

WHAT IS CLAIMED IS:

1. A mosquitocidal toxin, comprising:

a fused toxin peptide, wherein the fused toxin peptide comprises a mosquito targeting peptide fused to a toxin peptide, and wherein the fused toxin peptide is toxic to mosquitoes.
2. The mosquitocidal toxin of claim 1, wherein the mosquito targeting peptide targets *Aedes*, *Anopheles*, or *Culex* mosquitoes.
3. The mosquitocidal toxin of claim 1, wherein the mosquito targeting peptide targets *Aedes aegypti* mosquitoes.
4. The mosquitocidal toxin of claim 1, wherein the mosquito targeting peptide binds to gut epithelium of *Aedes aegypti* mosquitoes.
5. The mosquitocidal toxin of claim 1, wherein the mosquito targeting peptide is a peptide derived from Domain III of a flavivirus.
6. The mosquitocidal toxin of claim 1, wherein the mosquito targeting peptide is a peptide derived from Domain III of the glycoprotein of dengue virus.
7. The mosquitocidal toxin of claim 1, wherein the toxin peptide is a peptide having toxicity against mosquitoes.
8. The mosquitocidal toxin of claim 1, wherein the toxin peptide is a peptide that lacks toxicity against mosquitoes without fusion to the mosquito targeting peptide.
9. The mosquitocidal toxin of claim 1, wherein the toxin peptide is a Hv1a spider toxin peptide.
10. The mosquitocidal toxin of claim 1, wherein the fused toxin peptide lacks toxicity against other organisms.
11. The mosquitocidal toxin of claim 1, further comprising a carrier.

12. A method for producing a modified plant expressing mosquitocidal toxins, comprising:

inducing expression of an exogenous gene construct encoding a fused toxin peptide in target cells of the plant, wherein the fused toxin peptide comprises a mosquito targeting peptide fused to a toxin peptide, and wherein the fused toxin peptide is toxic to mosquitoes; and

producing a modified plant expressing the fused toxin peptide.

13. The method of claim 12, wherein the plant is a nectar plant, the target cells of the plant are nectar-producing cells, and the modified plant expresses the fused toxin peptide in nectar of the plant.

14. The method of claim 13, wherein the plant is *Impatiens walleriana*.

15. The method of claim 12, wherein the mosquito targeting peptide targets *Aedes*, *Anopheles*, or *Culex* mosquitoes.

16. The method of claim 12, wherein the mosquito targeting peptide targets *Aedes aegypti* mosquitoes.

17. The method of claim 12, wherein the mosquito targeting peptide binds to gut epithelium of *Aedes aegypti* mosquitoes.

18. The method of claim 12, wherein the mosquito targeting peptide is a peptide derived from Domain III of a flavivirus.

19. The method of claim 12, wherein the mosquito targeting peptide is a peptide derived from Domain III of the glycoprotein of dengue virus.

20. The method of claim 12, wherein the toxin peptide is a peptide having toxicity against mosquitoes.

21. The method of claim 12, wherein the toxin peptide is a peptide that lacks toxicity against mosquitoes without fusion to the mosquito targeting peptide.

22. The method of claim 12, wherein the toxin peptide is a Hv1a spider toxin peptide.
23. The method of claim 12, wherein the fused toxin peptide lacks toxicity against other organisms.
24. The method of claim 12, wherein the exogenous gene construct comprises a promoter specific to the plant, a gene encoding the mosquito targeting peptide, and a gene encoding the toxin peptide.
25. The method of claim 12, wherein the step of inducing expression of the exogenous gene construct comprises transforming at least one cell of the plant with the exogenous gene construct to produce a modified plant expressing the fused toxin peptide.
26. The modified plant prepared by the method of claim 12.
27. A method for producing a modified plant expressing mosquitocidal toxins in nectar of the plant, comprising:
- inducing expression of an exogenous gene construct encoding a fused toxin peptide in cells of the plant producing nectar, wherein the fused toxin peptide comprises a mosquito targeting peptide fused to a toxin peptide, wherein the mosquito targeting peptide is a peptide derived from Domain III of the glycoprotein of dengue virus, wherein the toxin peptide is a Hv1a spider toxin peptide, and wherein the plant is *Impatiens walleriana*; and
 - producing a modified plant expressing the fused toxin peptide in the nectar of the modified plant and not expressing the fused toxin peptide in non-nectar tissues of the modified plant.
28. The modified plant prepared by the method of claim 27.
29. A modified mosquitocidal plant, wherein the modified plant expresses an exogenous gene construct encoding a fused toxin peptide in target cells of the plant, wherein the fused toxin peptide comprises a mosquito targeting peptide fused to a toxin peptide, and wherein the fused toxin peptide is toxic to mosquitoes.

30. The modified mosquitocidal plant of claim 29, wherein the plant is a nectar plant, the target cells of the plant are nectar-producing cells, and the modified mosquitocidal plant expresses the fused toxin peptide in nectar of the plant.
31. The modified mosquitocidal plant of claim 30, wherein the plant is *Impatiens walleriana*.
32. The modified mosquitocidal plant of claim 29, wherein the mosquito targeting peptide targets *Aedes*, *Anopheles*, or *Culex* mosquitoes.
33. The modified mosquitocidal plant of claim 29, wherein the mosquito targeting peptide targets *Aedes aegypti* mosquitoes.
34. The modified mosquitocidal plant of claim 29, wherein the mosquito targeting peptide binds to gut epithelium of *Aedes aegypti* mosquitoes.
35. The modified mosquitocidal plant of claim 29, wherein the mosquito targeting peptide is a peptide derived from Domain III of a flavivirus.
36. The modified mosquitocidal plant of claim 29, wherein the mosquito targeting peptide is a peptide derived from Domain III of the glycoprotein of dengue virus.
37. The modified mosquitocidal plant of claim 29, wherein the toxin peptide is a peptide having toxicity against mosquitoes.
38. The modified mosquitocidal plant of claim 29, wherein the toxin peptide is a peptide that lacks toxicity against mosquitoes without fusion to the mosquito targeting peptide.
39. The modified mosquitocidal plant of claim 29, wherein the toxin peptide is a Hv1a spider toxin peptide.
40. The modified mosquitocidal plant of claim 29, wherein the fused toxin peptide lacks toxicity against other organisms.

41. The modified mosquitocidal plant of claim 29, wherein the exogenous gene construct comprises a promoter specific to the nectar of the plant, a gene encoding the mosquito targeting peptide, and a gene encoding the toxin peptide.
42. A seed of the modified plant of claim 29.
43. A modified mosquitocidal *Impatiens walleriana* plant, wherein the modified plant expresses an exogenous gene construct encoding a fused toxin peptide in cells of the plant producing nectar, wherein the fused toxin peptide comprises a mosquito targeting peptide fused to a toxin peptide, wherein the mosquito targeting peptide binds to gut epithelium of mosquitoes, wherein the toxin peptide is a Hv1a spider toxin peptide, and wherein the modified plant fails to express the fused toxin peptide in non-nectar tissues of the modified plant.
44. A modified mosquitocidal *Impatiens walleriana* plant, wherein the modified plant expresses an exogenous gene construct encoding a fused toxin peptide in cells of the plant producing nectar, wherein the fused toxin peptide comprises a mosquito targeting peptide fused to a toxin peptide, wherein the mosquito targeting peptide is a peptide derived from Domain III of the glycoprotein of dengue virus, wherein the toxin peptide is a Hv1a spider toxin peptide, and wherein the modified plant fails to express the fused toxin peptide in non-nectar tissues of the modified plant.