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Effective complexes of seed dressers in sowings of winter wheat

Aim To determine the efficacy of the selected compositions of the modern proterin and specialized against the ophthalmologist of the METAT-OXIDE-SEMICONDUCTOR 65557, is the sowing of a high-performance wheat winter-annual swarthy girl. Methods. Field, results processed after generally accepted in agriculture, agricultural chemistry, plant-grower and statistics by methodsologies. Results A synergistic effect is set in relation to the increase of the wheat winter-year productivity in co-operation of the proteins of the latetiude and the seestest of the top and the latetiude and the vitawax. The best in experiments results are obtained for the use of preparations for stainsing of the seeds of the lathiyud 2.0 + seestest top, 1.5 l / of t and latitude, 2.0 + vitax, 2.5 l / of t. Conclusions . Compositions of the known Ukrainian and Ukrainian market of opiate peel and vitamins with the preparation of anti-ophthalmic anti-inflammatory drugs are the prospect for providing high levels of wheat winter-annual productivity.

Keywords: seed traps, Triticum aestivum of L., grain-growing productivity.

An achievement of high levels of wheat production in winter-year is one of the main trends in the development of plant-grower in Ukraine [2] and the whole world [9, 10]. A large threat to the wheat plants in the autumn-spring period of vegetation, especially during vegetative development, is the causative agents of mushroom infections present. Last year in Ukraine, the winter-yearly sowing areas of wheat have been significantly increased by mushroom diseases, in particular root rot. The last one became one of the most widespread diseases of grain-crops and after the damage does not yield to fecal illnesses and fusariosus ear [6]. The increase in harmfulness can be explained by not only unfavorable weather conditions (duty of moist and droughty periods) but also the decline of the general agricultural culture, first of all by the destruction of the crop rotation. A difficult phytosanitary situation with root rot in Ukraine is related first of all to diminishing of part of volumes of stainsing effective preparations. As a result, in vegetation seasons 2009-2014 periodically to the 10% sowing of wheat winter-yearly in Ukraine is perish early in spring from a take-all and damage root rot. After the supervisions of the author, from root rot all yearly perishes 2-5% sowing of winter-annual wheat grain in the leading grain producers of the country. The level of technologies of growing grain crops in farms is substantially lower, which is why the damage caused by root rot is a mass character here.

Death of culture causes the aggregate of unfavorable factors for hibernation. Lengthening to the end of December to the period of autumn vegetation of sowing, increasing temperature with high amount of precipitations and monetictic level of photosynthetic active radiation predetermine the active development of root rot, especially fusarium [11, 16]. It hinders their optimal development of secondary rooting, the accumulation of sugars in plants and their tempering before the included winter season [7]. It should be noted that in many areas of the country attention is not enough to save the proper introduction of all the elements of the technology of growing of winter crops. The ineffective are used against root rot specimens, there is a lack of phosphorus, potassium, elements of the redox systems of plants - sulfur, copper, manganese, zinc, iron, and the high quality differences of culture are not taken into account. The last results in the ruin of a row of sorts, the first of all sorts of wheat, the winter-year of high-intensive type [2].

Root to the rot are the diseases of grain-crops, that strike a root, basal part of stem, underground merithallus, knot of bushing out. Over 20 mushrooms - causative agents of root rot are identified only in Ukraine. To nayshkodochynnishyh helmintosporiozna belong root rot, or ordinary root rot (a causative agent is a mushroom from the class of Deuteromycetes (Bipolaris sorokiniana (of Sacc.) / Drechslera of sorokiniana, Helminthosporium of sativum); tserkosporelozna basal rot of wheat (of Pseudocercosporella of herpotrichoides); ryzoktonioz, bordered spotted or ryzoktoniozna root rot (of Rhizoctonia of cerealis, Rhizoctonia of solani / of Thanatephorus of cucumeris); pitioz (of Pythium of spp.) - caused by the

mushrooms of P. aristosporum, P. arrhenomanes, P . graminicola, P. ultimum, that strike the rootage of plantlets and young plants of wheat; Fusarium root to the rot (of Fusarium of oxysporum, Fusarium of solani (of Sacc.), F. avenaceum, F. verticilliodes (the sexual stage - G. moniliformis), F. subglutinans (the sexual stage - G. subglutinans), F. acuminatum, F. equiseti (of Sacc.); ofio Painful root rot, or ophibolosis (causative agent - Gaeumannomyces of graminis (of Sacc.) And others like that [16, 18].

A fight against obobolozoz, in the opinion of the author, is the unsolved problem of modern plant-grower of Ukraine. The loss of grain from ophthalmic disease at the strong degree of development of illness, from literary data, can present over 65% [3, 5, 7, 19]. It is known only a few specialist technicians for a fight from ophibolosis in sowing of wheat winter-annual [2, 8, 11, 12, 17].

To find out the disease of ophiololysis is difficult enough: internal fabrics of root, external, remain without changes, are struck only [19]. It is necessary to apply special methods of diagnostics. The grain growers practically pay no attentions to the fight against ophiololysis and not rectify the presence of a causative agent in sowing. However, an effective fight against ophiololysis is the most powerful source of winter wheat production and quality in Ukraine.

One of the main directions in the creation of high-efficiency systems for the fight against many diseases and wreckers of arable crops is the introduction of the country of multicomponent proteins practically by all leading pesticidal companies in the world. Thus, in the leading ophthalmologists, there is a limited amount of operating substances able to hinder the development of ophiolobosis.

Aim of researches - to determine the efficiency of a row of compositions of modern proterinocytes, which have shown themselves in the plant-grower of the country, and a specialty-protectant of latency (METAL-OXIDE-SEMICONDUCTOR 65557) against ophthalobia on sowing of wheat winter-annual.

Materials and methods of researches. Research conducted on the basis of the experienced agricultural production of the Institute of Phytophysiology and Genetics of the National Academy of Sciences of Ukraine in the town of Glevakha of Vasylkiv district of the Kyiv region in 2011-2014 on the productive sowing of wheat winter-year (Triticum of aestivum of L.) of the short-stem high-intensive sort of swarthy girl. Area of registration areas in experience - 10 m2, the repeated is 6-8-valid for one occasion.

Experiments conducted on darkly-gray podzolized soil, sandy-loamy after mechanical composition. Table of contents of humus - 1.8%, pH (salt) - 5.8.

During a vegetation fed plants, challenged with wreckers and illnesses, carried out phenological surveillance. Phosphoric and potassium fertilizers brought in as monocaliphosphate and to the sulfate of potassium, nitrogen - in the first and second signup in the form of ammoniac saltpeter, and in the genesic period of development - urea. Seed, 280 g / area, processed immediately in front of the sowing of the drone silsters top 312.5 FS of tc.s. (dp fludoksonil + diphenokonazole + thiamethoxam) for the norms of expense 1,5-2 l / of t seed; Vitax 200 FF, 34% VS (dp carboxin + thirams) 2.5-3 l / of t seed; Max Forte 050 FS, tc.s. (dd. fludioxonil + tebuconazole + azoxystrobin), 2 l / of t seed; latex (METAL-OXIDE-SEMICONDUCTOR 65557), 1-2 l / of t seeds.

A table of contents is a squirrel and gluten determined by the method of IR spectroscopy on the device of Inframatic 8600 (firm Perten, Sweden).

The results of experiments are processed statistically according to standard methodsologies [1], using the program Exel and the professional package of software for statistical analysis of Statistica 8.0.

Results of researches. The set, that investigated, provided a reliable increase in harvest statistically, and for the application of vitavaks found out a tendency to increase the harvest (table). In the conditions of the autumn-spring period, 2012-2013, heavy for wintering wheat winter-year, when the terms were created for a significant take-all of the winter crop sowing, the efficiency of the preparation of the lake was near the size of activity of Preparations селест топ и максим forte. At more favourable terms of hibernation, 2013-2014, the best-in-experience productivity was used for the use of the Selestup Tester, the efficiency of the Vitamax and the max forte here was below.

It should be noted that with the application of preparations for stains of seed there was a decline of defeat of the stair root rot by 70-100%. In experiments, there are no visual defeats of stair root rot in the experiments on areas for the use of latex + vitawax and latex + gray top. At the same time, the high activity of the preparation of the latitiude testifies to the possible presence of a causative agent of ophthalmic disease and he is highly vulnerable to sowing of wheat winter-annual.

In the conditions of 2013, the protection of seeds with the preparation of the lactitudes is assisted in the upgrading of the grain of wheat's winter-yearly compositions of the proteins. However, on the results of the vegetation season in 2014 it was not observed.

At the determination of the features in the co-operation of the investigators, the synergy with the action of two (or more) pesticides has been discovered more than expected, comparatively with the separately applied preparations [14]. The set, that compositions of the latetiude with a snowstorm top or vitaux is synergistic in relation to the level of harvest of wheat in the winter-year of high-intensive variety. Taking into account the efficiency of the pretreatment against the onebulon, the display of the effect of synergy can be related to maintenance of high levels of absorption of wheat winter-annual plants.

Conclusions

In the conditions of the experienced agricultural production of the Institute of Phytophysiology and Genetics of the National Academy of Sciences of Ukraine in 2013 and 2014, conducted field research of modern compositions of compositions on the winter wheat harvest of a high-performance sort of swarthy Girl.

A synergistic in relation to the increase of harvest effect is set in the co-operation of preparations of latitiud + vitawax and lattiyud + seestest top. The best result is obtained for the use of preparations for stainsing of the seed of the lacquer, 2 + seestest top, 1.5 l/t of t and latitude, 2 + vitax, 2.5 l/t.

It is discovered that with the application of preparations for stains of seed observed, the decline of the defeat of the stair root rot is 70-100%. In experiments on areas for the use of compositions of latency + seestal top and latent + vitawax was not a visual defeat of stair root rot. The high activity of the lithotypes of the tracheostomy testifies to the possible presence of the causative agent of ophibolosis and the high severity of it on sowing of wheat winter-annual.

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