their abundance, and various proportions of process length and vesicle diameter. The genus high disparity resulted in a number of species described but it may reflect instead the infraspecific variability, ecological adaptation and/or various stages in the development of this cyst-builder. The discovery of specimens with the internal body suggests that the *Skiagia* microorganism produced process-bearing cyst, the outer envelop surrounding the cyst or a vegetative cell occasionally preserved, and a reproductive/dormant internal cell. There are probably three stages in the life cycle of *Skiagia* although only the acanthomorphic cysts are commonly preserved as Cambrian microfossils. This first record of the acanthomorphic cyst with internal fruiting cell is from South Australia, the Arrowie Basin, but the genus *Skiagia* is worldwide distributed in the Lower and Middle Cambrian strata.

Cretaceous palynostratigraphy of Southeastern Anatolia, Turkey

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Southeast Anatolian Region is located at the northern edge of the Arabian Plate. Following Neocomian nondepositional period, five shallowing upward cyclic sedimentational phases were distinguished in the Southeastern Anatolia during Cretaceous (Ertug 1991). In an ascending order, Aptian-Albian Areban Formation, Cenomanian Derdere Formation, Santonian A-member of Karababa Formation, Campanian Karabogaz Formation and Maastrihtian lower-member of Germav Formation were deposited in the SE. Anatolia related to regional transgressions at the beginning of the sedimentational phases (Bond 1972, Ertug 1990, Ertug *et al.* 1990). Although, some parts of Cretaceous sediments are palynologically barren due to the unsuitable lithologies, these transgressional successions consist of shale, marl and limestone intercalations, and yield rich and well-preserved palynomorph assemblages consist of dinoflagellates, spores-pollen and acritarchs of which for the stratigraphic purposes, dinoflagellate cysts turned out to be the most indicative group of palynomorphs.

The purpose of this study is to document the dinoflagellate, spores-pollen and acritarch assemblages from these units and discuss their bio-chronostratigraphic correlations with similar Cretaceous successions in adjacent areas. For this purpose, 21 wells have been palynologically studied, and 67 dinoflagellate species belonging to 36 genera, 34 spores-pollen species belonging to 21 genera and 4 acritarch species belonging to 2 genera have been determined. Morphology and taxonomy of some selected taxa are also discussed (Herngreen & Chlonova 1981, Srivastava 1972).

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Características palinológicas del Cretácico Superior y del tránsito Cretácico-Terciario en los Pirineos Sur-Centrales

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Se han estudiado medio centenar de asociaciones palinológicas de los Pirineos sur-centrales, de edad Campaniense superior a Maastrichtiense superior y del tránsito Cretácico-Terciario, procedentes de las Formaciones Tremp, Laspún (capas rojas) y Arén (areniscas litorales), ocasionalmente asociadas a restos de dinosaurios. Además se han analizado los resultados de los estudios realizados por otros autores en muestras del mismo intervalo temporal y de la misma zona geográfica.

En su conjunto dominan formas polínicas de plantas de ecosistemas continentales costeros (helechos, palmeras) y de formas acuáticas de carácter margino-litoral con influencia marina (algas planctónicas, quistes de dinoflagelados y foraminíferos).

En las series analizadas palinológicamente en el intervalo Campaniense superior-Maastrichtiense destaca la presencia de pólenes anemófilos de Coníferas como *Pinuspollenites* y *Araucariacites* que habitan en zonas altas relativamente secas. En numerosas muestras de las series de Vicari, Montrebei, y Fontllonga abunda el morfotipo *Cycadopites* atribuido a plantas de carácter termófilo. Las esporas más comunes en las distintas secciones de este intervalo (*Cyathidites, Leiotriletes, Cicatricosisporites*) son de helechos termófilos y de cierto grado de humedad. En general el clima de la zona en el Campaniense superior-Maastrichtiense debió de ser cálido y relativamente húmedo.

El Maastrichtiense superior ha sido estudiado tanto al norte como al sur de la cuenca. Al norte, Blasi-2 presenta una palinoasociación de carácter continental pobre en taxones y en grana. Destaca la presencia significativa de monocolpados. La serie de Campo es marina en los tramos inferiores (Formación Arén) caracterizados por la paridad entre los palinomorfos