Title (en)

ASEXUAL INDUCTION OF HERITABLE MALE STERILITY AND APOMIXIS IN PLANTS

Publication

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Application

EP 88906709 A 19880728

Priority

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Abstract (en)

[origin: WO8900810A1] The present invention relates to methods for asexual induction of heritable male sterility and apomixis in plants. The invention is directed to factors derivable from certain plants which, when applied to certain recipient plants, induce heritable male sterility in the recipient. Such asexually transmissible male sterility factors, termed AMS/vectors, are present in extracts of certain male sterile alfalfa plants, where they are associated with a unique 1 x 10<6> (approx.) dalton molecular weight nucleic acid and a 40-110 nanometer particle. The asexually generated male-sterile plants derived by AMS/vector treatment can be used to produce new and valuable hybrids of alfalfa, corn, soybean, sorghum, sunflower, millet, tomato, and other plants.

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Citation (search report)

- Proc. Natl. Acad. Sci., Vol. 78, No. 11, November 1981, pages 7043-7046, US; L.K. GRILL et al.: "Identification and characterization of double-stranded RNA associated with cytoplasmic male sterility in vicia faba", Abstract, introduction, discussion.
- Plant Molecular Biology, Vol. 10, 1988, pages 489-497, Kluwer Academic Publishers, Dordrecht, NL; T. TURPEN et al.: "On the mechanism of cytoplasmic male sterility in the 447 line of Vicia faba", the whole document.
- See references of WO 8900810A1

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