

b) providing a dsRNA expressed from the nucleic acid to a host cell comprising the target gene to suppress the expression of the target gene.

18. The method of claim 17, wherein providing the dsRNA expressed from the nucleic acid segment to the host cell comprises expressing the nucleic acid segment in the host cell in sense and antisense orientation.

19. The method of claim 17, wherein providing the dsRNA expressed from the nucleic acid segment to the host cell comprises providing a diet comprising the dsRNA to the cell or an organism comprising the cell and allowing the cell to take up the dsRNA.

20. The method of claim 17, wherein the host cell is a pest cell and wherein providing the dsRNA expressed from the nucleic acid to the pest cell comprises expressing the dsRNA in a plant cell and allowing a pest comprising the host cell to feed on the plant cell.

21. The method of claim 20, wherein suppressing the expression of the target gene in the pest cell is manifested by a phenotypic effect on said cell or the pest comprising the cell.

22. The method of claim 21, wherein the phenotypic effect is programmed cell death.

23. A method for modulating the expression of at least a first gene in an organism comprising

a) providing as a dsRNA at least a first nucleic acid segment obtained by the method of claim 1 to said organism, wherein said dsRNA segment is specific for said gene in said organism; and

b) observing a phenotypic effect in said organism.

24. The method of claim 23, wherein the phenotypic effect is selected from the group consisting of cessation of vegetative growth, cessation of reproductive growth, cessation of feeding, mortality, morbidity, stunting, paralysis, inhibition of sexual reproduction, molt inhibition, flightless, and failure to emerge from pupal stage.

25. A method for modulating the level of expression of a gene in a plant pest comprising providing in the diet of said pest at least a first dsRNA molecule, and observing a phenotypic effect of suppression of one or more genes in said pest, wherein said dsRNA molecule is produced from a nucleotide sequence that exhibits substantial homology with a corresponding DNA sequence of one or more essential genes in said pest, and wherein said nucleotide sequence is a nucleic acid segment identified according to claim 1.

26. A method for inhibiting plant pest infestation comprising expressing at least a first dsRNA molecule obtained according to claim 1 in a transgenic plant and providing the plant or a part or tissue thereof to one or more pests comprising said target gene, and observing a phenotypic effect in said organism, wherein the phenotypic effect is sufficient to inhibit infestation of said transgenic plant by said pest.

27. A method for protecting a plant from pest infestation comprising expressing a dsRNA molecules obtained according to claim 1 in a transgenic plant, providing said plant or a part or tissue thereof to one or more pests comprising said target gene, and observing a phenotypic effect in the organism, wherein the phenotypic effect is sufficient to inhibit infestation of the transgenic plant by the pest.

28. The method of claim 27, further comprising expressing in said plant at least a first protein selected from the group consisting of a patatin, a *Bacillus thuringiensis* insecticidal protein, a *Xenorhabdus* insecticidal protein, a *Photorhabdus* insecticidal protein, a *Bacillus laterosporus* insecticidal protein, and a *Bacillus sphaericus* insecticidal protein.

29. A method for protecting a plant or a seed thereof from pest infestation, comprising contacting the plant or seed thereof with a dsRNA molecule obtained according to claim 1.

30. The method of claim 29, further comprising contacting the plant or seed thereof with a patatin, a *Bacillus thuringiensis* insecticidal protein, a *Xenorhabdus* insecticidal protein, a *Photorhabdus* insecticidal protein, a *Bacillus laterosporus* insecticidal protein, a *Bacillus sphaericus* insecticidal protein, a biocontrol agent or an insecticide.

31. A cell of a plant protected from pest infestation according to the method of claim 23.

32. A plant regenerated from the plant cell of claim 31.

33. A seed or progeny produced from the plant of claim 32, wherein said seed comprises said nucleotide sequence.

34. A method of producing an expression construct for expressing a dsRNA with reduced transgene silencing in a plant cell, comprising:

a) preparing an expression construct comprising a first sequence, a second sequence, and a third polynucleotide sequence, wherein the third polynucleotide sequence is linked to the first polynucleotide sequence by the second polynucleotide sequence and the third polynucleotide sequence is substantially the reverse complement of the first polynucleotide sequence; and

b) introducing an intron into at least one of the first and third polynucleotide sequences or introducing said expression construct into the intron, wherein the first and third polynucleotide sequences hybridize when transcribed into RNA and form a dsRNA molecule stabilized by the second polynucleotide sequence after intron splicing, and wherein the expression construct exhibits reduced transgene silencing in a plant cell transformed with the expression construct relative to an expression construct that lacks the intron.

35. The method of claim 34, wherein the intron is introduced into at least one of the first and third polynucleotide sequences.

36. The method of claim 34, wherein the intron is introduced into the first and third polynucleotide sequences.

37. The method of claim 34, wherein the expression construct is introduced into the intron.

38. A method of controlling feeding by a target crop pest or pathogen or progeny thereof on a plant comprising introducing into the plant an expression construct prepared by the method of claim 34.

39. An expression construct prepared according to the method of claim 34.

40. A plant cell transformed with the expression construct of claim 39.

41. A method of increasing the pest or pathogen-inhibitory activity of a dsRNA, comprising

a) obtaining a first nucleic acid segment that when expressed as a dsRNA and taken up by a target crop pest or pathogen inhibits feeding by the target crop pest or pathogen or progeny thereof; and

b) linking the first nucleic acid segment to a second nucleic acid segment to create a longer nucleic acid