Ecologo-Biological Estimation of Soils under Vegetable Cultures as the Indicator Fertility of Soils

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In Irragic gypsic calisols (in WRB), in Irragic calisols (in WRB), in Irragic mollic luvisols (in WRB) and in Irragic gleyic luvisols (in WRB) of subtropic zones in a crop rotation under vegetable cultures, at permanent cultivation of these cultures and virgin variants for comparison it is investigated fermentativ activity, number of microorganisms, intensity of carbonic gas isolation from soils, nitrification, ammonification and decomposition of cellulose. On the basis of biochemical parameters are given biodiagnostics and a complex of biological parameters are given the integrated parameter of ecologo-biological condition of investigated soils is determined. Results of analyses have shown, that using of the scientifically-grounded crop rotations in conditions of in Irragic mollic luvisols and in Irragic gleyic luvisols irrigation it is possible to keep fertility, and it also possible to increase it in Irragic gypsic calisols and Irragic calisols.

Key words: vegetable cultures, permanent cultivation, biochemical parameters, biodiagnostica, integral parameter of ecologo-biological condition of soils.

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