

Title (en)

GERMPLASM AND MOLECULAR MARKERS FOR DISEASE RESISTANCE IN POTATO

Title (de)

KEIMPLASMA UND MOLEKULARE MARKER FÜR KRANKHEITSRESISTENZ IN KARTOFFEL

Title (fr)

GERMOPLASME ET MARQUEURS MOLECULAIRES DE RESISTANCE AUX MALADIES POUR POMME DE TERRE

Publication

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Application

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Abstract (en)

[origin: WO9905903A1] This invention provides novel germplasm, breeding stock, genetic markers and methods for introducing resistance to late blight and other diseases into cultivated potato plants. The germplasm is derived from a segment of the Solanum bulbocastanum genome that contains one or more genes conferring resistance to late blight. The S. bulbocastanum genome is introduced into cultivated potato by somatic hybridization of S. bulbocastanum with S. tuberosum. Also provided is a S. bulbocastanum RAPD fragment marker that co-segregates with the disease resistance gene. In addition, chromosome 8 RFLP markers are provided, which also are tightly linked to the resistance gene(s). These markers are used to monitor passage of the disease resistance trait in breeding crosses. The markers are also used to facilitate isolation of the S. bulbocastanum gene or genes responsible for the disease resistance.

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