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## **TYPES OF MALIGNANT PESTS DAMAGING AGRICULTURAL PRODUCTS DURING THE STORAGE PERIOD**

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### **Annotation**

This article provides information on the types of pests that affect stored products during storage and the damage they cause.

**Keywords:** Mealybug, dermestid, adult, larva, offspring, mite, grain-eating, endosperm, mite, improvement.

The ever-increasing world population requires further improvements in the production and storage of agricultural products. The majority of the world's population is now increasingly short of food and other products. On the other hand, people with vast knowledge of insects are insects armed with seemingly simple tools. But in many cases the advantage remains on the side of insects[1.].

Warehouse pests cause serious damage to the inventory stored in our nation's warehouses.

During the storage period, the pest (Surinam mealybug, four-spotted mealybug, barn weevil, grain weevil, rice weevil, leatherback chipmunk, small flour mite, Southern barn weevil, common feather mite) causes damage[2.].

Before grain and groats are stored in the reserve, its moisture content is lowered. Grain, despite its hardness, is one of the favorite feeds for pests.

Storages usually have to be dark due to bad weather and sufficient nutrients, favorable conditions for pests that allow them to reproduce throughout the year. The fact that the development of pests from eggs to adults occurs in a short period of time is their extremely favorable ability to give several generations throughout the year. The viability of adult males and females of many pest species is in most cases



several tens and hundreds of days. The high fecundity of barn pests allows females to lay several hundred eggs during their lifetime[3.].

Some species of barn pests can live both in the field and in barns (scavengers). Cereal seed eating gnawing beetles and larvae cause great damage to seeds, sesame seeds, seeds of vegetable and melon crops and cereal products.

There are also species (pea donut, moss donut) that enter warehouses with food during their life and quietly continue their life inside the grain.

For some species (skin-eaters), even if the main food is skin, it also damages grain and other foods.

Many species of insects and mites hide in burrows in the barn, inside the grain, avoiding light.

Warehouse pests in general are creatures that cause significant damage to stockpiled products spread across the Earth's surface.

Insects and mites cause direct and indirect damage to stored products. Direct damage reduces product quality. seeds lose their ability to germinate, contaminating the product with their waste. Harm causes overheating of grain and other products, spread of microflora, and in some cases disease in humans and animals. Some insects, e.g. - barn and rice weevils, grain weevils, cereal weevils - feed mainly on the endosperm of grain, others (Southern barn weevil, bed bugs) gnaw on the grain weevil. Flour mites and others cause damage by eating first the grain aphids and then the endosperm.

In different countries, the damage caused by insects to stored products is: in wheat - 1.5 - 7.6%, corn - 23%, rice - 2 - 49%, legumes - 14 - 64%. The larva of rice weevil eats 13.5 mg of endosperm, small flour mite-0.1-0.15 mg of chigiga, 0.15-0.2 mg of sesame, chirp beetle-0.7 and 1.1 mg per day. Their larvae kill twice as much product as the above. Losses from grain parmesan range from 1.07-7.8%. Similar damage is caused by barn and rice weevils [4.].

On the other hand, barn mites severely damage the seed, drastically reducing its ability to germinate. When mite-infested grain is stored in stock for 2 months, grain germination decreases - 5.5% in oats, 24.5% in beets, 13-25% in wheat. At a moisture content of 15.7% mite infested wheat for 40 days deteriorated gluten (viscosity) flour, the activity of catalase in flour from such grain decreased, and the



activity of amylase increased by 26%. During six months of storage of grain infested with weevils, its gluten content decreased by 31.3-11.6% [5].

Given the above, it is an extremely urgent task to study pests in depth and to develop modern, environmentally friendly, measures and measures for their control and their further improvement.

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