

Elements of Somatic Ecology and their Evolutive Significances

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Abstract. *By analysing the organisms from an ecological point of view, we find that most (all pluricellular organisms and unicellular eukaryotic ones) have the body formed of their own cells and microorganisms that populate it as living medium. These do not represent a single individuality but a complex ecological system, formed of different beings that are interested in making a unitary and functional whole. Both eukaryotic cells and pluricellular organisms provide to microorganisms, and not only, a multitude of habitats in which they carry on their existence. According to Lynn Margulis' endosymbiotic theory (1981), eukaryotic cells provide ideal living medium to some prokaryotic cells, which populate them endosymbiotically under the form of cellular organelles. The study of these life medium is related to what we call "Somatic Ecology", a term introduced by Leo Buss (1987), by which a new branch of Ecology appears. The somatic ecology concept offers a new perspective on knowledge of our evolutionary and functional structure and in ecosystems protection and biomes that make up our organism.*

Keywords: Somatic Ecology, biosken, ecosystem, biome, probiotic relationships, germ-free organisms.

1. Introduction

The analysis of four organisms, from a Somatic Ecology point of view, opens us a universe that we have not seen it before or even suspected it. It is about the fact that an impressive number of microorganisms that live not only in our body but in certain habitats, populate it during our common development and maintain it in operational conditions as long as possible, generating, over our existence, thousands of generations without affecting our health, but rather contributing to its maintenance.

Data that have led to concept of somatic ecology have accumulated over time.

D.C. Savage (1978) stated that "animals exist as complex organic units composed of animal and microbial cells which interact". Savage's statements have remained without echo at that time because they were not fully understood.

G. Zarnea (1994) believes that "a microorganism can be autochthonous for a certain habitat and allochthonous for another one, which transits it". So, according to G. Zarnea's thinking some microbiota can be considered as being own to