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(71) Applicant: **TROPIC BIOSCIENCES UK LIMITED** [GB/GB]; Norwich Research Park, Innovation Centre, Colney Lane, Colney, Norwich NR4 7GJ (GB).

(72) Inventors: **MAORI, Eyal**; 5 Hurrell Road, Cambridge CB4 3RQ (GB). **GALANTY, Yaron**; 8 Benny's Way, Coton, Cambridge CB23 7PS (GB). **PIGNOCCHI, Cristina**; 49 Central Crescent, Hethersett, Norwich NR9 3EP (GB). **CHAPARRO GARCIA, Angela**; 58 Grove Road, Norwich NR1 3RW (GB). **MEIR, Ofir**; 7 Turnberry, Norwich Norfolk NR4 6PX (GB).

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(54) **Title:** PRODUCTION OF dsRNA IN PLANT CELLS FOR PEST PROTECTION VIA GENE SILENCING

(57) **Abstract:** A method of producing a long dsRNA molecule in a plant cell that is capable of silencing a pest gene is provided, the method comprising: (a) selecting m a genome of a plant a nucleic acid sequence encoding a silencing molecule having a plant gene as a target, the silencing molecule capable of recruiting RNA-dependent RNA Polymerase (RdRp); and (b) modifying a nucleic acid sequence of the plant gene so as to impart a silencing specificity towards the pest gene, such that a transcript of the plant gene comprising the silencing specificity forms base complementation with said silencing molecule capable of recruiting said RdRp to produce the long dsRNA molecule capable of silencing the pest gene, thereby producing the long dsRNA molecule m the plant cell that is capable of silencing the pest gene.

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