

# IL NATURALISTA SICILIANO

*Organo della Società Siciliana di Scienze Naturali*

## *Volume contents*

- Ostracodophili** *From Naples 1963 to Rome 2013 – a brief review of how the International Research Group on Ostracoda (IRGO) developed as a social communication system* pp. 13-17
- J.A. Aguilar-Alberola & F. Mesquita-Joanes** *The hatching process in Cyprididae ostracods: morphology and function of the A-9 stage* pp. 19-20
- G. Aiello, D. Barra & R. Parisi** *Variability in ornament and shape of the genus Urocythereis from a southern Italy bay (Ionian Sea)* pp. 21-24
- D. Akdemir & O. Külköylüoğlu** *On the relationship between climatic changes and ecology of ostracods in Hatay, Region Turkey* pp. 25-26
- L.G. Akita, P. Frenzel & N. Börner** *The recent ostracod fauna of Tangra Yumco Lake System, Central Tibetan Plateau* pp. 27-30
- C.M. de Almeida & D.A. Do Carmo** *Taxonomy and palaeoenvironmental evolution of Late Cretaceous ostracodes from offshore Santos Basin, southern continental margin, Brazil* pp. 31-32
- C.M. de Almeida & D.A. Do Carmo** *The first ostracods species of Permian/?Triassic from Paraná Basin, central Brazil* pp. 33-34
- C.A. Alvarez Zarikian** *Ostracoda in deep ocean Cenozoic Paleogeography: from regions of deep water formation to ultraoligotrophic environments* pp. 35-38
- L. Antonietto, A. Abrahão, D.A. Do Carmo & R. Meireles** *Taxonomic, biostratigraphic and palaeozoogeographic aspects of Amphicytherura Butler & Jones, 1957 and Aracajuia Krömmelbein, 1967 (Cytheridae, Schizocytherinae)* pp. 39-40

- A. Stepanova, E. Taldenkova & R.F. Spielhagen** *Postglacial environmental changes at the eastern Laptev Sea continental margin based on ostracod assemblage study* pp. 381-383
- M. Stoica** *The Cypridea genus in Purbeckian sediments from South Dobrogea (Romania)* pp. 385-387
- M. Stoica, A. Floroiu, W. Krijgsman & I. Vasiliev** *Upper Miocene ostracods from the Black Sea (Taman Peninsula; Russia)* pp. 389-391
- G. Tanaka, H. Ohtani, K. Kato, S. Nomura & D.J. Siveter** *Exceptionally preserved Holocene fossil ostracods in tsunamigenic sediments* pp. 393-394
- E. Tesakova** *Ostracoda, genus Palaeocytheridea Mandelstam, 1947 from the Middle and Upper Jurassic of Europe: revision, stratigraphy, paleobiogeography* pp. 395-398
- J. Tiemi Matsuda, R.P. Mormul, F.A. Lansac-Tõha, K. Martens & J. Híguti** *Habitat complexity and the Ostracoda (Crustacea) community in a tropical floodplain* pp. 399-400
- T. Tsourou, H. Drinia & G. Anastasakis** *Ostracod assemblages from Holocene middle shelf deposits of southern Evoikos Gulf (central Aegean Sea, Greece) and their palaeoenvironmental implications* pp. 401-403
- T. Tsourou, K.P. Pavlopoulos, J.-P. Goiran & E. Fouache** *Palaeoenvironmental evolution of Piraeus (Attica, Greece) during Holocene based on ostracod assemblages* pp. 405-407
- A. Tuncer, C. Tunoğlu, Ö. Sümer & U. İnci** *Early Pleistocene Ostracoda assemblage and palaeoenvironmental characteristics of the Fevzipasa Formation, Söke, western Turkey* pp. 409-410
- C. Tunoğlu, A. Tuncer, N. Özgen & Ö. Kangal** *Oligocene Ostracoda from the Sivas Basin (central Anatolia, Turkey)* pp. 411-412
- M. Vesel-Lukić, V. Hajek-Tadesse & M. Poljak** *Late Miocene Ostracoda from Bizeljsko section (eastern Slovenia)* pp. 413-414
- F.A. Viehberg, S. Assonov, U.B. Ülgen, N. Çağatay, T. Litt & M. Melles** *A multi-proxy approach based on a Late Pleistocene/Holocene ostracod record from Lake İznik (Turkey)* pp. 415-416
- F.A. Viehberg, A. Hasberg, N. Rohn & S. Trajanovski** *News from the endemic ostracod fauna from lakes Prespa and Ohrid (Albania, Greece, Macedonia)* pp. 417-418
- C. Vittori, I. Mazzini, F. Salomon, J.-P. Goiran, S. Pannuzi & A. Pellegrino** *Ostracodology and palaeoenvironment in an-thropic context: the Ostia palaeo-lagoon case* pp. 419-423

ALAEETTİN TUNCER, CEMAL TUNOĞLU, ÖKMEK SÜMER & UĞUR İNCİ

EARLY PLEISTOCENE OSTRACODA ASSEMBLAGE  
AND PALEOENVIRONMENTAL CHARACTERISTICS  
OF THE FEVZIPASA FORMATION, SÖKE, WESTERN TURKEY

The study area is located about 40 km west of Aydın district in western Turkey. This area includes Neogene to Quaternary sediments. The Fevzipasa Formation unconformably overlies the Miocene rock units. It includes conglomerates, sandstones, mudstones, marls, limestones and tuff layers and unconformably overlain by recent deposits of the Söke – Milet Basin (SÜMER *et al.*, 2013a). The lower part of the Fevzipasa formation is represented by coarse clastics and lacustrine carbonates. This lower part is overlain by mollusca shells-bearing fine to coarse-grained sandstones. Prominent tuff layers (lower and upper tuff layers) of this dominantly sandstone succession were radiometrically dated between roughly 2 and 1 Ma (SÜMER *et al.*, 2013b). Based on small mammal fauna (ÜNAY *et al.*, 1995; ÜNAY & GOKTAS, 1999; SARICA, 2000) the age of the upper part is Early to Late Pleistocene age.

To investigate the palaeoenvironmental evolution of the succession, forty-two samples were collected along two stratigraphic sections. Ostracoda assemblages together with Chara flora, Gastropoda and Bivalvia faunas and fish remains were recovered from only twenty-nine samples. Ostracod assemblages include *Candona neglecta*, *C. parallela pannonica*, *Pseudocandona* sp., *Cyclocypris ovum*, *Ilyocypris gibba*, *I. bradyi*, *Heterocypris salina* and *Scottia pseudobrowniana*. In addition to these, fish remains belonging the Cyprinidae family (*Tinca* sp., *Leuciscus* sp., *Leuciscus etilius*) and Characeae gyrogonites referable to *Nitellopsis obtusa*, *Chara* sp., *C. aspera*, *C. globularis*, *C. hispida*, *C. vulgaris*, *Lychnothamnus* sp. and *Sphaerochara* sp. occurred in the samples.

Overall the ostracod, fish and gyrogonites records indicate that the

Fevzipasa Formation was deposited in a palaeoenvironmental setting characterized by permanent and shallow water bodies. According to determined ostracoda fauna assemblage, age of the investigated levels of this formation is Pleistocene (MEISCH, 2000). By combining all these data, it can be suggested that the age of the upper part of the Fevzipasa Formation is Pleistocene.

## REFERENCES

- MEISCH C., 2000. Freshwater Ostracoda of Western and Central Europe. Süßwasserfauna von Mitteleuropa 8/3. Spektrum Akad Vlg, Gustav Fischer, Heidelberg, Berlin: 522 pp.
- ÜNAY F., GÖKTAS F., HAKYEMEZ H.Y., AVSAR M. & SAN Ö., 1995. Dating of the exposed at the northern part of the Büyük Menderes Graben (Turkey) on the basis of Arvicolidae (Rodentia, Mammalia). *Geological Bulletin of Turkey.*, Volume 38 (2): 75-80.
- ÜNAY F. & GÖKTAS F., 1999. Late Early Miocene and Quaternary small mammals in the surrounding of Söke (Aydın): Preliminary results. *Geological Bulletin of Turkey*, 42 (2): 99-113.
- SARICA N., 2000. The Plio – Pleistocene age of Büyük Menderes and Gediz grabens and their tectonic significance on N-S extensional tectonics in West Anatolia: mammalian evidence from the continental deposits. *Geological Journal*, 35: 1-24.
- SÜMER Ö., İNCİ U. & SÖZBİLİR H., 2013a. Tectonic evolution of the Söke Basin: Extension-dominated transtensional basin formation in western part of the Büyük Menderes Graben, Western Anatolia. *Journal of Geodynamics*, 65: 148-175.
- SÜMER Ö., İNCİ U. & SÖZBİLİR H., 2013b. Under review. First report of sedimentary evidence for sea level change in Pleistocene shallow marine fan-deltaic successions of the Fevzipaşa Formation, Western Anatolia Turkey. *Journal of Quaternary Science*.

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