UDC: **633.174 – 026.564:632.6(292.485)(477)**

JUSTIFICATION OF PEST RESISTANCE IN SORGHUM AT THE FOREST-STEPPE OF UKRAINE

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Goal. To establish modern features of stability of grain sorghum to a complex of the basic pests at the resource-saving systems of farming. **Methods.** Stationary-vegetative, temporary fieldy, scouting. **Results.**In modern conditions of agricultural development, an important reserve for increasing the production of quality products is the reduction of crop losses in plant production, and particular, of sorghum from a complex of pests.

It has been established, that the priority is the rational use of crop rotation and stable hybrids of sorghum to a complex of pests in the main stages of sorghum organogenesis.

It is noted, that the basis of the relationship between pest and plants are high-quality nourishing bonds, the control of which and the adaptation of organisms physiology contribute to the efficient use of feed. Nutritional specialization of phytophages is determined by the biochemistry of the plant-recipient.

The stability of sorghum to damage is also due to factors that increase the immunity of plants. Particularly important, barriers that limiting insects and mites feeding.

The feeding of insects and mites - a process associated with high energy costs, a consistent change of action in the process of their development and reproduction. After pest finds the recipient-plant, they choice of place suitable for feeding and damage plant tissues.

Resistance to pests is genetically related to the time and duration of the origin of the most vulnerable phases of development of plants, the ability to synthesize protective substances, which features morphological and anatomical structure of organs and tissues.

Conclusions. The damage degree caused by pests of various origins depends on the characteristics of the anatomical and morphological structure of individual organs and tissues, the peculiarities of the passage of phenological phases of growth and development, the biochemistry of plant, the plant's ability to restore or compensate damaged organs. By these indirect signs one can conduct a successful assessment of the featuresto create valuable hybrids. At this stage, it is necessary to continue research on the optimization of agrotechnical, organizational and economic measures and breeding genetic method in increasing the stability of sorghum hybrids into a complex of harmful insects in the research area.