

Sea Star Immune Organ Axial Organ Cells in S.E.M

Michel Leclerc

556 rue Isabelle Romée, 45640 Sandillon, France.

mleclerc45@gmail.com

**Corresponding Author: Michel Leclerc, 556 rue Isabelle Romée, 45640 Sandillon, France.*

Abstract

Two types of immune axial organ cells were observed in S.E.M. Among them we found a macrophage-like cell with "velum" and a lymphocytic one.

INTRODUCTION

The sea star axial organ, "an ancestral lymphoid organ", includes conjonctive cells and mainly lymphocytes (Sea star B lymphocytes and sea star T lymphocytes (ref. 1)) and phagocytes which play the role of macrophages.

In the present study, we have a look on the whole axial organ cell morphology by the use of S.E.M.

MATERIALS AND METHODS

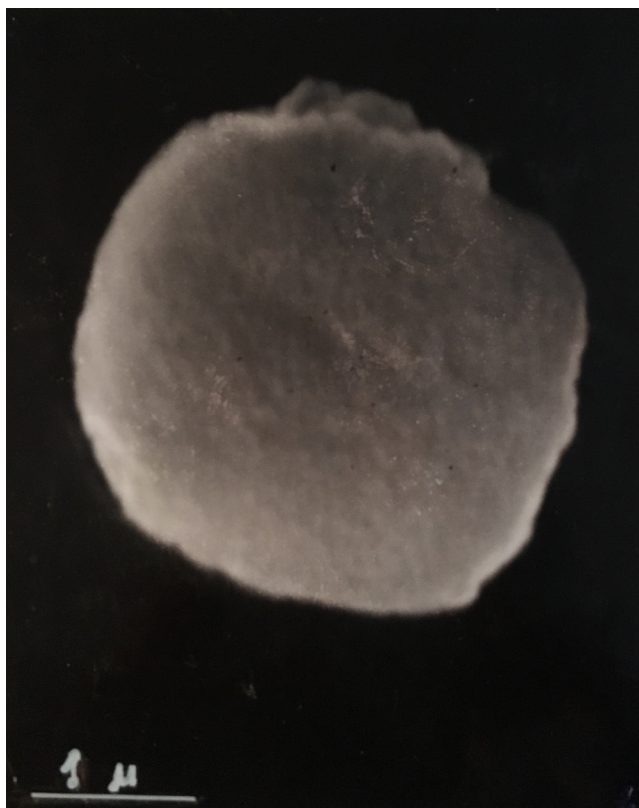
The sea stars *Asterias rubens* from french coasts were used. Axial organ was excised and dilacerated.

Obtained axial organ cells were fixed with alcohol 50°, then 90°, 100° and treated with the critical point.

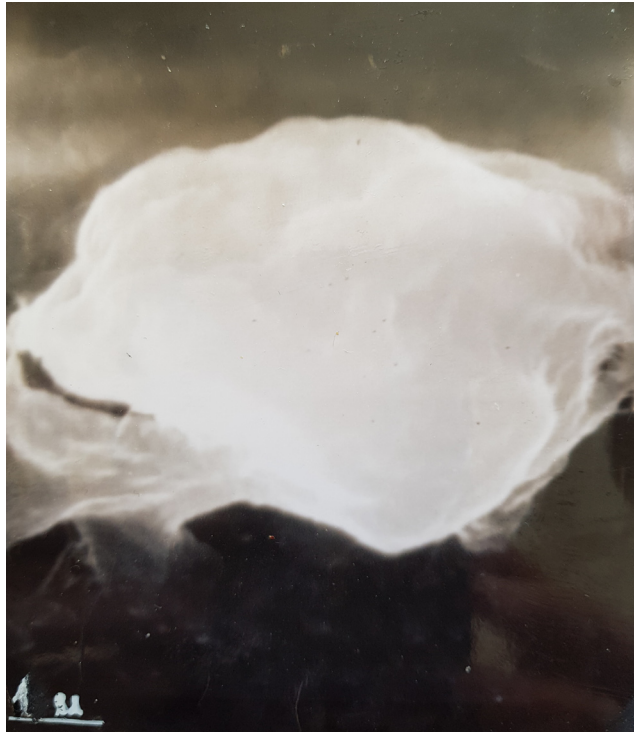
Observations were performed with a S.E.M Hitachi.

RESULTS

First, a lymphocyte-like cell was observed as following:



Second a phagocyte cell type with "velum", pseudopods, was observed as following:



These observed cells are small and are sometimes called: "The minuscules"

The lymphocyte one corresponds to 4μ in diameter; the phagocyte one to $7, 8\mu$ in diameter

CONCLUSION

It is the first time that invertebrate immune cells are

shown in S.E.M. It seems to be of special interest, at our knowledge.

REFERENCE

- [1] Leclerc, M. (2012) Amer. J. Immunol ;8(4), 191-195

Citation: Michel Leclerc. *Sea Star Immune Organ Axial Organ Cells in S.E.M. Archives of Immunology and Allergy. 2018; 1(2): 77-78.*

Copyright: © 2018 Michel Leclerc. *This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.*