Високостійкими до *Tilletia caries* відмічені зразки, захищені ефективними генами стійкості. Встановлено, що протягом років вивчення ефективність проти збудника *Tilletia caries* проявили гени стійкості: 'Sel. M. 65-3157' (Bt 9), 'Sel. M. 66-23' (Bt 10, 11), 'Лютесценс 6028' (Bt 12, 13), 'Еритроспермум 5221' (Bt 14), 'Ферругінеум 220/85' (Bt 15, 16), 'Еритроспермум 4318/88' (Bt 17), 'Еритроспермум 6089' (Bt 18, 19), 'Ферругінеум 124-88' (Bt 20, 21).

Сорти пшениці озимої та лінії, що відобразили імунність та високу стійкість до збудника твердої сажки рекомендуємо для використання в селекційному процесі, як джерела стійкості до даного збудника.

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Musayeva G. D.[1], junior researcher in Molecular Cytogenetic Lab,
Rahimov R. G.[2], PhD in Genetics,junior researcher in Molecular Cytogenetic Lab,
[1]AR MES Genetic Resources Institute, Azerbaijan
[2]AR MES Genetic Resources Institute, Azerbaijan
e-mail: musaligunel@gmail.com

CORRELATION RELATIONSHIPS BETWEEN SPIKE TRAITS OF TRITICALE COLLECTION SAMPLES

Triticale (×*Triticosecale* Wittmack) is a man-made cereal formed by crossing wheat with rye. It possesses the genomes of the genus *Triticum* and *Secale* ssp., and thus the advantageous properties of wheat grain with the features of rye, such as resistance to abiotic and biotic stresses. Triticale can be grown in a wide range of agro-ecologies, up to 3000 m above sea level. It requires an average of 500–600 mm rainfall, well distributed during the growing season. However, it can also perform well with as little as 350 mm of seasonal rainfall. It is adapted to a wide range of soils conditions including low fertility sands, shallow soils, acidic and sodic, very high and low Ph. Triticale has more vigorous root system than wheat, barley or oats binding light soils and extracting more nutrients from the soil and its vigorous root system makes growing this plant attractive in low fertile soils, light soils and where a crop is being to better compete with weeds. Drought and frost tolerance are the primary advantages that triticale has over the other cereal crops and thus it reduces weather risk. The adopted triticale cultivars have high grain yield potential.

Taking into account the above, the purpose of our current research work is to study the correlations between the spike yield traits (morphological characteristics such as spike length, mass, number of spikelet of spike, number of grains, mass) in the samples collected from the triticale collection kept in our institute.Correlation in the broadest sense is a measure of an association between variables. In correlated data, the change in the magnitude of 1 variable is associated with a change in the magnitude of another variable, either in the same (positive correlation) or in the opposite (negative correlation) direction. As research material, 82 triticale samples of different origins kept in the collection of Molecular Cytogenetics Department of ARETN Institute of Genetic Resources and hard (Triticum durum cv. Saray) and soft (Triticum aestivum cv. Absheron) wheat varieties created in our laboratory were used as controls. Correlation analysis revealed that there were highly significant correlations between all the traits. There were highly significant correlations between spike length and spike mass, number of spikelet of spike, grain number, and grain mass. There were highly significant correlations between spike mass and number of spikelet of spike, grain number, and grain mass. There were highly significant correlations between number of spikelet of spike, and spike length, spike mass, grain number and grain mass. There were highly significant correlations between spike mass, number of spikelet of spike and grain mass. At the same time, highly significant correlations were noted between grain mass and other traits.

In our study, the highly significant correlations between the yield traits of the spike can be considered appropriate to achieve introgression of high indicators by involving in interspecies hybridization of triticale and interspecies of wheat in future breeding works.