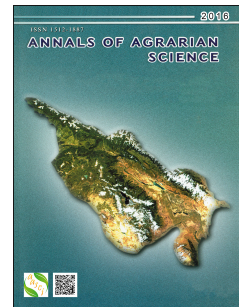


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Changes of structural and aggregate composition of the mountain brown forest soils in the Republic of Armenia

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ABSTRACT

The Republic of Armenia is one of the regions least resourced with soils. Currently there is almost no land in Armenia through the development of which it is possible to provide the population with food products, and the industry with the raw material. The only way to solve this problem is to increase soil fertility. The agriculture based on the achievements of contemporary science and technology also creates serious problems.

This work is devoted to the study of the problems of changes in structural-aggregate composition of brown mountain-forest soils of the Republic of Armenia in relation to their agricultural use. The studies show that the structural elements of virgin brown mountain-forest soils are sufficiently stable and structured. It is shown that with the intensive use of agricultural lands, in comparison with the virgin soils, the most significant changes are observed precisely in the arable horizon (in particular, the arable layer significantly pollinated).

A set of agro-technical measures is offered to improve the structural-aggregate composition, to maintain and enhance the fertility of brown mountain-forest soils. In particular, the improvement of fertility, the efficient use and conservation of brown mountain-forest soils require the development and application of scientifically based system of agro-technical measures. If possible, the minimum or zero agronomic forms of agricultural tillage must be applied in the system of adaptive-landscape agriculture for the restoration and conservation of agronomically valuable soil structure.

Keywords: Brown forest soils, Structural composition, Aggregate composition.

Introduction

The Republic of Armenia is one of the regions having the poorest soil resources. Currently Armenia has no virgin lands, by the cultivation of which it would be possible to improve the provision of the population with foodstuffs and to provide the industry with raw materials. The only way to solve this problem is the preservation and the increase of soil fertility, the

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