

**FEATURES OF TREATMENT OF WINTER WHEAT SEEDS BY DIFFERENT  
PROCESSORS**

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**ANNOTATION**

Carrying out pre-sowing seed treatment can reduce crop losses by 50% or more. It is absolutely necessary if the farm strives for high performance. But the choice of the drug and the etching procedure require certain knowledge: self-activity is fraught with negative consequences.

*Key words: seeds, grain, dressing agent, fungicides, diseases, treatment, pre-sowing treatment, seedlings.*

Crop losses from diseases are 15-35%, including 60% of insufficient seed dressing. Treatment with fungicides can reduce potential losses by 50-55%. That is why seed dressing prior to planting is an essential activity in the overall disease control system of any crop.

Seed dressing is a must if the farm wants to get a decent harvest. Unfortunately, etching is not very common in our region. Many farms believe that they can do without it, considering the damage from disease to be small. But if the farmer strives to reach the level of 40-60 c / ha of grain, it is impossible to do without dressing.

There are insecticidal and fungicidal seed disinfectants. The former protect seeds and seedlings from soil microflora and insects, the latter - from external and seed phytopathogenic infection, fungicidal preparations are more popular, because pests can be dealt with during the growing season of plants, but diseases that appear directly during the germination of seeds can be overcome very complicated. This is due to the fact that many farms themselves dress grain crops (mainly to protect against seed infections), for which they use fungicidal dressing agents. Unfortunately, today there are no absolutely healthy seed lots not affected by infection. And dressing is the only way to combat such dangerous diseases as cereal smut. Only this procedure provides protection of plants at the most vulnerable moment - during germination and the initial period of growth. On the territory of our country, a very large number of drugs are allowed for use, most of them combine systemic, local-systemic and contact properties. The drugs differ in the mechanism and nature of the action, as well as in the set of exterminated pathogens. Contact dressing agents used for prophylactic purposes create a protective shell on the seeds, rid the seed material from surface infection, and suppress pathogens in the zone where the seeds are located in the soil. And preparations of contact-systemic action not only create a protective film, but also disinfect seeds from the inside. These dressing agents are designed to combat more serious diseases, such as head smut, root rot, septoria blight.

The procedure for dressing seeds is quite simple: a preparation is loaded into the dressing machine, then the seeds are lifted up the auger and impregnated with a chemical, which requires the use of various dressing machines that ensure an acceptable quality of seed treatment. The effectiveness of the entire procedure and the final result depend on this.

Treat equipment for etching with care. The farm must have a special etching machine. If the dressing of seeds, well cleaned of dust, awns, scales, weed seeds and other mechanical impurities, is able to protect the crop from 40% of losses, then dressing by a handicraft method, using shovels and other improvised means, in 70% of

cases leads to negative results. Damaged seeds absorb an unacceptably large amount of the drug, film-forming substances are not completely distributed over the surface of the seeds, dust absorbs up to 30% of the dressing agent.

For dressing, it is recommended to take seeds that are free of dust and impurities: this guarantees good adhesion of the preparation and, therefore, a better quality of dressing. Ideally, these should be conditioned, calibrated seeds belonging to the middle part of the ear and with increased biological activity.

Before use, the drug is mixed with the required amount of water. Typically, the rate of the working solution when pickling grain with moisture is 10 l / t of grain (for example, 2.0-2.5 l of the preparation and 7.5-8 l of water). Depending on the volume of work, each farm independently chooses the equipment for pickling.

As for the timing of etching, there are no clear recommendations. It is recommended to pickle the seeds a month before sowing, as farms already have a lot of work in spring, so you should calmly process them in advance. But, as a rule, farms pickle seeds just before sowing.

In order to choose the right dressing agent, farms must analyze the seeds at a plant protection station and select drugs in accordance with the identified diseases. When choosing a dressing agent, one should be guided not only by phytoexamination data, but also by the general phytosanitary situation in the region.

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