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SOIL POLLUTION BY WASTE AND MEASURES TO IT PREVENT**TUPROQLARINI CHIQINDILAR BILAN IFLOSLANISHI VA UNI OLDINI OLIISH CHORA TADBIRLARI****ЗАГРЯЗНЕНИЕ ПОЧВ ОТХОДАМИ И МЕРЫ ПО ЕГО ПРЕДОТВРАЩЕНИЕ****Nazarov Mamadali¹** ¹Associate Professor of the Department of Botany, Biotechnology and Ecology of Ferghana State University, Candidate of Agricultural Sciences**Khalmatova Shokhistakhon Madaminovna²** ²Associate Dosent of the Department of Botany, Biotechnology and Ecology of Ferghana State University, Candidate of Agricultural Sciences**Abstarct**

The article shows that soils are exposed to anthropogenic and man-made factors, and for several years heavy metals, nitrites and fluorine contained in mineral fertilizers accumulate in the soil under the main arable layer. But it was noted that the industry lacks modern innovative and information and communication technologies that allow assessing the real sanitary and environmental condition of the country. More than a hundred substances and chemical compounds that enter the soil as a result of irrigation over the years eventually enter the soil and decompose it. This means that more than a hundred substances and chemical compounds that enter the soil as a result of irrigation over many years eventually enter the soil and decompose it.

Annotatsiya

Maqolada tuproqlarni antropogen va texnogen omillar ta'sirida bir necha yillar mobaynida tuproqda og'ir metallar, mineral o'g'itlar tarkibidagi nitrit va ftor asosiy haydov qatlami ostida to'planib qoladi. Ammo sohada mamlakatning haqiqiy sanitar-ekologik holatini baholash imkonini beruvchi zamonaviy inovatsion va axborat kommunikatsiya texnologiyalari mavjud emasligi ta'kidlangan. Tuproqqa yillar davomida sug'orish orqali tushayotgan yuzdan ortiq modda va kimyoviy birikmalar oxir oqibat tuproqqa tushib, uni degradatsiyaga uchratmoqda. Demak, tuproqqa yillar davomida sug'orish orqali tushayotgan yuzdan ortiq modda va kimyoviy birikmalar oxir oqibat tuproqqa tushib, uni degradatsiyaga uchratmoqda.

Аннотация

В статье показано, что почвы подвергаются воздействию антропогенных и техногенных факторов, в течение нескольких лет тяжелые металлы, нитриты и фтор, содержащиеся в минеральных удобрениях, накапливаются в почве под основным пахотным слоем. Но отмечалось, что в отрасли отсутствуют современные инновационные и информационно-коммуникационные технологии, позволяющие оценить реальное санитарно-экологическое состояние страны. Более сотни веществ и химических соединений, попадающих в почву в результате орошения в течение многих лет, в конечном итоге попадают в почву и разлагают ее. Это означает, что более сотни веществ и химических соединений, которые попадают в почву в результате орошения в течение многих лет, в конечном итоге попадают в почву и разлагают ее

Key words: heavy metals, innovation, migration, heterogeneous, homogeneous, phytotoxin, accumulation, intersectoral, innovation, epidemiology

Kalit so'zlar: og'ir metallar, innovatsiya, migratsiya, heterojen, bir hil, fitotoksin, to'planish, tarmoqlararo, innovatsiya, epidemiologiya.

Ключевые слова: тяжелые металлы, инновация, миграция, гетерогенный, гомогенный, фитотоксин, накопление, межатраслевой, инновации, эпидемиология

INTRODUCTION

In our country, since 2017, laws and regulations, including on waste, have been developed and applied in practice in all sectors on the basis of the "action strategy" until 2030. It is known that waste is generated in almost all industries in solid, liquid and gaseous form. In our country, since

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2017, laws and regulations, including on waste, have been developed and applied in practice in all sectors on the basis of the "action strategy" until 2030. It is known that waste is generated in almost all industries in solid, liquid and gaseous form. Consisting of household, inorganic, and organic substances. In some countries, household waste is considered biodegradable products, and it has been established that the nutrients contained in the soil contain about 30 macro and microelements that are vital for soil organisms. In the future, they can be used as fertilizers for local use as environmentally friendly products [1]. But it was noted that the industry lacks modern innovative and information and communication technologies that allow assessing the real sanitary and environmental condition of the country.

THE PURPOSE OF THE WORK

As we all know, soil and water pollution naturally does not have a negative impact on humans and animals, on plants, since various compounds and substances in the air get back into the soil through precipitation. We know that harmful substances carried through the air lead to their accumulation in the soil, while plants absorb them only partially, too. with precipitation-reservoirs, rivers-irrigation water-the soil makes a circular motion.

As a basis for rationing 4 main indicators are taken. These are: transactional (harmful substance in soils is absorbed by the plant) migration - aerial (from the air), migration - aquatic and general sanitary (harmful substance reduces the bioavailability of the soil due to its self-cleaning properties). It is especially necessary to know the soil-plant and plant-plant relationship to poison, toxic substances, soil-plant relationship. Toxic substances are determined on the basis of several factors that determine the relationship between soils and plants, that is, migration.

The main place in this is occupied by the question of the speed of action of the toxicant and the reaction of the plant to it. The migration process of toxic substances in the soil depends entirely on the type of soil covering the soil surface with vegetation, and on the amount of humus, granulometric composition, water regime, and temperature factor. For example, lead moves faster in the soil than cadmium, because the solution of the lead complex binds to humic acids 150 times more often than the cadmium complex.. Lead and mercury settle in the surface layer of the soil (10 cm). While cadmium moves 30 cm copper and zinc, only 3-8% mercury and lead can get into a hole 30-40 cm deep [3].

The migration movement of heavy metals in plants occurs in the following order: root-stem-leaf-seed-fruit-tuber. Even the content of heavy metals in the root exceeds its tip by 500-600 times, which means that the root has a better chance of protection (buffering). (Table 1.)

Organ distribution of lead in wheat mg/kg by weight compared to dry

Lead dose mg / kg	In black soil			grey soil	grey soil		On a fully ripe stem
	Accumulation phase		it is fully ripe		Accumulation		
	the root	leaves		When it is fully ripe	the root	leaves	
0	4,1	3,5	0,6	0,7	5,9	3,9	0,4
50	13,0	3,6	0,5	0,7	47,0	3,8	0,4
100	21,0	3,6	0,5	0,5	81,0	4,8	0,5
500	127,0	6,0	0,7	0,9	7130	16,0	1,1
1000	238	9,0	0,7	0,7	12500	33,0	2,8
200	440	22,0	1,9	0,9	32400	76,0	5,0

Among herbaceous plants, plants occupy the following places in terms of tolerance: Poaceae (spikelets), Fabaceae (legumes), Chenopodiaceae (salt marshes). For example, high levels of lead (Pb) accumulate in plants. Cadmium resistance in plants is as follows: tomatoes-oats-lettuce-meadows-peas-spinach. Various fungi are able to accumulate in their body a large number of elements Hg, Se, Cd, Cu, Zu.

RESULTS AND THEIR DISCUSSION

The permissible standard indicator for heavy metals has not yet been sufficiently developed for soil, since the soil solution has a system of greater heterogeneity than others (the property of uniformity in water and air).

The reason why the study of soils - the ecological state - is difficult, and their assessment is not clear, is that they react differently to phytotoxins. We can find out from the data found by various scientists for the topsoil.

Long-term field experiments have shown that when taking phosphorus fertilizers in 3-4 times larger quantities, an increase in nitrogen content is observed due to a sharp decrease in their fluorine content.

It is especially abundant in the leaves and stems of cotton. In the experienced

In the experimental variants, the absolute insolubility (50, 100, 400 kg/ha) remained unchanged even with the introduction of 50 kg/ha. But with the introduction of 400 kg / ha, an increase in fluoride was observed .[6].

It is noted that substances accumulated in soils accumulate passing through the lower tiers as a result of irrigation. This requires the application of certain measures to increase soil fertility, the use of mineral fertilizers and the efficient use of water.

CONCLUSION

This requires the use of new technologies in agriculture to address issues of soil fertility, crop diversification, fertilizer management, and the reintroduction of land that has gone out of circulation. Such measures contribute to increasing yields, maintaining and improving soil composition and organic matter levels, improve the ecological condition of the soil, and contribute to greater stabilization of soil composition.

In addition, the scientifically based use of fertilizers not only increases the efficiency of cultivation, but also makes it possible to steadily increase soil fertility, as well as prevent environmental pollution

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