous facies to the « marbres de Guillestre »

outcropping in the Tanarello Valley, makes it possible to confirm on the paleontological evidence the Titonic age of these sediments. Occurrence of schistous limestones containing *Globotruncanae* is also noticed to the South of the titonic limestones.

VILLA, F., 1961, *Su alcune microfacies dell'Afghanistan occidentale*: Riv. Italiana Paleont. Strat., vol. 62, n. 4, pp. 393-404, tav. 31-32.

Microfacies of paleozoic, cretaceous and paleogenic samples collected by prof. A. Desio in western Afghanistan are described. They show interesting foraminiferal and algal associations. Photos of the more typical ones are given.

VILLA F. & POZZI, R., 1962, *Microfacies e microfauna del Mesozoico dell'alta Valtellina (Alpi Retiche)*: Riv. Italiana Paleont. Strat., vol. 68, n. 4, pp. 447-482, tavv. 31-36, 2 figg. testo.

Some microfacies from Upper-Triassic and Lower-Liassic outcrops in the high Valtellina (Rhetic Alps), and an assemblage with Calpionellids and *Stomiosphaera* of the Titonic of Piz d'Esen are described and illustrated. The authors record for the first time a planktonic cenomanian microfauna at the top of the Piz d'Esen sequence.

WEZEL, F. C., 1964, *Uvigerina torquata, nuova specie del Pliocene Siciliano*: Riv. Italiana Paleont. Strat., vol. 70, n. 1, pp. 139-142, tav. 9.

The new species *Uvigerina torquata* n. sp. from Middle-Pliocene calcareous marls of south-central Sicily is described and illustrated.

WEZEL, F. C., 1964, *Il Pliocene e Pleistocene di S. Michele di Ganzaria (Catania)*: Riv. Italiana Paleont. Strat., vol. 70, n. 2, pp. 307-380, tavv. 23-27, 2 figg., 2 tab. testo.

Foraminifera assemblages from marly-arenitic formations lying over the sulphur series in S. Michele di Ganzaria area (southwest of Catania, Sicily) have been examined. Studied sediments range from Middle-Pliocene to the Sicilian age.

ZALAFFI, M., 1963, *Segnalazione di un livello con piccole coproliti fosfatiche e glauconitiche nel Miocene del Lazio me-*

ridionale: Geologica Romana, vol. 2, pp. 331-341, 8 figg. testo.

A thin layer with many phosphatic fecal pellets with glauconitic grains is mentioned from southern Latium, at the bottom of the so called « strati di Ausonia » formation underlying the clastic sedimentary cycle dating from Upper-Helvetian to Sarmatian age. The ecologic significance of this coprolite layer is made evident.

ZANFRÀ, S., 1961, *I foraminiferi di due lembi del Pliocene superiore della Riviera di Ponente (Imperia-Ventimiglia)*: Boll. Soc. Geol. Italiana, vol. 80, fasc. 3, pp. 3-9, tav. 1, 1 fig., 1 tab. testo.

The micropaleontologic study of some samples of clays from two localities between Imperia and Ventimiglia (northwestern Italy) makes it possible to date them to the Upper-Pliocene.

ZANFRÀ, S., 1963, *Osservazioni micropaleontologiche della serie dei terreni dal Cretaceo medio al Miocene inferiore sul bordo orientale del Massiccio del Matese (Italia meridionale)*: Mem. Soc. Geol. Italiana, vol. 4, pp. 1-7, tavv. 1-4, 1 fig., 1 tab. testo.

A great number of samples collected to the east of the Matese Massif (Southern Italy) in a northward-trending zone about 20 Km long and 10 Km wide, have been studied from a micropaleontologic standpoint. Typical microfaunas have

been recognized of the stages from the Middle-Cretaceous to the Lower-Miocene age.

ZANFRÀ, S., 1964, *Indagine biometrica sulla Bolivina dilatata Reuss (Foram.) nei piani Elveziano, Tortoniano, Piacenziano, Astiano e Calabrian del'Appennino Bolognese (Nord-Italia)*: Cursos y Conferencias, Inst. Lucas-Mallada C.S.I.C. (España), 9, pp. 123-130.

Results of a study on 500 micro- and macro-sphaeric specimens of *Bolivina dilatata* (Reuss) from samples ranging from Helvetian to Calabrian in the Apennines of Bologna (northern Italy) confirm that individuals of a same species vary in time, if their length and breadth as subordinate variables is considered.

ZANIN BURI, C., 1965, *Il Trias in Lombardia (Studi geologici e paleontologici)* 13. *Le Alghe calcaree delle Prealpi Lombarde*: Riv. Italiana Paleont. Strat., vol. 71, n. 2, pp. 449-544, tavv. 42-64, 1 fig. testo.

Eighteen forms of calcareous Algae from samples collected in the Triassic formations of several localities in Lombardia are described and illustrated, and their stratigraphic range is indicated. Among them three species and three subspecies are proposed as new: *Macroporella retica* n. sp., *Gyroporella anisica* n. sp., *Andrusoporella longobardica* n. sp., *Physoporella pauciforata variabilis* n. subsp., *Gyroporella vesiculifera plumosa* n. subsp. *Griphoporella curvata cistiformis* n. subsp.

NOTICE — The abstracts concerning a lot of papers dated 1965 but issued only later, and those concerning other papers unwittingly omitted in the present report will be included in the next report which will be issued soon. The writer apologizes for all unavoidable omissions. The authors of omitted papers are invited either to notice any lacking or possibly to send the reprints to the writer.