cases, one or more ingredients (e.g., at least 50%, 60%, 70%, 80%, 90%, 95%, 99%, or 100% of the ingredients) can be highly pure (e.g., at least 90%, 95%, 96%, 97%, 98%, 99%, 99.5%, or 99.9% pure). The methods also provide infinite reproducibility of a recipe, which is not possible with traditional production methods. Further, the methods described herein allow for unique flexibility in optimization of the flavors, aromas, and textures of Moscato wine, and greatly reduce or even eliminate the possibility that the resulting wine will contain detrimental or undesired components. Moreover, the methods disclosed herein differ from currently existing methods in that they are rapid, reproducible, and cost-effective.

In one aspect, the present disclosure refers to a Moscato replica comprising:

ethanol;

water; and

one or more additional volatile organic compounds (VOCs), wherein the additional VOCs comprise at least one compound selected from the group consisting of 1-para-menthene-8-thiol, 2-acetyl-1-methylpyrrole, 2-ethyl-3(5 or 6)- dimethylpyrazine, 2-ethyl-3-methylpyrazine, 2-isobutyl-3-methoxypyrazine, 2-isobutyl-4-methyl-1,3-dioxolane, 2-methoxy-3-(1-methylpropyl) pyrazine, 2-pentylfuran, 3,7-dimethyl-6-octenoic acid, 3-methylthio hexyl acetate, 3-phenylpropanal, 4,5,6,7-tetrahydro-3,6-dimethylbenzofuran, 4-mercapto-4-methyl-2-pentanone, 5-methyl-2-phenyl-2-hexenal, allyl hexanoate, ethyl (methylthio) acetate, ethyl 2-trans-4-cis-decadienoate, furfuryl thioacetate, indole, methionyl acetate (3-methylthio-propylacetate), methionyl butyrate, methyl-2-pyrrolyl ketone, phenethyl tiglate, and phenethylacetaldehyde dimethyl acetal.

In another example, the present disclosure refers to a method of making a Moscato-like alcoholic beverage, the method comprising combining ingredients comprising:

water,

one or more acids,

one or more sugars or sugar alcohols,

a pH-modifying salt,

optionally, one or more nucleotide monophosphates,

one or more amino acids,

ethanol, and

ten or more additional VOCs selected from the group consisting of 2-methyl-1-butanol, 2-nonanol, 2-nonanone, 2-undecanone, 3-methyl-1-pentanol, 4-carvomenthenol, a-terpineol, benzaldehyde, beta-pinene, butyl alcohol, butyric acid, citronellol, decanoic acid, delta-decalactone, diethyl malate, diethyl succinate, ethyl 2-methylbutyrate, ethyl butyrate, ethyl decanoate, ethyl isobutyrate, ethyl lactate, ethyl laurate, ethyl myristate, ethyl octanoate, ethyl salicylate, eucalyptol, gamma-terpinene, geraniol, hexanoic acid, hexyl acetate, hexyl alcohol, isoamyl acetate, isoamyl alcohol, isobutyl alcohol, isobutyraldehyde, isobutyric acid, linalyl acetate, l-limonene, L-rose oxide, nerol, p-cymene, phenethyl acetate, phenethyl alcohol, phenethyl butyrate, and phenethyl propionate.

In a further aspect, the present disclosure refers to a Moscato replica comprising:

ethanol;

water;

VOCs, wherein the VOCs comprise 2-nonanol, 2-nonanone, 2-undecanone, 3-methyl-1-pentanol, 4-carvomenthenol, benzaldehyde, beta-pinene, butyl alcohol, delta-decalactone, diethyl malate, diethyl succinate, ethyl lactate, ethyl myristate, ethyl salicylate, eucalyptol, gamma-terpinene, hexyl acetate, hexyl alcohol, isoamyl acetate, isobutyl alcohol, isobutyraldehyde, linalyl acetate, L-rose oxide, nerol, pphenethyl acetate, phenethyl alcohol, phenethyl butyrate, and phenethyl propionate; and

one or more non-volatile compounds, wherein the non-volatile compounds comprise 2-isopropylmalic acid, arginine, asparagine, beta-alanine, camphoric acid, choline, D-glucuronic acid, fucose, glutamic acid, glycine, histidine, leucine, lysine, mannitol, phenylalanine, quercetin, salicylic acid, threonine, trans-ferulic acid, tryptophan, tyrosine, and valine.

In yet another aspect, the present disclosure refers to a method of making a Moscato replica, the method comprising combining

ethanol;

water; and

one or more additional VOCs, wherein the additional VOCs comprise at least one compound selected from the group consisting of 1-para-menthene-8-thiol, 2-acetyl-1-methylpyrrole, 2-ethyl-3(5 or 6)-dimethylpyrazine, 2-ethyl-3-methylpyrazine, 2-isobutyl-3-methoxypyrazine, 2-isobutyl-4-methyl-1,3-dioxolane, 2-methoxy-3-(1-methylpropyl) pyrazine, 2-pentylfuran, 3,7-dimethyl-6-octenoic acid, 3-methylthio hexyl acetate, 3-phenylpropanal, 4,5,6,7-tetrahydro-3,6-dimethylbenzofuran, 4-mercapto-4-methyl-2-pentanone, 5-methyl-2-phenyl-2-hexenal, allyl hexanoate, ethyl (methylthio) acetate, ethyl 2-trans-4-cis-decadienoate, furfuryl thioacetate, indole, methionyl acetate (3-methylthio-propylacetate), methionyl butyrate, methyl-2-pyrrolyl ketone, phenethyl tiglate, and phenethylacetaldehyde dimethyl acetal; wherein at least one of the one or more additional VOCs is present in a concentration of at least about 2-fold the concentration of the same VOC in a corresponding traditional Moscato.

In another aspect, the present disclosure refers to a method of making a Moscato replica, the method comprising:

combining ingredients comprising:

water;

ethanol; and

one or more additional volatile organic compounds (VOCs),

wherein the one or more additional VOCs comprise at least one compound selected from the group consisting of 1-para-menthene-8-thiol, 2-acetyl-1-methylpyrrole, 2-ethyl-3(5 or 6)-dimethylpyrazine, 2-ethyl-3-methylpyrazine, 2-isobutyl-3-methoxypyrazine, 2-isobutyl-4-methyl-1,3-dioxolane, 2-methoxy-3-(1-methylpropyl) pyrazine, 2-pentylfuran, 3,7-dimethyl-6-octenoic acid, 3-methylthio hexyl acetate, 3-phenylpropanal, 4,5,6,7-tetrahydro-3,6-dimethylbenzofuran, 4-mercapto-4-methyl-2-pentanone, 5-methyl-2-phenyl-2-hexenal, allyl hexanoate, ethyl (methylthio) acetate, ethyl 2-trans-4-cis-decadienoate, furfuryl thioacetate, indole, methionyl acetate (3-methylthio-propylacetate), methionyl butyrate, methyl-2-pyrrolyl ketone, phenethyl tiglate, and phenethylacetaldehyde dimethyl acetal.

In an example, the present disclosure refers to a Moscato-like alcoholic beverage concentrate comprising:

ethanol;

water; and

one or more additional VOCs, wherein at least one of the one or more additional VOCs is present in a concentration of at least about 2-fold the concentration of the same VOC in a corresponding traditional Moscato.

In one example, this document features a Moscato-like alcoholic beverage that contains ethanol, water, and one or more additional volatile organic compounds (VOCs), where the additional VOCs do not include one or more of 1-decanol, 1-octanol, 1-octen-3-ol, 2,3-pentadione, 2-methylbutyraldehyde, 4-ethyl phenol, cinnamaldehyde, cis-3-hexen-1-ol, ethyl levulinate, ethyl phenyl acetate, ethyl propionate, eucalyptol, isovaleraldehyde, methyl acetate, phenethyl acetate, propyl acetate, 1,1-diethoxyethane, 2-heptanone, 2-methoxy-4-propylphenol, 2-methylbutyl isovalerate, 2-nonanol, 2-undecanone, 3-carene, 4-ethyl guaiacol, acetophenone, alpha ionone, amyl butyrate, beta-ionone, butyl acetate, cis-3-hexenyl acetate, cis-whiskey lactone, diethyl malate, ethyl 3-hydroxyhexanoate, ethyl benzoate, ethyl cinnamate, ethyl heptanoate, ethyl myristate, ethyl nonanoate, ethyl salicylate, ethyl trans-2-butenoate, ethyl trans-3-hexenoate, ethyl undecanoate, ethyl(methylthio) acetate, ethyl-2-methylbutyrate, eugenol, farnesol, fufural, gamma-nonalactone, geranyl acetone, guaiacol, heptyl acetate, isoamyl hexanoate, isoamyl isobutyrate, isoamyl octanoate, isobutyl isobutyrate, isobutyraldehyde, linalool oxide, methional, methyl laurate, methyl octanoate, methyl salicylate, myrcene, p-cresol, p-cymene, phenethyl formate, phenethyl octanoate, salicylaldehyde, 2-acetylpyridine, 2-isopropyl-3-methoxypyrazine, 2-methoxy-4-methylphenol, 3-(methylthio)-1-propanol, 3,7 dimethyl-6-octenoic acid, 3-nonene-2-one, acetaldehyde, alpha-phellandrene, butyl formate, butyl isovalerate, dimethyl sulfide, ethyl palmitate, ethyl-3-hydroxybutyrate, gamma-octalactone, hexyl hexanoate, isoborneol,

WHAT IS CLAIMED IS:

1. A Moscato replica comprising:

ethanol;

water; and

one or more additional volatile organic compounds (VOCs), wherein the additional VOCs comprise at least one compound selected from the group consisting of 1-para-menthene-8-thiol, 2-acetyl-1-methylpyrrole, 2-ethyl-3(5 or 6)-dimethylpyrazine, 2-ethyl-3-methylpyrazine, 2-isobutyl-3-methoxypyrazine, 2-isobutyl-4-methyl-1,3-dioxolane, 2-methoxy-3-(1-methylpropyl) pyrazine, 2-pentylfuran, 3,7-dimethyl-6-octenoic acid, 3-methylthio hexyl acetate, 3-phenylpropanal, 4,5,6,7-tetrahydro-3,6-dimethylbenzofuran, 4-mercapto-4-methyl-2-pentanone, 5-methyl-2-phenyl-2-hexenal, allyl hexanoate, ethyl (methylthio) acetate, ethyl 2-trans-4-cis-decadienoate, furfuryl thioacetate, indole, methionyl acetate (3-methylthio-propylacetate), methionyl butyrate, methyl-2-pyrrolyl ketone, phenethyl tiglate, and phenethylacetaldehyde dimethyl acetal.

2. The Moscato replica of claim 1, wherein the one or more additional VOCs comprise at least one compound selected from the group consisting of 2-isobutyl-4-methyl-1,3-dioxolane, 2-pentylfuran, allyl hexanoate, and methionyl butyrate.

3. The Moscato replica of claim 1 or claim 2, wherein the one or more additional VOCs further comprise at least one compound selected from the group consisting of 2-nonanol, 4-(4-hydroxyphenyl)-2-butanone, 4-vinylphenol, butyraldehyde, citronellyl acetate, damascone, decanal, gamma-dodecalactone, hexanal, propionaldehyde, sotolon, and valeric acid.

4. The Moscato replica of any one of claims 1-3, wherein the one or more additional VOCs further comprise at least one compound selected from the group consisting of 2-nonanol, 4-vinylphenol, or both.

5. The Moscato replica of any one of claims 1-4, wherein the one or more additional VOCs do not comprise one or more of 1-octanol, 1-octen-3-ol, 1-propanol, 2,4,6-trimethylphenol, 2-acetylpyridine, 2-isopropyl-3-methoxypyrazine, 2-methylbutyl acetate, 2-methylbutyraldehyde,

3-(methylthio)-1-propanol, 3,7-dimethyl-6-octanoic acid, 3-nonen-2-one, 5-ethyl-3-hydroxy-4-methyl-2(5H)-furanone, 5-methyl furfural, 6-methyl-5-hepten-2-one, acetaldehyde, a-phellandrene, b-caryophellene, butyl formate, butyl isovalerate, cinnamaldehyde, citral, damascone, D-camphor, decanol, dimethyl sulfide, ethyl acetate, ethyl palmitate, ethyl phenylacetate, ethyl propionate, ethyl trans-2-butenoate, ethyl-3-hydroxybutyrate, furfural, hexadecanol, hexyl hexanoate, isoborneol, isobutyl acetate, isovaleraldehyde, isovaleric acid, jasmine lactone, linalool oxide, methyl acetate, methyl cyclopentenolone, methyl decanoate, myrtenol, octyl acetate, p,a-dimethylstyrene, phenylacetaldehyde, propyl butyrate, propyl hexanoate, terpinolene, trans-2-hexen-1-ol, and trans-2-pentenal.

6. The Moscato replica of any one of claims 1-5, wherein the additional VOCs do not comprise one or more of 1-octanol, 1-octen-3-ol, 1-propanol, 2,4,6-trimethylphenol, 2-methylbutyl acetate, 2-methylbutyraldehyde, 5-ethyl-3-hydroxy-4-methyl-2(5H)-furanone, 6-methyl-5-hepten-2-one, b-caryophellene, butyl formate, cinnamaldehyde, citral, D-camphor, decanol, ethyl acetate, ethyl phenylacetate, ethyl propionate, ethyl trans-2-butenoate, hexadecanol, isobutyl acetate, isovaleraldehyde, methyl acetate, methyl decanoate, p,a-dimethylstyrene, phenylacetaldehyde, and terpinolene.

7. The Moscato replica of any one of claims 1-6, wherein the one or more additional VOCs comprise one or more esters.

8. The Moscato replica of any one of claims 1-7, wherein the one or more additional VOCs further comprise one or more esters selected from the group consisting of 2-methylbutyl acetate, diethyl malate, diethyl succinate, ethyl 2-methylbutyrate, ethyl acetate, ethyl butyrate, ethyl decanoate, ethyl hexanoate, ethyl isobutyrate, ethyl isovalerate, ethyl lactate, ethyl laurate, ethyl myristate, ethyl octanoate, ethyl salicylate, ethyl valerate, hexyl acetate, isoamyl acetate, linalyl acetate, linalyl butyrate, methyl decanoate, methyl hexanoate, phenethyl acetate, phenethyl butyrate, phenethyl propionate, and mixtures thereof.

9. The Moscato replica of claim 7 or claim 8, wherein the one or more esters are present in a total amount of 9 mg/L to 70 mg/L.

10. The Moscato replica of any one of claims 7-9, wherein the one or more esters are present in a total amount of at least 26 mg/L.

11. The Moscato replica of any one of claims 1-10, wherein the one or more additional VOCs further comprise one or more acids.

12. The Moscato replica of claim 11, wherein the one or more acids are selected from the group consisting of butyric acid, decanoic acid, hexanoic acid, isobutyric acid, octanoic acid, and mixtures thereof.

13. The Moscato replica of 11 or claim 12, wherein the one or more acids are present in a total amount of 0.07 mg/L to 11 mg/L.

14. The Moscato replica of any one of claims 1-13, wherein the one or more additional VOCs further comprise one or more alcohols.

15. The Moscato replica of claim 14, wherein the one or more alcohols are selected from the group consisting of 1-propanol, 2-methyl-1-butanol, 2-nonanol, 3-methyl-1-pentanol, benzyl alcohol, butyl alcohol, hexyl alcohol, isoamyl alcohol, isobutyl alcohol, phenethyl alcohol, and mixtures thereof.

16. The Moscato replica of claim 14 or claim 15, wherein the one or more alcohols are present in a total amount of 1.9 to 86 mg/L.

17. The Moscato replica of any one of claims 14-16, wherein the one or more alcohols are preset in a total amount of at least 5.5 mg/L.

18. The Moscato replica of any one of claims 1-17, wherein the one or more additional VOCs comprise one or more aldehydes or ketones.

19. The Moscato replica of any one of claims 1-18, wherein the one or more additional VOCs further comprise one or more aldehydes or ketones selected from the group consisting of 2-nonanone, 2-undecanone, acetovanillone, benzaldehyde, damascenone, isobutyraldehyde, and mixtures thereof.

20. The Moscato replica of claim 18 or claim 19, wherein one or more aldehydes or ketones are present in a total amount of 0.05 mg/L to 0.6 mg/L.

21. The Moscato replica of any one of claims 1-20, wherein the one or more additional VOCs comprise one or more terpenes or isoprenoids.

22. The Moscato replica of any one of claims 1-21, wherein the one or more additional VOCs further comprise one or more terpenes or isoprenoids selected from the group consisting of 4-carvomenthenol, a-terpineol, beta-pinene, citronellol, eucalyptol, gamma-terpinene, geraniol, l-limonene, l-linalool, L-rose oxide, nerol, p-cymene, and mixtures thereof.

23. The Moscato replica of claim 21 or claim 22, wherein the one or more terpenes or isoprenoids are present in a total amount of 0.08 mg/L to 5 mg/L.

24. The Moscato replica of any one of claims 1-23, wherein the one or more additional VOCs further comprise one or more phenols.

25. The Moscato replica of claim 24, wherein the one or more phenols comprise 4-vinylphenol.

26. The Moscato replica of claim 24 or claim 25, wherein the one or more phenols are present in a total amount of 0.001 mg/L to 0.2 mg/L.

27. The Moscato replica of any one of claims 1-26, wherein the one or more additional VOCs further comprise one or more lactones.

28. The Moscato replica of claim 27, wherein the one or more lactones comprise delta-decalactone, gamma-decalactone, or both.

29. The Moscato replica of claim 27 or claim 28, wherein the one or more lactones are present in a total concentration of 0.001 mg/L to 2.5 mg/L.

30. The Moscato replica of any one of claims 1-29, wherein the one or more additional VOCs comprise one or more amines or pyrazines.

31. The Moscato replica of any one of claims 1-30, wherein the one or more additional VOCs comprise one or more thiols.

32. The Moscato replica of any one of claims 1-31, wherein the one or more additional VOCs further comprise 3-mercaptohexyl acetate.

33. The Moscato replica of any one of claims 1-32, wherein the one or more additional VOCs further comprise at least 10 compounds selected from the group consisting of 2-methyl-1-butanol, 3-methyl-1-pentanol, a-terpineol, beta-pinene, butyric acid, decanoic acid, delta-decalactone, diethyl succinate, ethyl butyrate, ethyl decanoate, ethyl hexanoate, ethyl isobutyrate, ethyl lactate, ethyl laurate, ethyl octanoate, gamma-terpinene, geraniol, hexyl acetate, hexyl alcohol, isoamyl acetate, isobutyl alcohol, isobutyric acid, linalyl acetate, l-limonene, l-linalool, phenethyl acetate, and phenethyl alcohol.

34. The Moscato replica of any one of claims 1-33, wherein the one or more additional VOCs further comprise at least 10 compounds selected from the group consisting of 1-propanol, 2-methylbutyl acetate, 2-nonanone, 2-undecanone, 3-mercaptohexyl acetate, 4-carvomenthenol, benzaldehyde, benzyl alcohol, butyl alcohol, citronellol, damascenone, diethyl malate, ethyl 2-methylbutyrate, ethyl acetate, ethyl isovalerate, ethyl myristate, ethyl salicylate, ethyl valerate, eucalyptol, gamma-decalactone, hexanoic acid, isoamyl alcohol, isobutyraldehyde, linalyl butyrate, L-rose oxide, methyl decanoate, methyl hexanoate, nerol, octanoic acid, p-cymene, phenethyl butyrate, and phenethyl propionate.

35. The Moscato replica of any one of claims 1-34, further comprising one or more non-volatile compounds.

36. The Moscato replica of claim 35, wherein the non-volatile compounds comprise one or more of alanine, cysteine, glutamine, mannose, and vanillin.

37. The Moscato replica of claim 35 or claim 36, wherein the non-volatile compounds do not comprise one or more of 2-isopropylmalic acid, 3,4-dihydroxybenzoic acid, 4-guanidinobutyric acid, adenine, caffeic acid, camphoric acid, carnitine, catechin, choline, coumaric acid, cytidine, cytosine, D-glucuronic acid, epicatechin, gallic acid, guanine, homoserine, methionine,

pantothenic acid, polydatin, pyridoxine, pyruvic acid, quercetin, salicylic acid, serine, sorbitol, trans-4-hydroxyproline, trans-ferulic acid, and uracil.

38. The Moscato replica of any one of claims 35-37, wherein the non-volatile compounds comprise at least 10 compounds selected from the group consisting of 2-isopropylmalic acid, arginine, asparagine, beta-alanine, camphoric acid, choline, citric acid, D-glucuronic acid, fructose, fucose, fumaric acid, GABA, glucose, glutamic acid, glutamine, glycine, histidine, isoleucine, lactic acid, leucine, lysine, malic acid, mannitol, inositol, phenylalanine, proline, quercetin, salicylic acid, sorbitol, succinic acid, tartaric acid, threonine, trans-ferulic acid, tryptophan, tyrosine, and valine.

39. The Moscato replica of any one of claims 1-38, wherein the one or more additional VOCs are present in a total amount of less than 120 mg/L.

40. A Moscato replica comprising:

ethanol;

water;

VOCs, wherein the VOCs comprise 2-nonanol, 2-nonanone, 2-undecanone, 3-methyl-1-pentanol, 4-carvomenthenol, benzaldehyde, beta-pinene, butyl alcohol, delta-decalactone, diethyl malate, diethyl succinate, ethyl lactate, ethyl myristate, ethyl salicylate, eucalyptol, gamma-terpinene, hexyl acetate, hexyl alcohol, isoamyl acetate, isobutyl alcohol, isobutyraldehyde, linalyl acetate, L-rose oxide, nerol, phenethyl acetate, phenethyl alcohol, phenethyl butyrate, and phenethyl propionate; and

one or more non-volatile compounds, wherein the non-volatile compounds comprise 2-isopropylmalic acid, arginine, asparagine, beta-alanine, camphoric acid, choline, D-glucuronic acid, fucose, glutamic acid, glycine, histidine, leucine, lysine, mannitol, phenylalanine, quercetin, salicylic acid, threonine, trans-ferulic acid, tryptophan, tyrosine, and valine.

41. A method of making a Moscato replica concentrate, the method comprising combining

ethanol;

water; and

one or more additional VOCs, wherein the additional VOCs comprise at least one compound selected from the group consisting of 1-para-menthene-8-thiol, 2-acetyl-1-

methylpyrrole, 2-ethyl-3(5 or 6)-dimethylpyrazine, 2-ethyl-3-methylpyrazine, 2-isobutyl-3-methoxypyrazine, 2-isobutyl-4-methyl-1,3-dioxolane, 2-methoxy-3-(1-methylpropyl) pyrazine, 2-pentylfuran, 3,7-dimethyl-6-octenoic acid, 3-methylthio hexyl acetate, 3-phenylpropanal, 4,5,6,7-tetrahydro-3,6-dimethylbenzofuran, 4-mercapto-4-methyl-2-pentanone, 5-methyl-2-phenyl-2-hexenal, allyl hexanoate, ethyl (methylthio) acetate, ethyl 2-trans-4-cis-decadienoate, furfuryl thioacetate, indole, methionyl acetate (3-methylthio-propylacetate), methionyl butyrate, methyl-2-pyrrolyl ketone, phenethyl tiglate, and phenethylacetaldehyde dimethyl acetal; wherein at least one of the one or more additional VOCs is present in a concentration of at least about 2-fold the concentration of the same VOC in a corresponding traditional Moscato.

42. The method of claim 41, wherein the one or more additional VOCs comprise at least one VOC that is not present in a corresponding traditional Moscato, and/or wherein the one or more additional VOCs do not comprise at least one VOC that is present in a corresponding traditional Moscato.

43. The method of claim 41 or claim 42, wherein the Moscato replica concentrate further comprises one or more non-volatile compounds, wherein the one or more non-volatile compounds comprise at least one non-volatile compound that is not present in a corresponding traditional Moscato, and/or wherein the one or more non-volatile compounds do not comprise at least one non-volatile compound that is present in a corresponding traditional Moscato.

44. A method of making a Moscato replica, the method comprising:

combining ingredients comprising:

water;

ethanol; and

one or more additional volatile organic compounds (VOCs),

wherein the one or more additional VOCs comprise at least one compound selected from the group consisting of 1-para-menthene-8-thiol, 2-acetyl-1-methylpyrrole, 2-ethyl-3(5 or 6)-dimethylpyrazine, 2-ethyl-3-methylpyrazine, 2-isobutyl-3-methoxypyrazine, 2-isobutyl-4-methyl-1,3-dioxolane, 2-methoxy-3-(1-methylpropyl) pyrazine, 2-pentylfuran, 3,7-dimethyl-6-octenoic acid, 3-methylthio hexyl acetate, 3-phenylpropanal, 4,5,6,7-tetrahydro-3,6-dimethylbenzofuran, 4-mercapto-4-methyl-2-pentanone, 5-methyl-2-phenyl-2-hexenal, allyl

hexanoate, ethyl (methylthio) acetate, ethyl 2-trans-4-cis-decadienoate, furfuryl thioacetate, indole, methionyl acetate (3-methylthio-propylacetate), methionyl butyrate, methyl-2-pyrrolyl ketone, phenethyl tiglate, and phenethylacetaldehyde dimethyl acetal.

45. The method of claim 44, wherein the one or more additional VOCs comprise at least one compound selected from the group consisting of 2-isobutyl-4-methyl-1,3-dioxolane, allyl hexanoate, and methionyl butyrate.

46. The method of claim 44 or 45, wherein the one or more additional VOCs further comprise at least one compound selected from the group consisting of 2-nonanol, 4-(4-hydroxyphenyl)-2-butanone, 4-vinylphenol, butyraldehyde, citronellyl acetate, damascone, decanal, gamma-dodecalactone, hexanal, propionaldehyde, sotolon, and valeric acid.

47. The method of any one of claims 44-46, wherein the one or more additional VOCs further comprise at least one compound selected from the group consisting of 2-nonanol, 4-vinylphenol, or both.