Relative Biochemical Basis of Susceptibility in Commercial Wheat Varieties against Angoumois Grain Moth, Sitotroga cerealella (Olivier) and Construction of its Life Table

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ABSTRACT: A study was conducted to evaluate the relative biochemical basis of susceptibility of six commercial wheat varieties grown in Khyber Pakhtunkhwa, Pakistan, against angoumois grain moth, *Sitotroga cerealella* (Olivier) (Lepidoptera: Gelechiidae) and construction of its life table at 28 ± 1°C, 65 ± 5 R.H.% and L:D 16:8 hours under laboratory environment. The results were evaluated on the basis of mean pest *S. cerealella* emergence, percent damage, and percent weight loss, male and female emerged along susceptibility index, 1000 grains weight, hardness and chemical composition of test wheat materials. Life table parameters of *S. cerealella* on highly susceptible and least susceptible wheat varieties were compared. On the basis of susceptibility index, variety Sirin (5.002) was recorded least susceptible and varietyPirsbak-2005 (7.832) recorded as highly susceptible. The chemical composition based on protein and carbohydrate contents (11.15%, 72.54%) revealed that the variety Sirin was recorded least susceptible, while variety Pirsabak-2005 (12.68%, 75.00%) was noted as highly susceptible. On the basis of life table, the net reproductive rate (10.9) on variety Pirsabak-2005 was higher than variety Sirin (9.4), and the intrinsic rate of increase was also higher on Pirsabak-2005 (30.7) than Sirin

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