# The first appearance of a virulence to the wheat gene *Sr24* among stem rust samples from Kemerovo

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The stem rust resistance *Sr24* gene is very important for agriculture, since it has been providing effective protection against stem rust for many years in the Russian Federation and throughout the world (with the exception of some races in South Africa and India). The *Sr24* gene is located on the 3DL chromosome, within a spontaneous translocation from the 3Ag chromosome of *Agropyron elongatum*.

Despite this, for the first time we recorded a race fungus *Puccinia graminis f.* sp. *tritici* from Kemerovo virulent to the *Sr24* gene.

The main purpose of the work was to confirm the virulence of the Kemerovo race of the fungus to the *Sr24* gene and to conduct an extended analysis. For this, series of inoculation of wheat lines carrying the *Sr24* gene with monopustular isolates of this race were carried out. To postulate the presence of the gene, each plant was genotyped (before the inoculation with the fungus) using specific molecular marker (Sr24#12).

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