



## Ecophysiological responses of some vegetable species cultivated under different greenhouses technological systems (ecological and conventional)

Ligia ACATRINEI - Biological Researches Institut of Iași

This paper approached the variations of some ecophysiological parameters of the certain species of vegetables under controlled systems such the greenhouses. The aim of this work is to appreciate the ecophysiological response through the processes of photosynthesis, transpiration and sub stomatal  $CO_2$  concentration. It were studied the ecophysiological response of some varieties of *Lycopersicon esculentum* Mill. The results were followed the comparative responses of the analyzed species cultivated in conventional and ecologic systems. The analyses concerning processes of photosynthesis, transpiration were performed with LCI portable systems. The transpiration and stomatal conductance were higher after flowering phenophasis in ecological systems, especially in the middle part of the plant. Sugars metabolism in tomatoes was not certainly depending with type of cultivation systems but the monosaccharides and disaccharides were greater until ripening in ecological system of culture in comparison with the conventional one, where these parameters decreased.