

PRESENCE OF THE MIDDLE-UPPER TRIASSIC IN THE AUTOCHTONOUS GEYİKDAĞI UNIT OF THE EASTERN TAURUS (SARIZ-TUFANBEYLİ REGION, KAYSERİ)

Baki VAROL*, Nizamettin KAZANCI* and Demir ALTINER**

Mesozoic carbonates of Sarız-Tufanbeyli area located in the eastern extension of the Geyikdağı unit which represents the autochthon of the Taurus belt. These carbonates form a NE-SW trending belt of 20 km width limited by Binboğa and Soğanlı dağı allochtons. In the studies of Demirtaşlı (1967), Özgül et al. (1973), Erkan et al. (1978), Aziz et al. (1980, 1982), Metin et al. (1982) which present the stratigraphy and geologic maps of the region, the Lower Triassic corresponding to the Katarası formation has been recognized and the Middle to late Triassic has been interpreted as a period of emergence and erosion (Fig. 1). However, there are some facies developments of Middle to Upper Triassic age interrelated between the Lower Triassic (Katarası formation) and the overlying Köroğlutepe formation of Jurassic to Lower Cretaceous age. Although some parts of these facies are difficult to recognize because of the intense dolomitization, the parts which escaped from dolomitization exhibit mappable outcrops in the region. The Middle-Upper Triassic recognized in three measured stratigraphic sections (Fig. 1) shows the following facies characteristics:

- In Yüceyurt section, *Endothyra* sp. and dasycladacean algae in the cavities of the green algae biolithids, *Endothyranella* sp., *Trochammina* sp. and Duostominidae in the foraminiferal mudstones and Sphaerecodium oncoids in the oncoidal packestones-wackestones represented by nodular limestones;
- In Gümelek tepe section, traces or well preserved specimens of *Aulotortus* gr. *sinousus* Weynschenk, *Aulotortus* sp., *Trochammina* sp., Nodosariidae in the dolomitic limestones alternating with massive dolomites;
- In Ayvat section, *Nodosaria ordinata* Trifanova in the foraminiferal packestones, *Endothyranella* sp., *Griphoporella cur-vat a* Gümbel and Prostromate algae with a complex internal structure in the algal-foraminiferal mudstones-wackestones.

Similar reef facies which are recognized among these various facies types defined by uppermost Middle and Upper Triassic associations (Zaninetti, 1976) have been also described from the Panaromi carbonate platform in Sicily (Abbate et al., 1977) and Sphaerecodium oncoids have been illustrated from the German and Austrian Alps (Peryt, 1977).

In conclusion, the presence of a reefal and dolomitic Middle-Upper Triassic sequence has been proved in the Triassic section of the Geyikdağı autochthon which is thought to be composed of only the Lower Triassic rocks.

REFERENCES

- Abbate, B.; Catalano, R.; D'argenio, B.; Distefano, P. and Riccobono, R., 1977, Relationships of algae with depositional and faunal assemblages of the Penormide carbonate platform, Upper Triassic, North-Western Sicily; in: Flügel, E. (ed.), *Fossil Algae*, 301-313.
- Aziz, A. and Erakman B., 1980, Tufanbeyli (Adana)-Sarız (Kayseri)-Gürün (Sivas) ilçeleri arasında kalan alanın jeolojisi ve hidrokarbon olanakları: TPAŞ Rep., 1526 (unpublished), Ankara.
- ; —; Kurt, G. and Meşhur, M., 1982, Pınarbaşı-Sarız-Gürün illeri arasında kalan alanın jeoloji raporu: TPAŞ Rep., 1601 (unpublished), Ankara.
- Demirtaşlı, E., 1967, Pınarbaşı-Sarız-Mağara ilçeleri arasında kalan sahanın stratigrafik birimleri ve petrol imkanları: MTA Rep. 4389 (unpublished), Ankara.
- Erkan E.; Özer, S.; Sümengen, M. and Terlemez, İ., 1978, Sarız-Şarkışla-Gemerek-Tomarza arasındaki temel jeolojisi: MTA Rep., 6546 (unpublished), Ankara.
- Metin, S.; Papak, İ.; Keskin, H.; Özsoy, İ.; Polat, N.; Altun, İ., İnanç A.; Hazinedar, H.; Konuk, O. and Karabaklı, N.N., 1982, Tufanbeyli-Sarız ve Göksun-Saimbeyli arasındaki jeolojisi: MTA Rep., 7129, (unpublished), Ankara.
- Özgül, N., 1976, Toroslar'ın bazı temel jeolojik özellikleri: TJK Bull., 19, 65-78.
- ; Metin, S.; Göger, E.; Bingöl, İ. and Baydar,O., 1973, Tufanbeyli dolayının Kambriyen ve Tersiyer kayaları: TJK. Bull., 16, 82-100.
- Peryt, T. M., 1977, Environmental significance of foraminiferal algal oncolites, 56-65: in: Flugel, E. (ed.), *Fossil Algae*, Springer Verlag, New York-Heidelberg, 375 p.
- Zaninetti, L., 1976, Les foraminifères du Trias. Essai de synthèse et correlation entre les domaines mesogéen et asiatique: Riv. Ital. Paleont., Strat., 82/1, 1-258.