



INFLUENCE ON SOIL FERTILITY OF SIDERATED PLANTS

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ABSTRACT

In this article the material is on carrying plant residue and green manure into the soil, which decreases T moisture evaporation from the soil, its temperature rises and increases the content of phosphates and nitrates. As a result, the best conditions are created for accelerating seed germination and plant development.

KEY WORDS: typical gray soil, straw, cotton stalk, African millet, barley, green mass.

INTRODUCTION

Currently, there are a number of agrotechnical, agro-reclamation, forest reclamation techniques: which mainly change the energy regime of the root layer and the surface layer of the air. At the same time, it was found that the state of moisture and air in the soil, associated with this regime, and their agrochemical and microbiological properties, also change simultaneously. Such techniques are irrigation, forest belts, methods of ridging and felling, methods of placing plants on an area (standing density), various methods of soil cultivation, some mulch techniques and artificial heating of soil, etc. Here we will briefly dwell on mulching the soil as an agronomic reception that improves thermal, water, nutritional, air modes, agrochemical, microbiological and other properties. As you know, in connection with the task of further increasing the yield, more attention is paid to improving the agrotechnical methods of cultivating agricultural crops. A relatively new, little-studied and at the same time promising agrotechnical method is mulching, which has long drawn the attention of many researchers. Mulching should be understood as any soil cover (continuous or inter-row) with various

materials, for which plant stubble, peat crumb, manure, humus, composts, straw, split, leaves, mulch paper, coal powder, soot, gravel, cement can be used, bitumen of various kinds of emulsions obtained from oil waste, etc. Recently, new mulching materials have appeared, in particular, polymer films of various colors and thicknesses. The properties of these mulching materials are very different and their effect on plant life and the environment is varied.

One of the main reasons for the low yields is the sharp item and denie soil fertility, due to lower content of humus in the soil and agro and deterioration of soil properties. To create a deficit-free balance in the soil, and in this regard, to increase productivity is possible only when a large amount of organic matter is introduced into the soil. However, it is not possible to apply manure in sufficient quantities to the economy of the republic due to its shortage. Therefore, scientifically grounded agrotechnical methods that contribute to the accumulation of humus in the soil, based on other types of organic fertilizers, is one of the most important tasks. N improve search of fruit soil rhodium can item and be cotton stalk, wheat stalk and green manure using at mulch (sod humus system) will significantly reduce power



consumption, since this system does not need to loosening and plowing, but due to the mass skoshennyh tra into and dying roots, the soil will be constantly replenished with fresh organic matter. With a stalk of cotton, wheat Stem s and using green manure to the mulch, to treat complexes with Nome Agricultural industry has a positive effect on the soil, plants and environment th Wednesday. Plant biomass improves the chemical, physical and biological properties of the soil. After the decomposition of plants, a huge amount of organic matter enters the soil , as from aboveground, which increases the content of nitrogen, phosphorus, potassium and g umus and leads to an increase in effective soil fertility and an increase in yield.

EXPERIMENTAL METHODS

The experiments were carried out and camping in the experimental station of the

Uzbek on th Research Institute of Mechanization and Electrification uu Agriculture (UzMEI) to the Otori is smiling T ashke ntskoy areas and Yangiyuls to th district , irrigated typical gray soils . All phenological observations on field experiments were carried out according to the methodology of the Soyuz NIKHI (1963) , "Methodology for conducting field and vegetation experiments with cotton" (SoyuzNIIH, 1973, 1984) and " Methods for conducting field experiments" (U zPITI, 2007) .

Field experiments were carried out according to the following scheme:

1. Traditional method.
2. The stalk of cotton is completely plucked out of the field against the background of wheat.
3. In a row about winter wheat, chop and mulch the stalk of cotton .

Experience scheme

Sowing cotton seeds - 2009								
I - repetition			II - repetition			III - repetition		
Sowing wheat -2009 autumn								
I - repetition			II - repetition			III - repetition		
1	2	3	1	2	3	1	2	3
Siderat - 2010 summer								
I - repetition			II - repetition			III - Tuesday		
1	2	3	1	2	3	1	2	3
Sowing cotton seeds - 2011								
I - repetition			II - repetition			III - repetition		
1	2	3	1	2	3	1	2	3

RESULTS

One of the most important reserves for increasing soil fertility can be the stalk of cotton, the stalk of wheat and green manure using for mulch (sod-humus system) will significantly reduce energy costs, since this system does not require loosening and plowing, but due to the mass of mown grasses and dying roots, the soil will be constantly replenished with fresh organic matter.

With a stalk of cotton, wheat and stalk using green manure to the mulch, to treat complexes with Nome Agricultural industry has a positive effect on the soil, plants and the environment. Plant biomass improves the chemical, physical and biological properties of the soil. After the decomposition of plants, a huge amount of organic matter enters the soil, as from the aboveground, which increases the content of

nitrogen, phosphorus, potassium and humus in it and leads to an increase in effective soil fertility and an increase in yield.2009-2011 year in n When entering the remains of plants sprouting in soil 3 variant grown cotton and wheat seed e Rata 1 m² area of the average included 7433 grams calf weight (Table №1). 2009 in October there was a moisture content of 46.8% of the stalk of cotton which has a weight of 959 grams , 2010 in July moisture of 8.2% of straw which has a weight of 781 grams of amm , 2010 in October moisture 59.8% African millet weighing 4018 gram, the second sideratn th plant sown in 2011 per month yatsa April, it was 72.16% moisture green th mass which has a weight of 985 grams and 2011 October, 53.7% moisture stalk of cotton which has weight of 690 grams .



Table- 1
Introducing the remainder of plants and green manure into the soil

No.	Introduced masses	Option I to control	Option II No plant residues applied	III option mulch	Number
1	Cotton stalk	Remained in place	P Using the fully pull out	$\frac{959 \text{ g / m}^2}{46.8\%}$	2009 year
2	Wheat straw	completely plucked out	completely plucked out	$\frac{781 \text{ g / m}^2}{8.2\%}$	2010 July
3	Afr Ica nskaya millet	Re-planting of plants	Re-planting of plants	$\frac{4018 \text{ g / m}^2}{59.8\%}$	2010 g . about ktyabr s
4	Barley	Unplanned	Unplanned	$\frac{985 \text{ g / m}^2}{72.16\%}$	201 1 g . April L
five	Cotton stalk	Remained in place	Completely plucked out	$\frac{690 \text{ g / m}^2}{53.7\%}$	2011 g . October s
Total masses added				7433 g / m ²	

The biomass consists of 510 grams of stem cotton, 717 grams of straw, 1615 grams of African millet, 275 grams of barley green mass, and 319 grams of cotton grass stalk (2011) 1 m² of the area was mixed with soil. 34.36 tons of biomass were introduced into the average area of 1 ha. As a result, the yield of 2009 year cotton 34.3 hundredweight 2010 year wheat is 41.6 centners entner and 2011 year cotton consists of 42.2 centners entnera.

CONCLUSIONS

During three years 1g area obog and Shchen biome Assa m 3 162 kg. The alternation of crops-wheat cotton has to stop the degradation , it will preserve the fertility of the soil with the help of cotton stalk, straw s wheat and plant re-th plant Yu, and their fully entering into the soil. Experiments have shown that due to biomass there is an increase in soil fertility.

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