## Section 3. Zoology. Ecology and physiology of animals



## FEEDING OF SITOPHYLUS ORIZEA L.

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Economic connections of Ukraine favour spread of pests, therefore the study of fauna and ecology of corn and grain pests is actual. The purpose of our work id to analyse body mass of the rice weevil imago reared on different substrates. The indices of beetle body mass (Varly, 1978) more fully reflect the state of the population studied and are related to its reproductive potential. Beetles were reared on wheat, barley and rice (18-22°C). A selection for the study was random. Beetles were fixed in 70° spirit according to the standard method, dried first on filtration paper, and additionally (t=20°C) to constant weight. Body mass of an individual after fixation and air-dry mass were determined (on torsion balance) with 1mg accuracy.

Dry body mass of rice weevil feeding on barley is greater (41.7%) than of individuals feeding on rice (10 of 24 compared cases). Sometimes this index was equal or even less in value, accordingly 7 (29.2%) and 6 (25%). Thus a conclusion suggests that individuals of rice weevil, feeding in barley have larger dry body mass than those that fed on rice. Use of sign criterion for statistical material (Лакин, 1973) confirms this conclusion. It is determined that differences in dry body mass are reliable (level of significance P>0,95) (Шилов, 1985) It is logical to assume that individuals having larger fatness will also have higher fecundity, and also higher resistance to unfavourable factors (starvation, low temperatures, etc.). It means that places of rice weevil reproduction on barley require primary elimination as having great importance for further spread of the rest.

ПИТАНИЕ SITOPHYLUS ORIZEA L.

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Наиболее предпочтительным для рисового долгоносика является зерно ячменя. Выявлены достоверные различия в сухой массе жука, питающегося зерновками ячменя, по сравнению с пшеницей и рисом. Очаги размножения рисового довгоносика на ячмене требуют первоочередного уничтожения, как имеющие большое значение в дальнейшем распространении вредителя.