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## EFFICIENCY OF THE POLY (VINYL ALCOHOL) (PVA) HYDROGELS AS SOIL CONDITIONER, DETERMINED BY MONITORING THE *CAPSICUM SP. L.* GROWTH

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### Abstract

This study revealed that the poly (vinyl alcohol) hydrogel [PVA] inserted into the soil prolonged its ionic activity. To prove the influence of the PVA hydrogels on the plants growth, *Capsicum annuum* L. has been used as model plant to monitor the photosynthesis, respiration processes and also the morphological parameters. PVA hydrogels determined the intensification of all physiological processes of the plant. It could be concluded that PVA hydrogel is an ecological material able to influence the soil quality by controlled release of initially absorbed water, improving the plants quality.

*Key words:* photosynthesis, poly (vinyl alcohol) hydrogel, respiration, soil conditioning, water controlled delivery

*Received:* September, 2010; *Revised final:* February, 2011; *Accepted:* February, 2011

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