

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

EP 1003364 A1 20000531 (EN)

Application

EP 98938178 A 19980727

Priority

- US 9815910 W 19980727
- US 5426797 P 19970730

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.

IPC 1-7

A01H 5/00; **A01H 1/00**; **A01H 1/04**; **C12N 15/05**; **C12N 15/09**; **C12N 15/11**

IPC 8 full level

A01H 5/04 (2006.01); **C07K 14/415** (2006.01); **C12N 15/82** (2006.01); **C12Q 1/68** (2006.01); **C12Q 1/6895** (2018.01)

CPC (source: EP US)

C07K 14/415 (2013.01 - EP); **C12N 15/8282** (2013.01 - EP); **C12Q 1/6895** (2013.01 - EP US); **C12Q 2600/13** (2013.01 - EP); **C12Q 2600/156** (2013.01 - EP)

Citation (search report)

See references of WO 9905903A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9905903 A1 19990211; AU 8676298 A 19990222; CA 2298843 A1 19990211; CN 1314782 A 20010926; CR 5828 A 19991025; EP 1003364 A1 20000531; PE 20000132 A1 20000221

DOCDB simple family (application)

US 9815910 W 19980727; AU 8676298 A 19980727; CA 2298843 A 19980727; CN 98809716 A 19980727; CR 5828 A 19980724; EP 98938178 A 19980727; PE 00068198 A 19980730