

---

## Salvador Reguant, Bryozoologist

---

G. BRAGA

### Professor of Paleontology, Università degli Studi di Padova

Dipartimento di Geologia, Paleontologia e Geofisica, Università degli Studi di Padova, Via Giotto, 1, 35137 Padova (Italy).

E-mail: [braga@epidote.dmp.unipd.it](mailto:braga@epidote.dmp.unipd.it)

Other friends and colleagues will write on Salvador Reguant as a geologist and stratigrapher showing also the human aspect of his academic life. For my part I will try to testify about his valuable and keen activity on Bryozoa: the very small colony animals that, according to many zoologists, are among the greatest wonders of creation.

I knew some of Reguant's papers before 1968, but I first met him that year, during the First International Symposium on Bryozoa, held at the head office of AGIP (Azienda Generale Italiana Petroli) in S. Donato Milanese (Milano). Before this Symposium, in 1965 an informal meeting was held in Stockholm at the Zoological Institute. Here a small group of lovers of living and fossil Bryozoa, including myself, decided to found the I.B.A. (International Bryozoology Association) with the aim of promoting and reviving studies on this interesting invertebrate Phylum, at that time neglected. Salvador Reguant did not attend the Stockholm meeting, but was well known by the bryozoologists and all people counted on his presence, because of the very poor student number on this topic.

In the S. Donato Conference the "family" increased and also Spain had its delegate. We can see a very young Salvador Reguant in the enclosed group photo (the seventh on the left below), taken in front of the AGIP building.

We got on immediately, and since we were both studying Cenozoic Bryozoa, we exchanged opinions and information on our research. This was an important opportunity to verify the determinations of common species that before were made only by comparison with published descriptions and figures.

From then on, our exchange of letters became more frequent -today we correspond by E mail- with information about running programs and off-prints exchange.

After Milano, we met again at the Symposia of Lyon (1974), Paris (1989) and Swansea (1992).

At these meetings, during the coffee break or the evening walks, we talked not only about Paleontology, but also about different matters. We used to use our own languages (Italian and Spanish), and since they have a common origin, the understanding was quite easy. It was rarely necessary to explain our thoughts.

### REGUANT'S CONTRIBUTIONS TO BRYOZOAN STUDIES

The papers of Salvador Reguant can be divided into two research lines: the first deals with Systematics and Taxonomy, while in the second morphological and living features of Bryozoans have been used for Paleoeological, Paleogeographical, Stratigraphical and Sedimentological deductions. All his research work was conducted on Spanish Cenozoic sediments, either Tertiary outcrop in the various mountain chains or surface Holocene deposits of the Atlantic Ocean and Western Mediterranean continental platforms.

The papers published in the sixties, the earliest of Salvador Reguant's research done in the Seminario Conciliar of Vic, deal with descriptions of Neogenic or Quaternary faunas, the institution of new species and the cataloguing of all known Spanish species. They are all in Spanish. The most important is probably the study "Los Briozoos del Neógeno español" where a critical revision of species

described by previous authors was undertaken, defining also their precise stratigraphic distribution.

We are in 1969 and there has been a five-year interruption, coinciding perhaps with the moving of Reguant to Barcelona University and with his new research and teaching line characterized by stratigraphic studies.

As a matter of fact almost all his successive papers, in which the English language prevails, are produced in collaboration with researchers from other Universities and Institutions, and Bryozoa are usefully employed for paleoecological and sedimentological deductions based also on growth form analysis of these animals, a matter now in progress.

The interest in Stratigraphy of Bryozoa is underlined by an interesting work, rich in elaborated data of the Paleogene fossil species recognized in European basins through the literature. The paper is accompanied by several tables and gives an useful general outline on the Bryozoan diffusion, starting from the K/T boundary until the Upper Oligocene age. In the conclusions Reguant summarizes the value of Bryozoa for biostratigraphy and paleoenvironmental analysis asserting, among other considerations, that the scarce use of Bryozoans in comparison of other universally known fossils, may be due to the greater difficulties in the determination of species.

Alternating with these papers, Reguant again does work on Systematics, always with paleogeographic deductions. Interesting is that of 1993 on "Cheilostome Bryozoa of Huelva (W Spain)" with comparative analysis of all Lower Pliocene forms described from the Mediterranean and adjacent areas, showing that the Huelva fauna, belonging to the Atlantic domain, differs significantly from that of the Western Mediterranean.

Two small treatises, in Catalan can be regarded as didactic works that, with simple descriptions and drawings, set out to explain this little known zoological Phylum. The most recent (1988), entitled "Introducció al coneixement dels briozous fòssils" is a chapter of the fifteenth volume of the "Enciclopedia Catalana".

Closing this short tribute to my friend Salvador Reguant I wish to recall that during a recent short journey in Barcelona I asked him to publish a paper on Bryozoa in the "Memorie di Scienze Geologiche": the Earth Science magazine of the Department of Geological Sciences in Padova, of which I am at present Editor.

This paper concerns a study on the Oligocene Bryozoa of the Cantabric region, and was already published as a preliminary study (1975) in collaboration with the late well known bryozoologist Emile Buge. The publication

was issued in 1997. I hope that this paper will be a stimulus to the bryozoologist Salvador Reguant to dedicate more of his time to these small animals that proved to be fruitful field of studies of the youthful period of his life.

## SELECTED PAPERS BY S. REGUANT ON BRYOZOA

- Reguant, S., 1960. Nota sobre dos Briozoos del Mioceno de la provincia de Tarragona. Nat. Comunicaciones del Instituto Geológico y Minero de España, 57, 127-134.
- Reguant, S., 1961. Los Briozoos del Neógeno Español. Instituto Geológico y Minero de España. Notas y Comunicaciones, 62, 215-244.
- Reguant, S., 1964. Catálogo sistemático y estratigráfico de los Briozoos del Neógeno Español. Lucas Mallada, Cursos y Conferencias, 9, 159-162.
- Reguant, S., 1966. Presencia de *Biflustra savartii* (Savigny-Audouin) (Briozoo Queilostomado) en el Mioceno peninsular. Acta Geologica Hispanica, 1(1), 1-3.
- Reguant, S., 1966. *Lunulites bugei* (Bryozoa Cheilostomata) nueva especie del numulítico inferior de Tremp (Lérida). Acta Geologica Hispanica, 1(1), 3-7.
- Reguant, S., 1969. Algunos Briozoos del Cuaternario del delta del Río Llobregat (Barcelona). Acta Geologica Hispanica, 4(2), 38-43.
- Buge, E., Reguant, S., 1975. Les Bryozoaires oligocènes de la region Cantabrique (Province de Santander, Espagne) - Étude préliminaire. Bryozoa 1974 - Doc. Lab. Géol. Fac. Sc. Lyon, H.S., 3(2), 483-495.
- Reguant, S., Serra, J., 1976. Bryozoa from the Quaternary platform sediments, between Blanes and Palamos (prov. Gerona, Spain). Preliminary note. Bryozoa 1974 - Docum. Lab. Géol. Fac. Sc. Lyon. H.S., 3(2), 467-482.
- Reguant, S., 1981. Microstructures dels Briozous. Seminaris d'Estudis Universitaris, Institució Catalana d'Història Natural, 6, 79-99.
- Reguant, S., Vázquez, A., Zamarreño, I., Maluquer, P., 1985. Significación de los briozoos en los sedimentos superficiales de la plataforma continental del Cabo de Gata (Almería - España). Acta Geologica Hispanica, 20, 69-80.
- Reguant, S., Rodríguez Fernández, J., Fernández, J., 1987. Morfología de las colonias de Briozoos en relación con la hidrodinámica del medio sedimentario. Acta Geologica Hispanica, 21-22 (1986-87), 541-547.
- Reguant, S., Zamarreño, I., 1987. Bryozoan bioherms on the mediterranean continental shelf (Northeastern Spain). In Bryozoa Present and Past (Ed. J.R.P. ROSS), 7<sup>o</sup> Int. Conf. on Bryozoa, Bellingham, 229-236.
- Reguant, S., 1988. Introducció al coneixement dels Briozous fòssils. Enciclopèdia Catalana, 15, 235-239, Barcelona.
- Reguant, S., 1990. *Metrarabdotos orisense* n.sp. (Bryozoa Cheilostomata Ascophora) del Eoceno medio de Vic (Barcelona): una forma ramosa singular. Revista Española de Paleontología, 5, 71-76.
- Reguant, S., Rodríguez Fernández, J., Fernández, J., Serra-Kiel, J., 1991. Bryozoan Biofacies, Zoarial forms and sedimentary environments. In: The Tertiary of Spain. Bryoz. act. et fossiles: Bryozoa living and fossil, F.P. Bigey Ed. Bull. Soc. Sci. Nat. Oest. Fr. Mém. HS 1, 361-370.
- Serra-Kiel, J., Reguant, S., 1991. Biofacies de plate-forme apho-

- tique silico-clastique avec Bryozoaires et Spongiaires (Eocène moyen, secteur oriental du Bassin Sud-Pyrénéen). *Geobios*, 24(1), 33-40.
- Reguant, S., Maluquer, P., 1992. Los Briozoos de los sedimentos superficiales Holocenos de la plataforma continental del Cabo de Gata (Almería, España). *Revista Española de Paleontología*, 7(2), 141-153.
- Reguant, S., Mayoral, E., 1992. The time of postmessinian opening of the Mediterranean: evidence from Pliocene Bryozoans. III Congr. Geol. de Esp., VIII Congr. Latinoam. de Geol., 2, 532-535.
- Reguant, S., 1993. Semi-multilamellar growth in *Reptomulticava alhamensis*, a new cyclostome (Bryozoa) species from the Tortonian of Alhama de Granada (S, Spain). *Revista Española de Paleontología*, 8(2), 147-152.
- Reguant, S., 1993. The Cheilostome Bryozoa from the Huelva Pliocene (SW, Spain) in the Western Mediterranean Context. *Mem. Sci. Geol.*, 45, 125-138.
- Reguant, S., Mayoral, E., 1994. The encrusting Bryozoa on disarticulated bivalve shells (chiefly of *Glycymeris insubrica*) in the Lower Pliocene of Huelva (SW Spain). *Biology and Palaeobiology of Bryozoans* P.J. Haywards, J.S. Ryland & P.D. Taylor (eds.) *Proceed. of the Intern. Bryozoology Conf. Swansea, 1992 - Olsen & Olsen*, 157-160.
- Reguant, S., 1995. Bryozoa and stratigraphy in Paleogene times through the study of Paleogene species from Europa. *Revista Española de Paleontología*, 10(1), 117-128.
- Reguant, S., 1997. Oligocene Cheilostomatida (Bryozoa) from San Vicente de la Barquera (N Spain). *Mem. Sci. Geol.*, 49, 73-94.