

Scientific Substantiation of Introduction of Differentiated Agricultural Systems, Increase of Productivity of Agricultural Production



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Abstract

As a result of the agrarian reforms implemented in the Republic of Azerbaijan, the basis for the dynamic development of agriculture was created. Major changes have been made in the agrarian sector, new economic and property relations have been formed, the normative legal base has been improved. An important issue has been raised to improve the quality of erosion lands and the productivity of agricultural crops.

Keywords: Humus; Soil; Erosion; Layer; Ostepenny; Not washed

Introduction

For solving various practical issues and in the first place, the most rational distribution of crops and increase their productivity soil must be evaluated, taking into account their quality and its changing under the influence of industrial activity.

To that end, it had explored common at the site soil research natural areas. Their evaluation was performed from the basis of agrochemical and water-physical properties of soils, impact their erosion and yield of different Soils crop farming zone estimated reserves of humus, nitrogen, phosphorus, absorption capacity and some water-physical properties in 0-20cm 0-50cm and 0-100cm of soil layers.

Scientific and reasonable accommodation, differentiated farming system on the basis of the evaluation provides an opportunity to improve crop productivity. Among soils agricultural zone natural fertility indicators highest impact mining nesmytye Brown ostepnnyye soil. Taken as a "benchmark". Points remaining soils distributed in these areas also are calculated as a percentage of the standard. To manage associations and groupings of soils comprising the agricultural zone and heavily used in agricultural production, they are grouped into the following five groups: land better, good, medium, low and very low dignity. In a fairly fractional grouping soil laid down the objective indicators of soil fertility and their productivity [1].

At the same time grouping based on commonality land allows rationally and purposefully uses soil from the agricultural point of view. The following will focus on

agroproduktivnoy characteristic of designated groups. S Group-land better dignity. This group includes mining and nesmytye Brown ostepnnyye soil, area of 9565, 0 hectares or 23, 89% of the total area of agricultural areas of evaluation scores 81.

Stocks of humus, gross phosphorus and nitrogen absorption capacity in 0-20cm of soil layers is 124,11 t/ha; 7,23 t/ha; 6,21 t/ha and 38,87mg/eq on 100 g of soil in 0-50cm layers respectively 223,42 t/ha; 15,41 t/ha; 12,62 tons/ha and 38,17mg/eq on 100g of soil, and in 0-100cm layers of 327,32 t/ha; 18,26 t/ha; 17,65 t/ha and mg/eq 41,23 on 100g of soil [2].

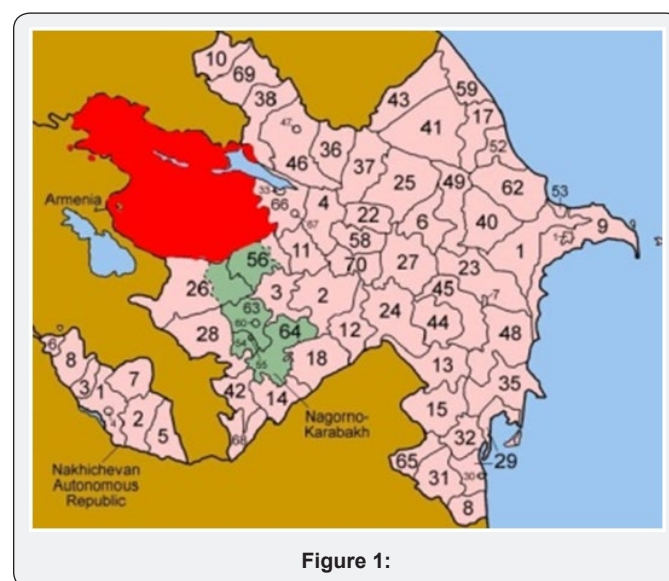


Figure 1:

For soils of this group did not require special erosion control activities. In order to maintain the natural fertility of these soils vineyards, ploughing, seeding and tillage should be conducted across a slope, to observe the erosion, and agricultural activities. ENJOY Group-land of good merit the land Area is 13783.5 hectares, or 11.24% of the total area of agricultural zone. They are priced ranging from 61 to 80 points on the bonitetnoj scale. This group includes the slabosmytje mountain-Brown, ostepnennye nesmytje and slabosmytje mountain grey-brown, nesmytje and slabosmytje mountain dark brown (dark grey-brown) and floodplain meadow soils Figure 1.

Stocks see 0-20 layer of humus in these soils reach 57,63 -95, 12 t/ha, 0-50cm layers of 131, 89-208, 20t/ha, and the meter layers 186, 44 -301,32t/ha. Compared with the first group, this group is less assured in nutrients. Gross nitrogen content and gross phosphorus in 0-20cm kalebletsja layer in the range from 3.57 to 5.29tons/ha and 3.28-4.97t/ha, 0-50cm layers of 7,80 -11,31t/ha and 7,80 -11,60t/ha, and the meter layers respectively 9.10 -16.12t/ha and 11.16 -18.88t/ha. In 0-20, see tank takeover layers varies between-36.27 28.32mg/eq on 100g of soil, and in 0-50cm layers respectively 27.50-36.04mg/eq on 100g of soil. When you use these lands must follow the General Agro technical measures protective nature envisaged for lands S Group [3]. To maintain and improve the productivity of vegetation and prevent erosion on pasture standards must be respected to settlements pastures for and enter the moving system of grazing, to make chemical fertilizers. Good graphics, decent game play Group-land of the middle area of the dignity in that group of soils is 8130,0 hectares or 20,30% of the total area of the agricultural area.

These soils are evaluated in 41-60 points. This group comprises small and srednesmytje mining-Brown, ostepnennye slabosmytje mountain grey-brown, slabosmytje mountain-dark brown (dark grey-brown) and the nesmytje mountain light brown (light greyish-Brown) soil. In these soils, stockpiles of humus, gross gross phosphorus and nitrogen absorption capacity in 0-20cm layer vary between 60.24 -63.01t/ha, 3.78 -3.84t/ha, -3,35 2,83t/ha and 28,77 -30,43mg/eq on 100g of soil, and in 0-50cm layer 87,78 -131,89 respectively, t/ha, 5,32m/ -7.86 ha, -6,05 5,99 t/ha and 27,71 -30,17mg/eq on 100g of soil [4].

When using the medium need dignity lands activities implement agro technical measures of a general nature applicable to land first and second teams, and the eroded sections carry out anti-erosion agricultural activities. The eroded areas of arable land use strip crops and strip buffers from perennial grasses. If necessary, a small part of the plots on arboraceous over 20° used for crops, perennial grasses, then using them as hayfields. Introduced mineral fertilizers.

On slobosmytje sites, reduce grazing on rule 25% due to nejeroirovannyh plots and observe the sequence of grazing. Rocky areas cleared of stones. YV Group-land of low land worthiness this group is 8115, 0 hectares or 20,27% of the total area of agricultural zones, they are priced from 21 to 40 points. This group includes the silnosmytje mountain-Brown ostepnennye, medium and silnosmytje mountain-Brown, medium and silnosmytje mountain dark brown (dark grey-brown) and the slobosmytje mountain light brown (light greyish-Brown) soil [5].

Stocks of humus in 0-20 see these layers of soil reach 36.83 -60.72 t/ha, polumetrovyh layers of 73,36 -115,29 t/ha, and the meter layers 126,69 -241,80 t/ha. Gross reserves of nitrogen vary in 0-20 see layers from 2.79 to 3.84 t/ha, gross phosphorus 1,78 -3,00 t/ha, absorption capacity -29,65 26,16mg/eq on 100g of soil, and in 0-50cm layers accordingly: from 5,32 to 5,90 t/ha, 3,93 -6,30 t/ha, and 23,84 -27,86mg/eq on 100g of soil [6].

To restore the soil fertility in srednesmytje and silnosmytje areas it is necessary to carry out the planting of perennial grasses and apply erosion event, featured for all previous groups to settlements pastures for pasture grazing rules on reduced 50%.

In Group-very low land worthiness. This group includes silnosmytje mountain gray-Brown and Silnosmytje Mountain dark brown (dark grey-brown) soils and evaluated up to 20 credits. These lands is 667.5hectares or 1.67% of the total area agricultural zone. Stocks of humus, gross phosphorus and nitrogen absorption capacity in 0-20cm layer accounted for 33.26-36.54 t/ha; 2.02 -2.42 t/ha; 1.51 -1.94 t/ha and 25.02 -26.40mg/eq, and in 0-50cm layer respectively 78.08 -81.25 t/ha; -5.00 3.84 t/ha; 3.20 -3.75 t/ha and -24.82 23.56mg/eq on 100g of soil. When you use these lands must observe activities previous land groups, and to restore the strongly rarefied grass would need additional erosion event, stone-clearing, etc.

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