

**THE TYPE, AMOUNT, AND DEGREE OF INFESTATION OF WEEDS FOUND IN PEAS**

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### **ABSTRACT**

Types and quantities of weeds in mosh fields, rate of occurrence

The Weeds reduce the productivity of the agricultural cultures, worsen the quality to product. Under average sowing productivity falls on 20-25%, but under strong in general possible not to get the harvests.

**Keywords:** herbicide, preparation, dicotyledonous plants, weed plant, corn, and biological effectiveness.

### **INTRODUCTION**

In agriculture one of the main problem is weeds. They pose a serious threat to the life of cultivated plants, reduce yields, reduce grain quality, and strongly contaminate seeds. Absorbs all the nutrients in the soil. As a water partner, fast-growing tall weeds block the light that a cultivated plant needs. When weeds multiply, very poor quality seeds are grown.

Many factors complicate the fight against weeds. Weed seeds are highly adaptable to any conditions and are characterized by germination and frost resistance, resistance to climate change.

Most weeds have a very strong developed root system and are able to accumulate the most important reserves of nutrients. Such grasses grow and develop even after mechanical treatment.

To develop an effective control system, it is necessary to have information about the types of weeds and know their basic characteristics.

Some weeds synthesize organic matter and are characterized by a type of nutrition. Such weeds have a strong root system and absorb minerals and water from the soil. The most common species are non-parasitic species that undergo photosynthesis.

Semi-parasitic plants have vegetative organs and can photosynthesize. But they do not have a root system to absorb water and minerals from the soil, so they absorb inorganic substances. There are also complete parasitic weeds that cannot take nutrients from the host plant through photosynthesis and suckers. All non-parasitic grasses reproduce by seed. In addition, many species of perennial weeds can reproduce vegetatively, and the reproductive organs are often located on the ground and underground. The roots of most weeds are located at a depth of up to 2 meters and do not lose their ability to regenerate even when pruned.

Crawling weeds use crawling stem buds. At the nodes appear rudiments of leaves, and after wintering new buds appear. Very well-developed weeds (several species of asparagus, mustard, sagebrush) are very dangerous because their distribution is located at a much deeper depth. There are several ways to combat them, and it is effective to take measures to prevent their spread in the first place.

1. The seeds sown should be free from weed seeds
2. Harvesting weed seeds without shedding in the fields adjacent to the fields.
3. Do not apply organic fertilizers without rot.
4. Regular inspection of quarantine weeds.

Destructive method: mechanical or chemical removal of seeds after allowing them to germinate well. Regularly chop the vegetative part. Freeze or dry the root system (depending on the season). To implement the above methods, you need to create a map of weed-infested fields and update it regularly. It should be detected at least once every two years.

However, weeding is very difficult if the fields are not chemically treated. Massive herbicides kill all weeds as well as cultivated plants. It can therefore be applied to uncultivated or harvested lands.

Selective herbicides affect plant selection. They have contact or systemic effects. It enters the root system through the leaves and stems and destroys the plants. When using them, the norms and deadlines must be set correctly. The concentration of drug use in the small period of weeds is reduced, but their sensitivity to the drug is also taken into account.

The experiments were conducted on irrigated lands of Qibray district, Tashkent region. The presence of various weeds was observed in the experimental area. Their types, amounts, and meeting rates were determined.

Table 1. Types of single and perennial dicotyledonous weeds common among peas and their degree of damage

№	Names of weeds			
	In Uzbek language	In Latin	Meeting, at 1 sq.m.	Damage rate, points
<b>Anniversaries</b>				
1	Common orache	<i>Atriplex patula</i> L.	6,5	4
2	Livid amaranth	<i>Amaranthus lividus</i> L.	5,8	3
3	Spear-leaved orache	<i>Atriplex hastata</i> L.	7,1	4
4	Tartary (Siberian) buckwheat	<i>Fagopyrum tataricum</i> L.	8,2	4
5	Black mustard	<i>Brassica nigra</i> L. Koch	5,7	3
6	Stellaire Intermédiaire	<i>Stellaria media</i> L	5,3	3
7	Shepherd's-purse	<i>Capsella bursa-pastoris</i> L.	8,9	4
8	Hedge mustard	<i>Sisymbrium officinale</i> L.	4,3	3
9	Dwarf mallow	<i>Malva neglecta</i> Wallr.	3,5	3
Average:			6,1	3,4
Total:			55,2	31
10	Cypress spurge	<i>Euphorbia cyparissias</i> L.	2,4	2
11	Tartary lettuce	<i>Lactuca tatarica</i> L.	3,1	2
12	Broad-leaved dock	<i>Rumex obtusifolius</i> L.	4,1	3
13	Field bindweed	<i>Convolvulus arvensis</i> L.	4,3	3
Average:			3,4	2,5
Total:			13,9	10
Overall:			61,9	41

The main reason for this is the lack of timely and quality agro-technological measures, ie crop rotation, non-application or underutilization of organic fertilizers, and weed control measures. The analysis of the obtained data showed that in the upper layer of the soil (0 - 30 cm) the amount of humus and other nutrients was relatively high, and in the lower layers it was significantly reduced. Twice a year, the types and quantities of weeds were determined in the experiments. annual perennial weeds before planting peas in an area of 1m<sup>2</sup>: Common orache ( *Atriplex patula* L.) -6,5, Livid amaranth ( *Amaranthus lividus* L.)-5,8, Spear-leaved orache ( *Atriplex hastata* L.)-7,1, Tartary (Siberian) buckwheat ( *Fagopyrum tataricum* L.)- 8,2, Black mustard ( *Brassica nigra* L. Koch)- 5,7, Stellaire Intermédiaire ( *Stellaria media* L)- 5,3, Shepherd's-purse ( *Capsella bursa-pastoris* L.)- 8,9, Hedge mustard ( *Sisymbrium officinale* L)- 4,3, Dwarf mallow ( *Malva neglecta* Wallr.)-3,5 averaged 6.1 units, or 3 points, for a total of 55.2 units, which in turn indicated that the field was moderately contaminated with annual two-stage weeds. During the period of wheat accumulation, perennial dicotyledonous weeds per 1m<sup>2</sup> area Cypress spurge ( *Euphorbia cyparissias* L.)-2,4, Tartary lettuce ( *Lactuca tatarica* L.)-3,1, Broad-leaved dock ( *Rumex obtusifolius* L.)-4,1, Field bindweed ( *Convolvulus arvensis* L.)-4,3 a total of 13.9 units, i.e., 61.9 units of single- and perennial two-stage weeds, although moderately contaminated. This in turn showed strong contamination.

Annual cereal weeds: Italian ryegrass (*Lolium multiflorum Lam.*) - 5,4, Spring wild-oat (*Avena fatua L.*) - 4,8, Barren brome-grass (*Bromus sterilis L.*) - 5,9, Yellow foxtail (*Setaria glauca L.*) - 5,1, Waterpepper (*Polygonum hydropiper L.*) - 5,3, Mouse (Wild-; Wall-) barley (*Hordeum murinum L.*) - 4,2 a total of 30.7 pieces, perennial cereal weeds: Bermuda grass (*Cynodon dactylon L.*) - 4,5, Purple nutsedge (*Cyperus rotundus L.*) - 5,6 a total of 10 grains, the amount of single and perennial weeds was 40.8 grains per 1 m<sup>2</sup> of total area. This indicates that the pea crop areas are moderately infested with cereal weeds.

Table 2 Types of annual and perennial cereal weeds found in peas and their degree of damage, (2017-2019).

№	Names of weeds			
	In the Uzbek language	In Latin	Meeting, at 1 sq.m.	Damage rate, points
<b>Anniversaries</b>				
1	Italian ryegrass	<i>Lolium multiflorum Lam.</i>	5,4	4
2	Spring wild-oat	<i>Avena fatua L.</i>	4,8	3
3	Barren brome-grass	<i>Bromus sterilis L.</i>	5,9	4
4	Yellow foxtail	<i>Setaria glauca L.</i>	5,1	4
5	Waterpepper	<i>Polygonum hydropiper L.</i>	5,3	4
6	Mouse (Wild-; Wall-) barley	<i>Hordeum murinum L.</i>	4,2	3
Average:			5,1	3,6
Total:			30,7	22
<b>Perennials</b>				
7	Bermuda grass	<i>Cynodon dactylon L.</i>	4,5	3
8	Purple nutsedge	<i>Cyperus rotundus L.</i>	5,6	4
Average:			5	3,5
Total:			10,1	7
Overall:			40,8	29

During the pea growth period, annual and perennial weeds accounted for 5.1 units when studied in the control variant. Zellek super, 104 g / 1 k.e. - After 15 days of application of herbicide 0.5 l / ha (standard) Italian ryegrass (*Lolium multiflorum Lam.*) - 89%, Spring wild-oat (*Avena fatua L.*) - 98%, Barren brome-grass (*Bromus sterilis L.*) - 88%, Yellow foxtail (*Setaria glauca L.*) - 87%, Waterpepper (*Polygonum hydropiper L.*) - 89% Mouse (Wild-; Wall-) barley (*Hordeum murinum L.*) - 86% average 0.5 pieces / m<sup>2</sup>, i.e., 88%, after 30 days

Italian ryegrass (*Lolium multiflorum Lam.*) - 89%, Spring wild-oat (*Avena fatua L.*) - 98%, Barren brome-grass (*Bromus sterilis L.*) - 88%, Yellow foxtail (*Setaria glauca L.*) - 87%, Waterpepper (*Polygonum hydropiper L.*) - 89% Mouse (Wild-; Wall-) barley (*Hordeum murinum L.*) - 86% an average of 0.6 units / m<sup>2</sup>, or 89%,

After 60 days Italian ryegrass (*Lolium multiflorum Lam.*) - 90%, Spring wild-oat (*Avena fatua L.*) - 93%, Barren brome-grass (*Bromus sterilis L.*) - 92%, Yellow foxtail (*Setaria glauca L.*) - 89%, Waterpepper (*Polygonum hydropiper L.*) - 89% Mouse (Wild-; Wall-) barley (*Hordeum murinum L.*) - 87% an average of 0.7 units / m<sup>2</sup>, or 90%, and the average calculation result was 89%. According

to these results, Zellek is super, 104 g / 1 k.e. - against 0.5 l / ha (standard) herbicide, Miura, k.e. - Efficiency when applied at 0.5 l / ha (Russia) Miura, k.e. - showed that it was 5% higher than 0.4 l / ha and 10% higher than the standard.

Determining the type, amount, and degree of damage to weeds is important to eliminate weeds that occur among agricultural crops. Because it is difficult to determine the scope of action of drugs used in the fight against them without knowing the above indications for their control. To determine, the types of weeds found in 1m<sup>2</sup> of land are identified and listed, and the degree of damage is determined by a score depending on the number of weeds. Weeds can be annual biennials, cereals or perennial biennials and cereals. In addition, the systematics, biology, and morphology of weeds are thoroughly studied, after which the drugs used against them are selected. Weeds were identified and counted in a simple manner using special rulers.

The results of the experiment show that the number of weeds in pea fields should be controlled. The reason for their proliferation may be the lack of timely and quality implementation of crop rotation and agro-technical measures. In addition, when untreated manure is applied, it is spread by birds, animals, wind, and water. It is also important that the seeds of weeds on the edges of the fields and on the waterfront are harvested before they are ripe. In addition, untimely cultivation of arable lands leads to an increase in the number of weeds.

Several methods of weed control can be used. Agrotechnical, mechanical, and chemical control methods can be used. Weeds absorb much more minerals from the soil than water from cultivated plants. In the remains of various insect eggs overwinter, disease spores are stored. Decreases crop yields and product quality. Taking into account the above, it is necessary to develop measures to combat them.

## **LITERATURE**

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