

What is claimed is:

1. A recombinant DNA molecule comprising a nucleotide sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10; and a complete complement thereof of any of the foregoing.
2. The recombinant DNA molecule of claim 1, wherein said molecule is from corn event MON95275, a representative sample of seed comprising said event having been deposited as ATCC Accession No. PTA-126049.
3. A DNA molecule comprising a polynucleotide segment of sufficient length to function as a DNA probe that hybridizes specifically under stringent hybridization conditions with corn event MON95275 DNA in a sample, wherein detecting hybridization of said DNA molecule under said stringent hybridization conditions is diagnostic for the presence of corn event MON95275 DNA in said sample.
4. The DNA molecule of claim 3, wherein said sample comprises a corn plant, corn plant cell, corn seed, corn plant part, corn progeny plant, processed corn seed, animal feed comprising corn, corn oil, corn meal, corn flour, corn flakes, corn bran, pasta made with corn, corn biomass, and fuel products produced using corn or corn parts.
5. A pair of DNA molecules, comprising a first DNA molecule and a second DNA molecule different from the first DNA molecule, that function as DNA primers when used together in an amplification reaction with a sample containing corn event MON95275 template DNA to produce an amplicon diagnostic for the presence of said corn event MON95275 DNA in said sample, wherein said amplicon comprises the nucleotide sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10.
6. A method of detecting the presence of a DNA segment diagnostic for corn event MON95275 DNA in a sample, said method comprising:
 - a) contacting said sample with the DNA molecule of claim 3;
 - b) subjecting said sample and said DNA molecule to stringent hybridization conditions; and
 - c) detecting hybridization of said DNA molecule to said DNA in said sample,

wherein said detection is diagnostic for the presence of said corn event MON95275 DNA in said sample.

7. A method of detecting the presence of a DNA segment diagnostic for corn event MON95275 DNA in a sample, said method comprising:
 - a) contacting said sample with the pair of DNA molecules of claim 5;
 - b) performing an amplification reaction sufficient to produce a DNA amplicon; and
 - c) detecting the presence of said DNA amplicon in said reaction,wherein said DNA amplicon comprises the nucleotide sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10.
8. A corn plant, corn plant part, corn cell, or part thereof comprising corn event MON95275 DNA characterized by the detectable presence of a recombinant polynucleotide molecule comprising the nucleotide sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10.
9. The corn plant, corn plant part, corn cell, or part thereof of claim 8, wherein the corn plant, corn plant part, corn cell, or part thereof is insecticidal when provided in the diet of a Coleopteran insect pest.
10. The corn plant, corn plant part, corn cell, or part thereof of claim 9, wherein the Coleopteran insect pest is selected from the group consisting of Western Corn Rootworm (*Diabrotica virgifera virgifera*) and Northern Corn Rootworm (*Diabrotica barberi*).
11. The corn plant, corn plant part, corn cell, or part thereof of claim 8, wherein the corn plant is further defined as progeny of any generation of a corn plant comprising the corn event MON95275.
12. A method for protecting a corn plant from insect infestation, wherein said method comprises providing in the diet of a Coleopteran insect pest an insecticidally effective amount of cells or tissue of the corn plant comprising corn event MON95275.
13. The method of claim 12, wherein said Coleopteran insect pest is selected from the group consisting of Western Corn Rootworm (*Diabrotica virgifera virgifera*) and Northern Corn Rootworm (*Diabrotica barberi*).
14. A method of producing a corn rootworm resistant corn plant comprising:

- a) breeding two different corn plants with at least one of the two different corn plants comprising corn event MON95275 DNA to produce progeny;
- b) confirming in said progeny the presence of a DNA segment diagnostic for corn event MON95275 DNA; and
- c) selecting said progeny comprising corn event MON95275 DNA;

wherein said progeny of step c) are corn rootworm resistant.

- 15. A corn seed comprising a detectable amount of the nucleotide sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10, or complete complements thereof.
- 16. A nonliving corn plant material comprising a detectable amount of the DNA molecule of claim 1.
- 17. A microorganism comprising a detectable amount of the DNA molecule of claim 1.
- 18. The microorganism of claim 17, wherein the microorganism is selected from the group consisting of a bacterial cell and a plant cell.
- 19. A commodity product comprising a detectable amount of a DNA molecule unique to corn event MON95275, wherein the molecule comprises the DNA molecule of claim 1.
- 20. The commodity product of claim 19, further selected from the group consisting of whole or processed corn seed, animal feed comprising corn, corn oil, corn meal, corn flour, corn flakes, corn bran, corn biomass, and fuel products produced using corn or corn parts.
- 21. A corn plant, corn plant part, or corn seed comprising DNA functional as a template in a DNA amplification method producing an amplicon diagnostic for corn event MON95275 DNA.
- 22. A method of determining the zygosity of a corn plant or corn seed comprising corn event MON95275 comprising:
 - a) contacting a sample comprising corn DNA with a first primer pair that is capable of producing an amplicon diagnostic for the allele corresponding to corn event MON95275 DNA;

- b) contacting said sample with a second primer pair that is capable of producing, using a thermal amplification reaction, an amplicon of an internal standard corn genomic DNA known to be single-copy and homozygous in the corn plant;
 - c) contacting said sample with a probe set which contains at least a first probe that specifically hybridizes to (or with) the allele DNA of corn event MON95275, and a second probe that specifically hybridizes to the internal standard corn genomic DNA known to be single-copy and homozygous in the corn plant;
 - d) performing a DNA amplification reaction using real-time PCR and determining the cycle thresholds (Ct values) of the amplicon corresponding to the allele DNA of corn event MON95275 and the single-copy, homozygous internal standard;
 - e) calculating the difference (ΔC_t) between the Ct value of the single-copy, homozygous internal standard amplicon and the Ct value of the amplicon corresponding to the allele DNA of corn event MON95275; and
 - f) determining zygosity, wherein a ΔC_t of about zero (0) indicates homozygosity of the inserted T-DNA of event MON95275 and a ΔC_t of about one (1) indicates heterozygosity of the inserted T-DNA of corn event MON95275.
23. The method of claim 22, wherein the primer pairs are selected from the group consisting of SEQ ID NO:15 combined with SEQ ID NO:16, and SEQ ID NO:18 combined with SEQ ID NO:19; and wherein the probes are SEQ ID NO:17 and SEQ ID NO:20.
24. The method of claim 22, wherein the ΔC_t of about one (1) indicating heterozygosity of the inserted T-DNA of MON95275 is in the range of 0.75 to 1.25.
25. A method of determining the zygosity of a corn plant or corn seed comprising corn event MON95275 comprising:
- a) contacting a sample comprising corn DNA with a set of primer pairs comprising at least two different primer pairs capable of producing a first amplicon diagnostic for corn event MON95275 and a second amplicon diagnostic for native corn genomic DNA devoid of corn event MON95275 DNA;
 - b) performing a nucleic acid amplification reaction with the sample and the set of primer pairs; and
 - c) detecting in the nucleic acid amplification reaction the first amplicon diagnostic for the presence of corn event MON95275 DNA, or the second amplicon

diagnostic for native corn genomic DNA devoid of corn event MON95275, wherein the presence of only the first amplicon is diagnostic of a corn plant or corn seed homozygous for corn event MON95275 DNA, and the presence of both the first amplicon and the second amplicon is diagnostic of a corn plant or corn seed heterozygous for corn event MON95275 DNA; or

- d) contacting a sample comprising corn DNA with a probe set which contains at least a first probe that specifically hybridizes to corn event MON95275 DNA and at least a second probe that specifically hybridizes to corn genomic DNA that was disrupted by insertion of the heterologous DNA of corn event MON95275 and does not hybridize to corn event MON95275 DNA; and
- e) hybridizing the probe set with the sample under stringent hybridization conditions,

wherein detecting hybridization of only the first probe under the hybridization conditions is diagnostic for a homozygous allele of corn event MON95275 DNA, and wherein detecting hybridization of both the first probe and the second probe under the hybridization conditions is diagnostic for a corn plant or seed heterozygous for corn event MON95275 DNA.

- 26. The method of claim 25, wherein the set of primer pairs comprises SEQ ID NO:15 combined with SEQ ID NO:16, and SEQ ID NO:21 combined with SEQ ID NO:22.
- 27. The method of claim 26, wherein the probe set comprises SEQ ID NO:17 and SEQ ID NO:23.