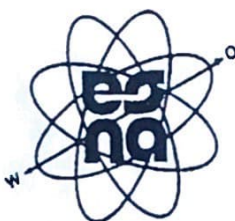


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THE NEW METHOD OF RELATING WHEAT GENOTYPES SEEDLINGS TO *Puccinia tritici* RESISTANCE CHARACTERS IN GREENHOUSE WITH MAXIMAL INFECTION INTENSITY IN FIELD

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The former method for estimating characters of resistance level to *Puccinia triticina* at seedling stage in greenhouse was of low capacity according to number of simultaneous tested wheat genotypes because of inoculation in settling tower, three days of successive pustule counting on each plant and time spent in data processing. The aim was to change all these limiting factors and achieve at least the similar correlation of data processed through new formula with maximal infection intensities in field. The resistance characters values of seedlings were achieved at approximate 20 °C in greenhouse during the winter period (temperature rising below 24 °C increase the leaf rust development). The method of inoculation by trashing spores used before only for reaction type (RT) estimation was predicted. The RT was transformed (0=6, 1=7, 2=8, 3=9, 4=10). The latency period (LP) that replaced LP 50 used before, was observed visually and marked adequate (1=pustule appeared first day, 0,8=some second day, 0,7=all after second day), as infection efficiency also (IF) (6=less than 20 pustules in the middle of the first leaf, 7=20-30, 8=30-40, 9=40-50 and 10=more than 50). The formula $RT \times IF \times LP$ results were correlated with maximal infection intensities in field of the same ten varieties used for former method establishing. The r value was 0,823, similar when results of formula $IF/LP 50 \times RT$ ($r=0,76$) or $IF / LP 50$ ($r=0,827$) (IF was the maximal number of pustule on approximately 100 mm² in the middle of the first leaf of seedlings, LP 50 was presented in days and transformed RT to 1=0,2, 2=0,4, 3=0,6,4=0,8) were used.