

Title (en)  
NOVEL MEANS AND METHODS FOR CEREAL PATHOGEN RESISTANCE

Title (de)  
NEUARTIGE MITTEL UND VERFAHREN FÜR GETREIDEKRANKHEITSERREGERRESISTENZ

Title (fr)  
NOUVEAUX MOYENS ET PROCÉDÉS POUR LA RÉSISTANCE AUX AGENTS PATHOGÈNES DE CÉRÉALES

Publication  
**EP 3439463 A1 20190213 (EN)**

Application  
**EP 17713961 A 20170328**

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Abstract (en)  
[origin: EP3228187A1] The present disclosure provides means and methods for conferring pathogen resistance to, or increasing pathogen resistance of, a cereal plant cell, or a cereal plant or part thereof, comprising inhibiting the expression or activity of the at least one WRKY protein in a cereal plant cell, or a cereal plant or part thereof, as compared to a corresponding control plant cell, or control plant or part thereof, lacking the inhibition of the expression or activity of the at least one WRKY protein, wherein the at least one WRKY protein is characterized by (i) a fertilizer-responsive expression or activity, and/or (ii) the amino acid sequence motif D-G/E-X1-X2-W-R-K-Y-G-K/E/Q-K/E shown in SEQ ID NO: 1, wherein X1 is a hydrophobic amino acid and X2 is a polar, non-hydrophobic amino acid. The present invention also provides cereal plant cells, or cereal plants or parts thereof, carrying the inhibition of the expression or activity of the at least one WRKY protein. In particular, the pathogen is *Zymoseptoria tritici*.

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