METHOD FOR DETECTING THE GENES OF RESISTANCE TO THE MOST DEVASTATING SPECIES OF RUST (GENUS *PUCCINIA*) IN WHEAT AND OTHER CEREALS USING THE MOLECULAR GENETIC ANALYSIS



Rusty wheat leaf (brown rust)

Stage of Development. Suggestions for Commercialization

IRL3, TRL3

Upon request, sample analysis of cereals (e. g. wheat varieties) and recommendations for their further use in breeding and crop production are provided

IPR Protection

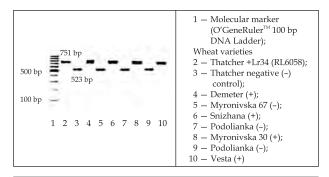
IPR1

Areas of Application

Identification of wheat and other cereals varieties resistant to various rust types for their further use in breeding and agriculture

Specification

A method that enables identifying the genes of resistance to different rust species (leaf rust (*Lr34*), stem rust (*Sr2* and *SrCad*), and yellow rust (*Yr36* and *Yr10*)) and determining their allelic states using molecular genetic markers has been proposed



751 bp Lr 34 (+) — resistant to brown rust 523 bp Lr 34 (-) — nonresistant to brown rust

Detection of genes of resistance to brown rust using the molecular genetic analysis

Advantages

Upon request, sample analysis of cereals (e. g. wheat varieties) and recommendations for their further use in breeding and crop production are provided

Contact Information

Yaroslav B. Blume, Institute of Food Biotechnology and Genomics of the NAS of Ukraine; +38 044 434 37 77, e-mail: cellbio@cellbio.freenet.viaduk.net