

Title (en)

ANTIBODIES AND SCFV IMMUNOTOXINS SPECIFIC TO IMPORTED FIRE ANTS, AND THEIR APPLICATION

Title (de)

ANTIKÖRPER UND SCFV-IMMUNOTOXINE SPEZIFISCH FÜR IMPORTIERTE FEUERAMEISEN UND IHRE ANWENDUNG

Title (fr)

ANTICORPS ET IMMUNOTOXINES SCFV SPECIFIQUES DES FOURMIS DE FEU IMPORTEES, ET APPLICATION DE CES ANTICORPS ET IMMUNOTOXINES

Publication

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Application

EP 98934354 A 19980709

Priority

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Abstract (en)

[origin: WO9902991A1] The present invention is drawn to a safe, cost-effective, environmentally-friendly and ecologically-sound bioengineered product for managing imported fire ants, and a method of making this product. Immunological and genetic engineering techniques are used to generate monoclonal antibodies (mAbs) as well as viruses (phage) that display scFv heavy and/or light chain Ig fragments which exhibit high-avidity specific binding to cells of the microvilli of the midgut of imported fire ant queens. The specific monoclonal antibodies and phage displayed antibody Fab fragments are conjugated to a toxin for targeted delivery and destruction of imported fire ant queens, but not native species, thereby restoring the natural ecosystem.

IPC 1-7

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IPC 8 full level

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CPC (source: EP KR)

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