

Sergio BRAVI*

A TENTATIVE REASSESSMENT OF THE FAUNA AND FLORA FROM THE PIETRAROJA PLATTENKALK (BN).

The Pietrarroja's fossil collection, a large part of which is actually stored in the Museum of Palaeontology of the University of Naples, needs a complete revision on the grounds of the modern taxonomy.

A provisional bringing up to date of the fauna and flora assemblage and of the nomenclature used by D'Erasmus (1915) is proposed here. It is partly based on the classification reported in R. L. Carroll (1988) and partly on recent papers which deals with some old and new taxa from this site.

The taxa marked by an asterisk (*) have been recently revised (see the brackets). The taxa marked by two asterisks have been examined by the writer, but not published. The names written in bold-face indicate new taxa which have been identified after 1915 and, if marked by an asterisk, also published.

NOMENCLATURE USED BY D'ERASMO (1915)

PLANTS

ECHINODERMS

BIVALVS

DECAPOD CRUSTACEANS

(?) *Pseudastacus* sp.

FISHES

Rhinobatus obtusatus COSTA

(?) *Phorcynis* sp.

Coelodus costai HECKEL

Palaeobalistum bassanii D'ERASMO

Notagodus pentlandi AGASSIZ

REVISED NOMENCLATURE AND NEW TAXA

PLANTS

Zamites? sp.1

Zamites? sp.2

Brachyphyllum sp.

Leafs, seds? and undetermined remains

ECHINODERMS

Asteroidea gen. e sp. indet.

Ophuroidea gen e sp. indet.

BIVALVS

Rudists?

Undetermined casts of small bivalvs

DECAPOD CRUSTACEANS

*Astacidea: gen. and species not determined

**Huxleycaris beneventana* BRAVI & GARASSINO

**Parvocaris samnitica* BRAVI & GARASSINO

**Micropenaeus tenuirostris* BRAVI & GARASSINO
(rev.: Bravi & Garassino, 1998)

FISHES

Rhinobatos obtusatus COSTA

(?) *Phorcynis* sp.

***Coelodus costae* HECKEL

Palaeobalistum bassanii D'ERASMO

**Notagodus pentlandi* AGASSIZ

(rev.: Bravi,1994)

* Dipartimento di Scienze della Terra, Universita' di Napoli "Federico II. Largo San Marcellino, 10. 80138 - Napoli.

Propteris scacchii COSTA
Lepidotus minor AGASSIZ
Belonostomus crassirostris COSTA
Belonostomus sp.
Oeonoscopus petraoiaie COSTA
Leptolepis brodiei AGASSIZ
Aethalion robustus TRAQUAIR
Sauropsidium laevisimum COSTA
Elopopsis aff. *fenzli* HECKEL
Hemielopopsis gibbus KRAMBERGER
Hypsospondylus bassanii KRAMBERGER
Chanos leopoldi COSTA
Chirocentrites coroninii HECKEL
Diplomystus brevissimus (DE BLAINV.)

 (Bravi, 1988)

AMPHIBIANS

Triton (?) megacephalus COSTA

REPTILES

Chometokadmon fitzingeri COSTA
 (rev.: Barbera & Macuglia, 1988)
Polysemia apennina COSTA
 (rev.: Barbera & Macuglia, 1988)

***Propteris scacchii* COSTA
 ***Lepidotus* sp.
 ***Belonostomus crassirostris* COSTA
 ***Belonostomus* cf. *crassirostris* COSTA
Ionoscopus petraoiaie COSTA
 ***Clupavus* sp.
Anaethalion robustus TRAQUAIR
 ?*Sauropsidium laevisimum* COSTA
Elopopsis aff. *fenzli* HECKEL
 ?*Hemielopopsis gibbus* KRAMBERGER
 ?*Hypsospondylus bassanii* KRAMBERGER
 **?*Chanos leopoldi* COSTA
Chirocentrites coroninii HECKEL
 **?*Diplomystus* n. sp.
 **Pleuropholis decastroii* BRAVI

AMPHIBIANS

**Celtdens megacephalus* (COSTA)
 (rev.: Mc Gowan & Evans, 1995)

REPTILES

* *Chometokadmon fitzingeri* COSTA

**Costasaurus rusconi* (COSTA)

**Derasmosaurus pietraoiaie* BARBERA
 (rev.: Barbera & Macuglia, 1988)
Mesosuchidae gen. e sp. indet.

**Scipionyx samniticus* DAL SASSO & SIGNORE
 (Leonardi & Teruzzi, 1993; Dal Sasso & Signore, 1993)

REFERENCES

- BARBERA C. & MACUGLIA L., 1988 - Revisione dei Tetrapodi del Cretacico inferiore di Pietraraja (Matese orientale, Benevento) appartenenti alla collezione Costa del Museo di Paleontologia dell'Universita' di Napoli. Mem. Soc. Geol. It., 41: pp. 567-574.
- BRAVI S., 1988 - Contributo allo studio de giacimento ad ittiliti di Pietraraja (Benevento). I. *Pleuropholis decastroii* n. sp. (Pisces, Actinopterygii, Pholidophoriformes). Mem. Soc. Geol. It., 41, pp. 575-586.
- BRAVI S., 1994 - New Observations on *Notagogus pentlandi* AGASSIZ (Pisces, Actinopterygii, Halecostomi, Macrosemiidae). Boll. Soc. Pal. It., 33 (1), 1994; pp.51-70.
- BRAVI S. & GARASSINO A., 1998 - New biostratigraphic and palaeoecologic observations on the "Plattenkalk" of the lower Cretaceous (Albian) of Pietraraja (Benevento, S-Italy), and its decapod crustaceans assemblage. Atti Soc. It. Sci. Nat. Museo civ. Stor. nat. Milano, 138/1997 (I-II): 119-171.
- CARROL R. L., 1988 - Vertebrate paleontology and evolution. Freeman ed. U.S.A., 698 pp.
- DAL SASSO C. & SIGNORE M., 1998 - Exceptional soft-tissue preservation in a theropod dinosaur from Italy. Nature, vol. 392/26 march 1998. pp. 383-387.

D'ERASMO G., 1915 - La fauna e l'eta' dei calcari ad ittioliti di Pietraroia (Prov. di Benevento). *Palaeontogr. Ital.*, Pisa. 21/1915: 1-53.

LEONARDI G. & TERUZZI G., 1993 - Prima segnalazione di uno scheletro fossile di dinosauro (Theropoda, Coelurosauria) in Italia (Cretacico di Pietraroia, Benevento). *Paleocronache*, 1, Jaca Book. (in/out ed.): pp. 7-14. Milano.

McGOWAN G. & EVANS S. E., 1995 - Albanerpetontid amphibians from the Cretaceous of Spain. *Nature*, 373: pp.143-145.

