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### Methods Of Maintaining Soil Depth Evenness During Disk Tillage

The article examines agro-technical requirements of machine implements with disk working bodies and is aimed to investigate the existing and alternative methods of depth regulation during soil tillage by the mentioned implements. We defined the machines performance indicators significantly affecting the plant potential release not considered previously. The study results were obtained via the soil tilling depth regulation by the disking speed, the change of an incidence angle of the working batteries, and by the use of the additional load mounted on the machine frame. The article presents a two-year research results obtained in 40 different land plots of the Sumy region (Ukraine) using domestic and imported machines, with wheat and buckwheat as crops. To ensure the study accuracy, the methodology was based on the GOST 46.16.02.-96. Agricultural Machinery. Quality Indicators Nomenclature (Catalogue of Normative Documents, published in 1997). The research results demonstrate that the tilling depth depends on the manufacturing plant default settings, the speed regime, and the machine load. For the experimental data analysis, the Least Squares Means method was used. The research presents alternative methods of changing the tilling depth applicable for any machine aggregates with disk working bodies, and its results can serve the agricultural machinery designers

Key words: disking, tillage implements, operating conditions, agro-technical requirements, adjustment, performance quality