

Bacterial colonies and other macroscopic formations grown on solid nutrient media surface are generally taken to be haphazard aggregations of cells localized on a single place growing and multiplying squeezed and crowded hustling and competing for place and nutrients. Little attention is paid to their appearance which is regarded just a mass of single individuals molded by their immediate surrounding. Their size, structure, shape, coloration etc. are at most noticed separately – as handy identification markers resulting from the summation of single cells' properties.

A closer look soon reveals that these macroscopic properties are not cumulative mass phenomena but actually features of a unified autonomous structure resulting from controlled and sophisticated morphogenesis

We present here an introductory study on the morphogenesis of colonies and similar in the bacterium *Serratia marcescens*.

We focused our attention not only to colonies – i.e. clonal structures arising from a single cell; we also studied structures originating from cell suspensions, regenerating after mechanical disruption, resulting from close contacts between bodies, interference of close area to the final phenotype and even structures resulting from suspensions originating of different strains.

Our observations and simple experimental setting give evidence that formation of multicellular bodies is an elaborated process which needs complex communication capabilities.