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## Àngel Ginés (1950 – 2024)

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Àngel Ginés in Àrta Cave in 2013 (photo: B.P. Onac).

The scientific community and the Balearic caving community recently suffered a loss with the passing of Àngel Ginés. He was a dedicated scientist, cherished for his amiable nature, impactful teaching, and his association with the world of caves, contributing significantly to the study and dissemination of karst knowledge.

Àngel's speleological journey began in the late 60s when, alongside his inseparable brother Joaquín and other young enthusiasts, he pioneered the exploration of unknown passages in Coves des Màrmol (Calvià, Mallorca). This experience profoundly influenced and strengthened Àngel's passion for speleology, playing a crucial role in shaping his subsequent contributions within the *Grup Espeleològic EST*, intensifying the explorations of Mallorca's classic caves. From the early years, he showed a keen interest in the topography of Mallorcan endokarst formations, collaborating with other local caving teams such as the *Grup Nord de Mallorca*, and *Speleo Club Mallorca*.

A key moment occurred in 1972 when Àngel actively participated in the topography of Cova de Sa Bassa Blanca (Alcúdia, Mallorca), collaborating with colleagues from *Speleo Club Mallorca*. The visits and explorations to this cave marked a significant milestone, initiating the study of Pleistocene marine paleolevels through phreatic speleothems existing in littoral caves; a theme that remained a constant presence throughout his career, always working closely with his brother Joaquín involved as well in caves and karst research. This period also corresponds to the beginning of his collaboration with the academic and scientific speleological communities worldwide, initiating a continuous publication effort that extended to the majority of Mallorcan coastal caves.

In 1981, he, along with other members of the HADES team, was awarded the City of Palma Research Award for the study of Pleistocene phreatic crystallizations found in Mallorcan littoral caves.

Subsequently, his research endeavors were complemented by a commitment to disseminating karst knowledge. Notably, he authored the script for the documentary movie *El laberint subterrani*, focusing on the Cova des Pas de Vallgornera (Llucmajor, Mallorca). The film was presented in 2000 to the International Speleology Film Festival in La Chapelleen-Vercors (France) and received the prize of best exploration film, with Àngel accepting it on behalf of the entire team.

He was a member of the *Societat d'Història Natural de les Balears* (SHNB), where he held various positions between 1981 and 1992. It was in the *Bolletí de la SHNB* that he, alongside his brother, published his first scientific article in 1970.

His dissemination and management work continued, serving as the Director of the *Museu Balear de Ciències Naturals*, in Sóller, from 1991 to 1996. Under his leadership, the Museum and the Botanical Garden successfully met the challenging task of opening to the public in 1993.

His scientific contributions in national journals as Endins, the Monographs de la the Societat d'Història Natural de les Balears or Papers de la Societat Espeleològica Balear, among others, were complemented by publications in international scientific journals of great prestige, including Science and Nature. His body of work comprises over two hundred titles covering the exploration and topography of cavities, the history of speleology, various aspects of exokarst and endokarst, cave flora, and biospeleology. The latter topic was the focus of his MS thesis in 1982, titled Bioespeleology of Mallorcan karst, preliminary ecological data. This theme is related to one of the last publications signed by Àngel, where he collaborated on the reference book: Inhabitants of the darkness. *Ibero-Balearic fauna of the caves* (2023). Angel actively participated in numerous meetings and conferences related to karst, offering courses, and disseminating knowledge since the early stages of his speleological engagement. Additionally, he coedited and co-authored several reference books on karren, such as *Karren landforms* (1996) and *Karst rock features: Karren sculpturing* (2009), along with monographs focusing on the Mallorcan karst, such as *Karst and caves of Mallorca* (1995) and *Mallorca: A Mediterranean benchmark for Quaternary studies* (2012).

In 1999, Àngel defended his PhD thesis on Karst morphology and vegetation in the Serra de Tramuntana. An ecological approach at the Universitat de les Illes Balears (UIB).

Throughout his professional journey, he served as a Secondary Education teacher in Biology and Geology at various high schools in Mallorca, in mainland Spain, and in Menorca, where he played a pivotal role as a reference and pioneer in speleology, closely associated with the *Unió Excursionista de Menorca*. Additionally, he held the position of Associate Professor of Karstology at UIB, contributing to the Karst Research Group within the Department of Earth Sciences, focusing on Sedimentology, Coastal Geomorphology, and Fluvial Geomorphology. Even in recent times, he maintained ties with UIB, actively participating in scientific speleology as a member of the Earth Sciences Research Group.

Àngel significantly contributed to the *Federació Balear d'Espeleologia*, serving as the director of publications for the *Endins* journal from 1976 to 1995. In 1998, he was founding member of the *Sociedad Española de Espeleología y Ciencias del Karst* (SEDECK), and in 2017, he was a co-founder of the *Societat Espelelògica Balear* (SEB).

At the time of his passing away, Angel was deeply engaged in intense research addressing seasonal  $CO_2$  dynamics in the atmosphere of Cova de sa Font on the island of sa Dragonera, among other projects.

With Àngel Ginés's demise, our country has lost a dedicated scientist admired for his amiability, leaving behind an irreplaceable void in Mallorcan speleological research. His sudden and unexpected departure will undoubtedly be deeply felt by all his friends, colleagues, and family.

Thank you for your guidance and friendship; you will always be remembered.

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