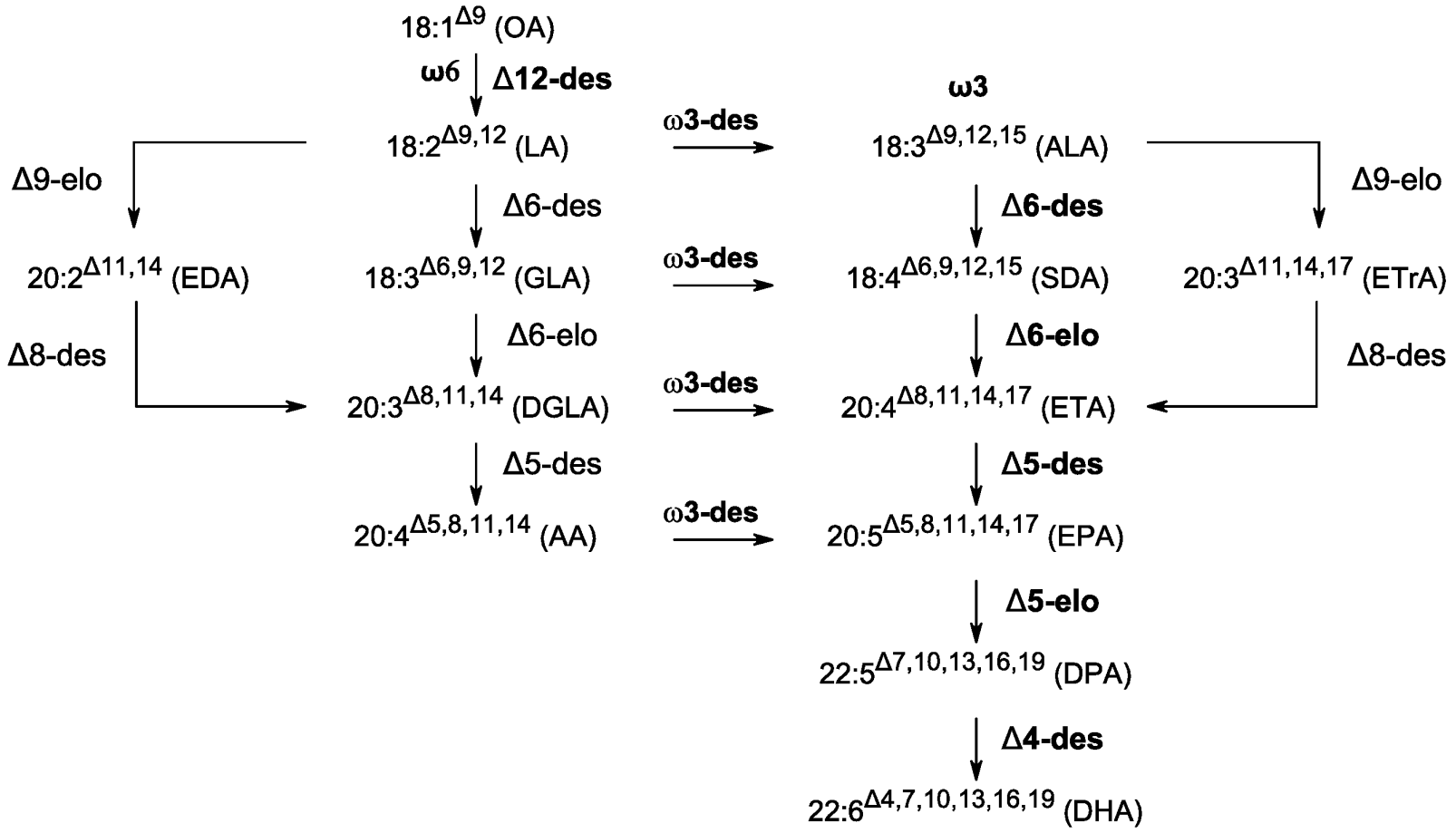

18:1Δ9 (OA)
ω6
Δ12-des
18:2Δ9,12 (LA)
ω3-des
ω3
18:3Δ9,12,15 (ALA)
Δ9-elo
Δ6-des
Δ6-des
Δ9-elo
20:2Δ11,14 (EDA)
18:3Δ6,9,12 (GLA)
ω3-des
18:4Δ6,9,12,15 (SDA)
20:3Δ11,14,17 (ETrA)
Δ6-elo
Δ6-elo
Δ8-des
Δ8-des
ω3-des
20:3Δ8,11,14 (DGLA)
20:4Δ8,11,14,17 (ETA)
Δ5-des
Δ5-des
ω3-des
20:4Δ5,8,11,14 (AA)
20:5Δ5,8,11,14,17 (EPA)
Δ5-elo
22:5Δ7,10,13,16,19 (DPA)
Δ4-des
22:6Δ4,7,10,13,16,19 (DHA)

Figure 1

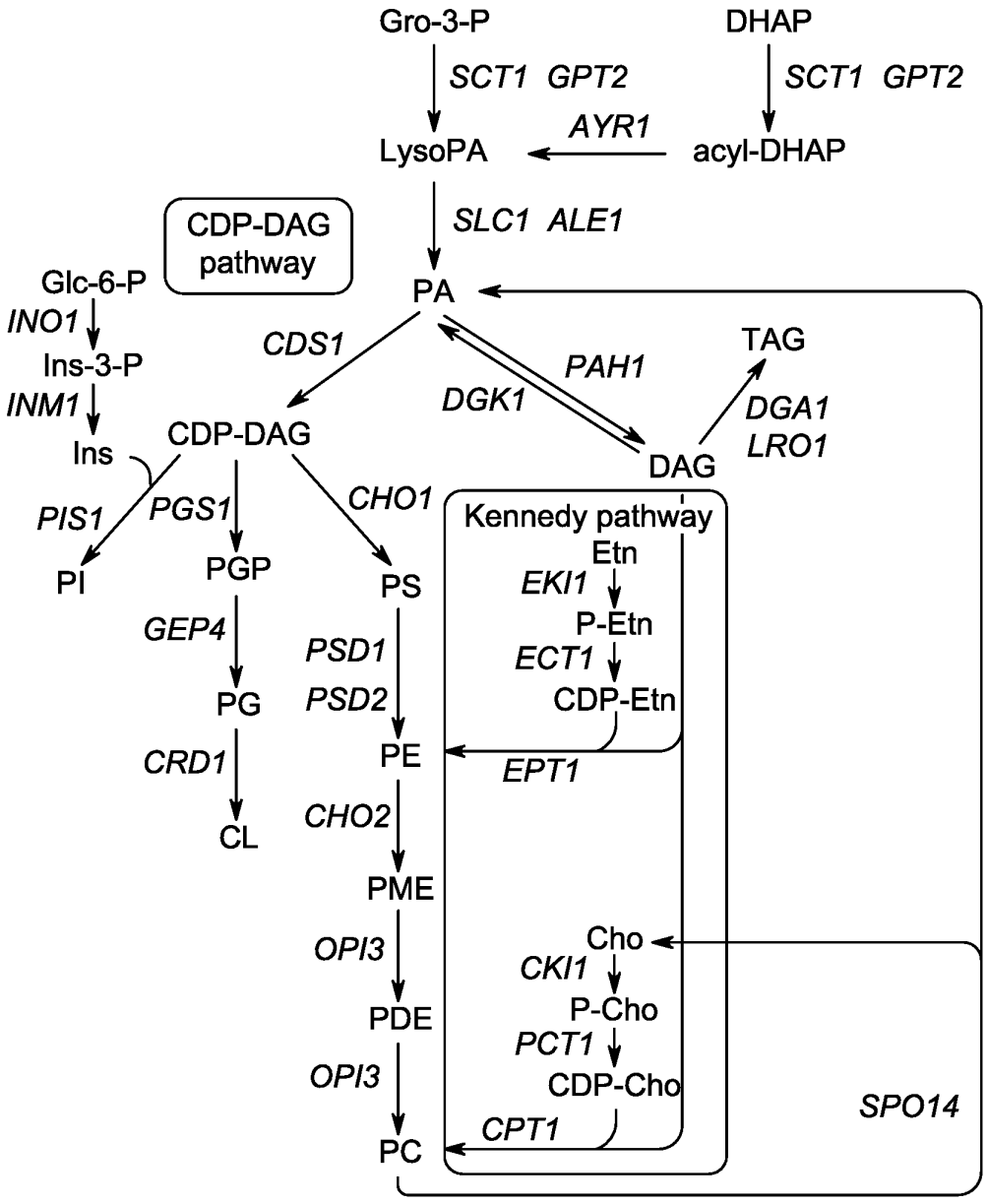

Gro-3-P
DHAP
SCT1 GPT2
SCT1 GPT2
AYR1
LysoPA
acyl-DHAP
SLC1 ALE1
CDP-DAG pathway
Glc-6-P
INO1
Ins-3-P
INM1
Ins
PA
CDS1
PAH1
DGK1
TAG
DGA1
LRO1
DAG
CDP-DAG
PIS1
PGS1
CHO1
PI
PGP
PS
Kennedy pathway
Etn
EKI1
P-Etn
ECT1
CDP-Etn
EPT1
GEP4
PSD1
PSD2
PG
PE
CRD1
CL
CHO2
PME
OPI3
Cho
CKI1
P-Cho
PDE
PCT1
OPI3
CDP-Cho
SPO14
CPT1
PC

Figure 2

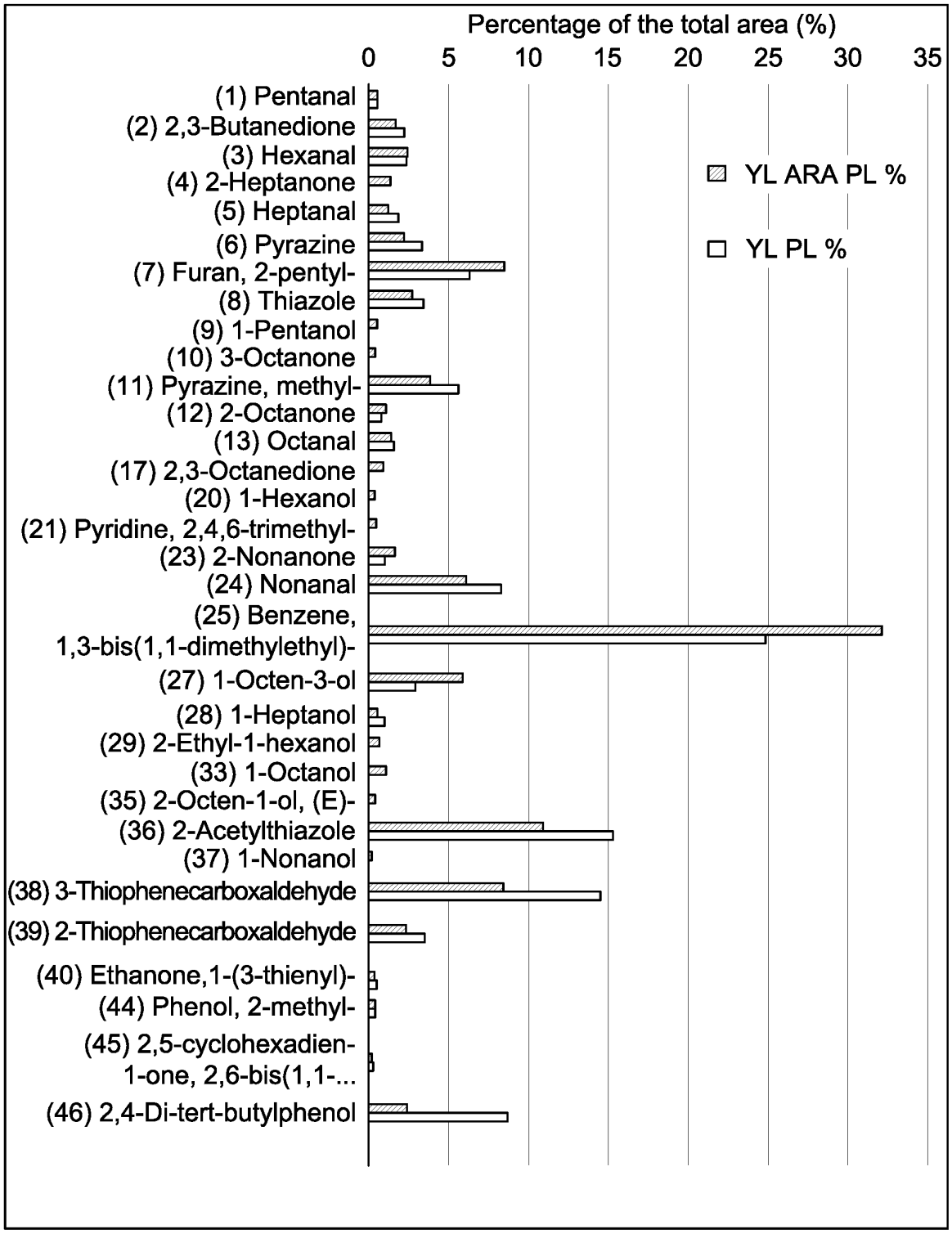

Percentage of the total area (%)
0
5
10
15
20
25
30
35
(1) Pentanal
(2) 2,3-Butanedione
(3) Hexanal
(4) 2-Heptanone
(5) Heptanal
(6) Pyrazine
(7) Furan, 2-pentyl-
(8) Thiazole
(9) 1-Pentanol
(10) 3-Octanone
(11) Pyrazine, methyl-
(12) 2-Octanone
(13) Octanal
(17) 2,3-Octanedione
(20) 1-Hexanol
(21) Pyridine, 2,4,6-trimethyl-
(23) 2-Nonanone
(24) Nonanal
(25) Benzene, 1,3-bis(1,1-dimethylethyl)-
(27) 1-Octen-3-ol
(28) 1-Heptanol
(29) 2-Ethyl-1-hexanol
(33) 1-Octanol
(35) 2-Octen-1-ol, (E)-
(36) 2-Acetylthiazole
(37) 1-Nonanol
(38) 3-Thiophenecarboxaldehyde
(39) 2-Thiophenecarboxaldehyde
(40) Ethanone,1-(3-thienyl)-
(44) Phenol, 2-methyl-
(45) 2,5-cyclohexadien-1-one, 2,6-bis(1,1-...
(46) 2,4-Di-tert-butylphenol
YL ARA PL %
YL PL %

Figure 3

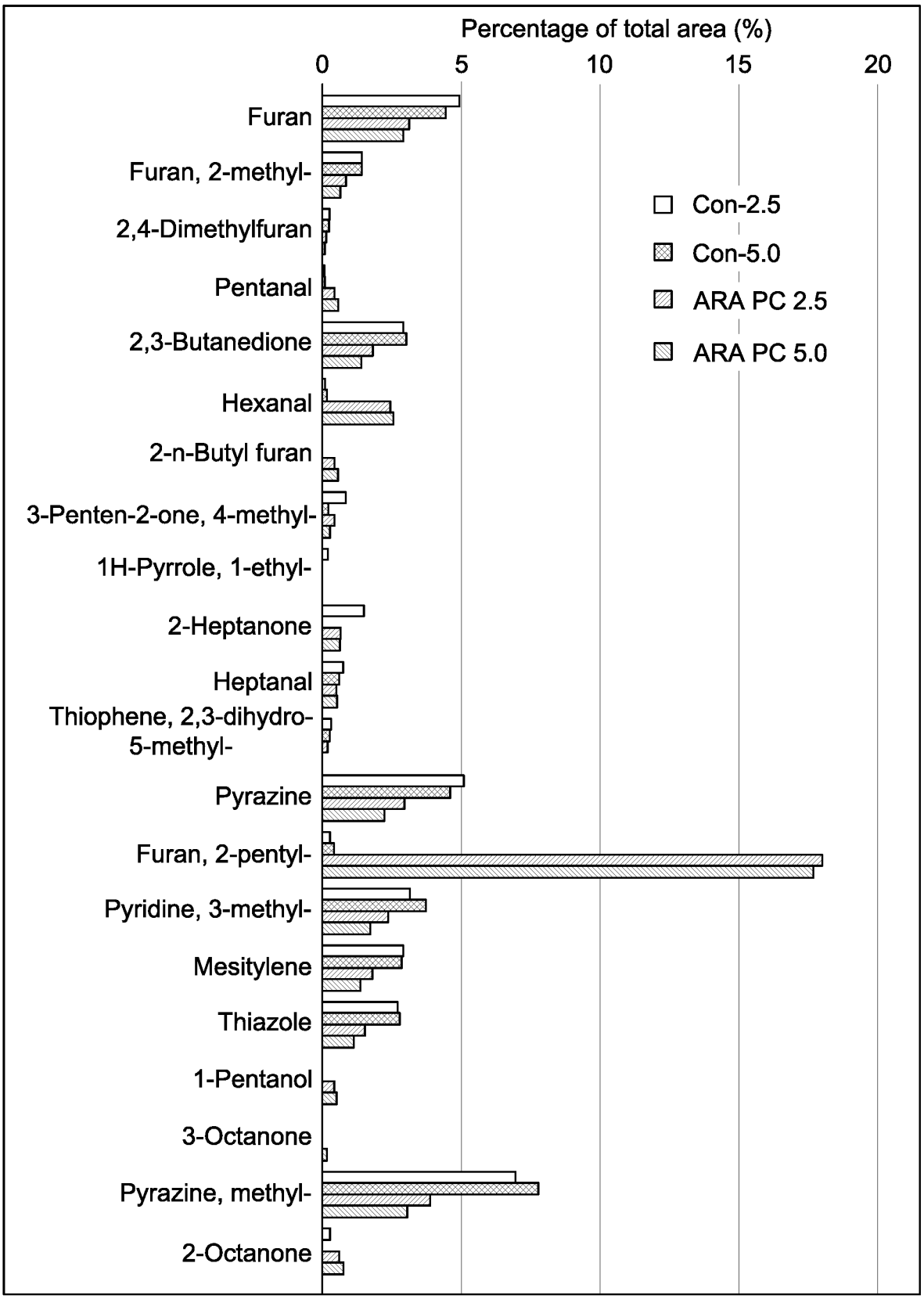

Percentage of total area (%)
0
5
10
15
20
Furan
Furan, 2-methyl-
2,4-Dimethylfuran
Pentanal
2,3-Butanedione
Hexanal
2-n-Butyl furan
3-Penten-2-one, 4-methyl-
1H-Pyrrole, 1-ethyl-
2-Heptanone
Heptanal
Thiophene, 2,3-dihydro-5-methyl-
Pyrazine
Furan, 2-pentyl-
Pyridine, 3-methyl-
Mesitylene
Thiazole
1-Pentanol
3-Octanone
Pyrazine, methyl-
2-Octanone
Con-2.5
Con-5.0
ARA PC 2.5
ARA PC 5.0

Figure 4

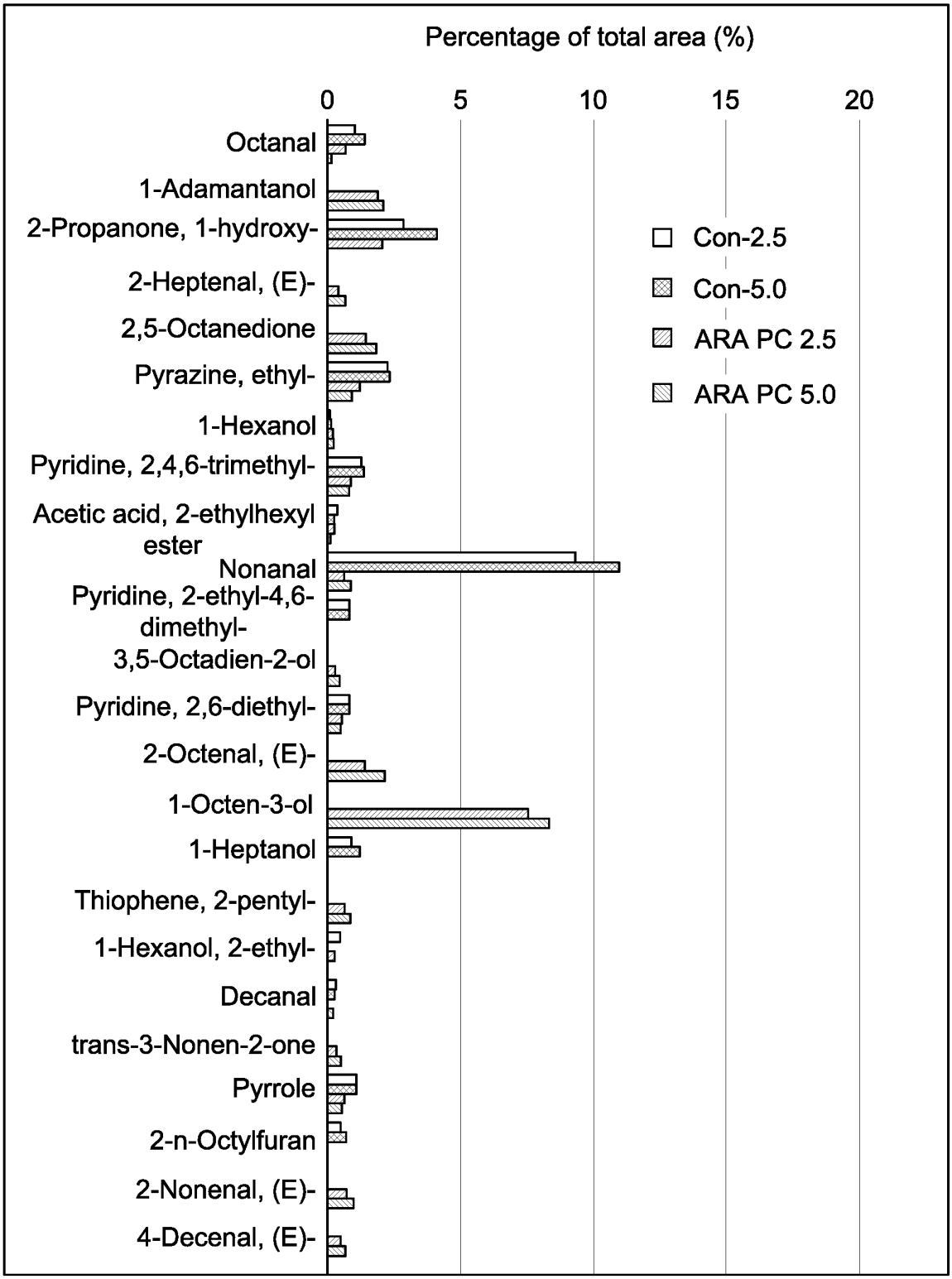


Figure 4 (continued)

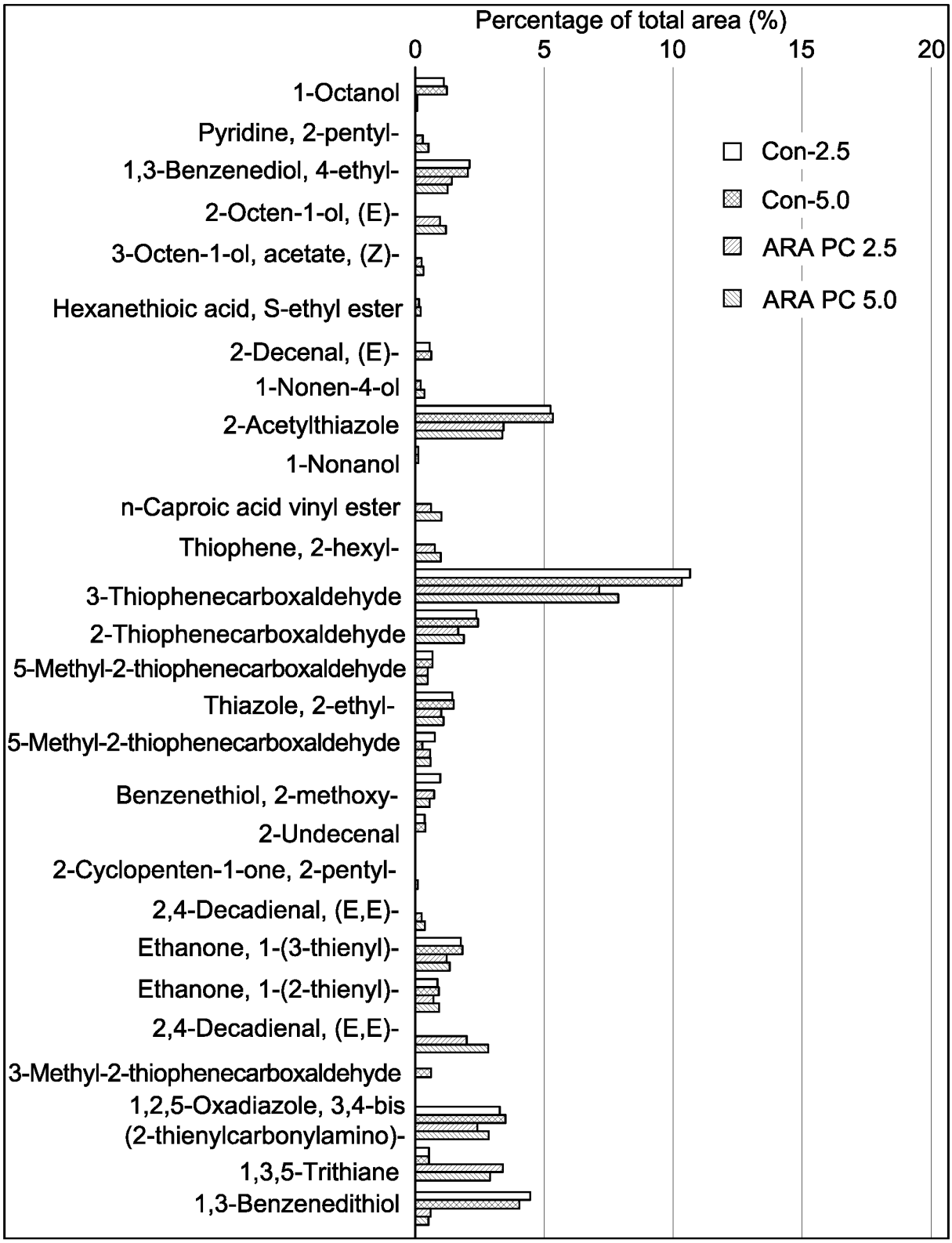


Figure 4 (continued)

Figure 5

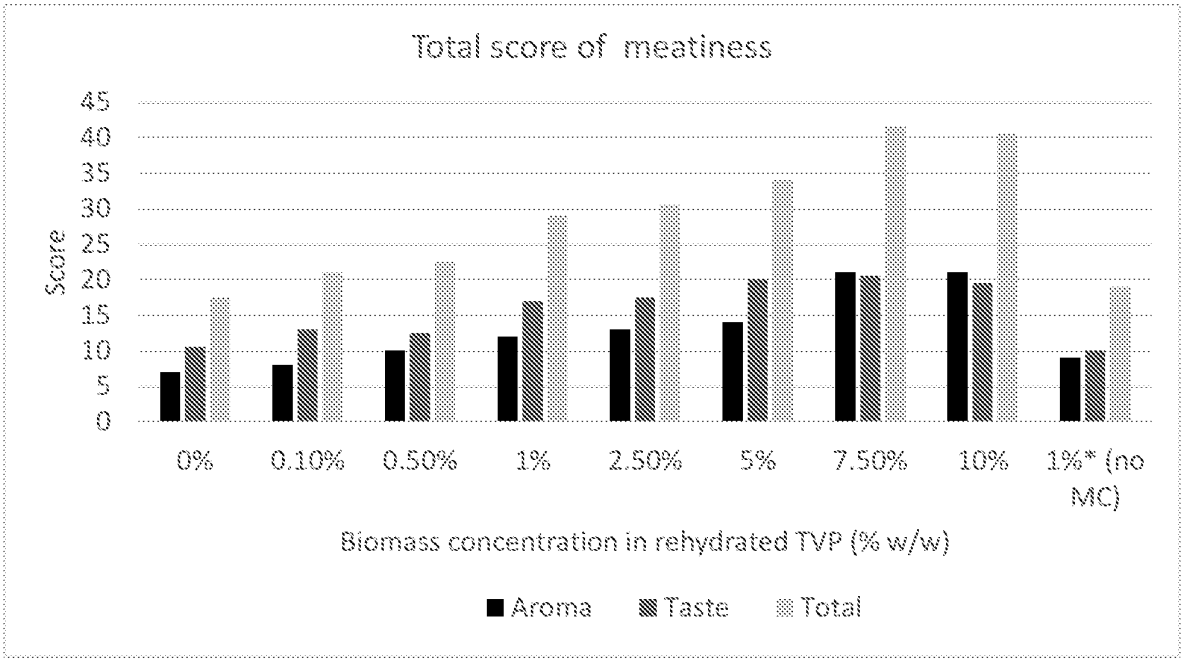


Figure 6

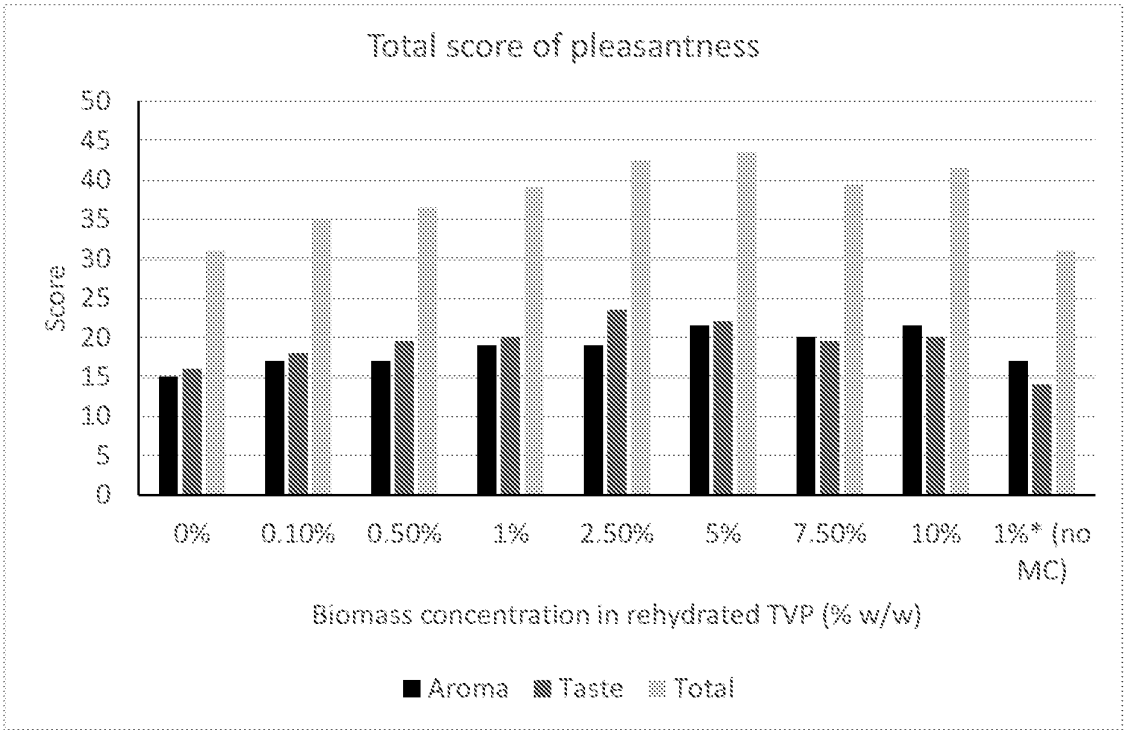


Figure 7

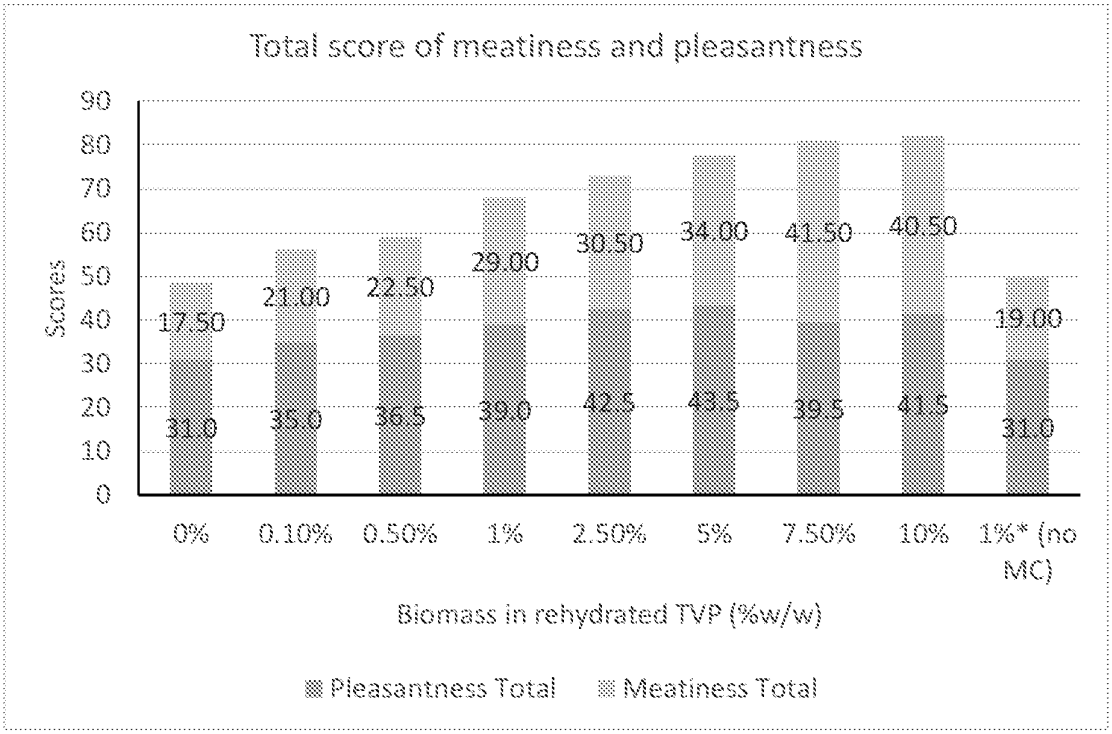


Figure 8

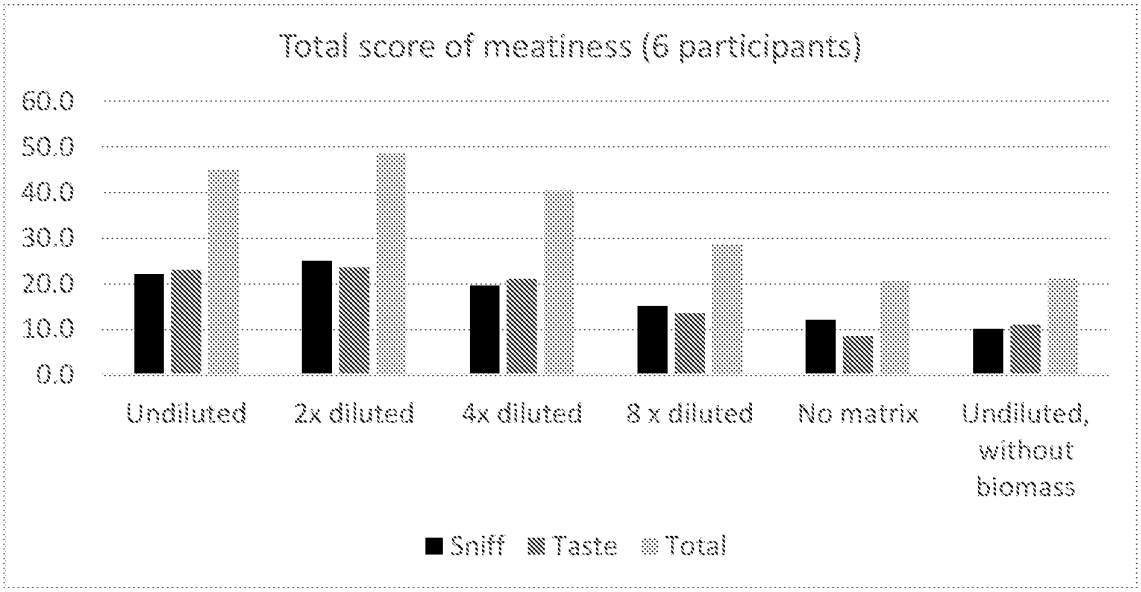


Figure 9

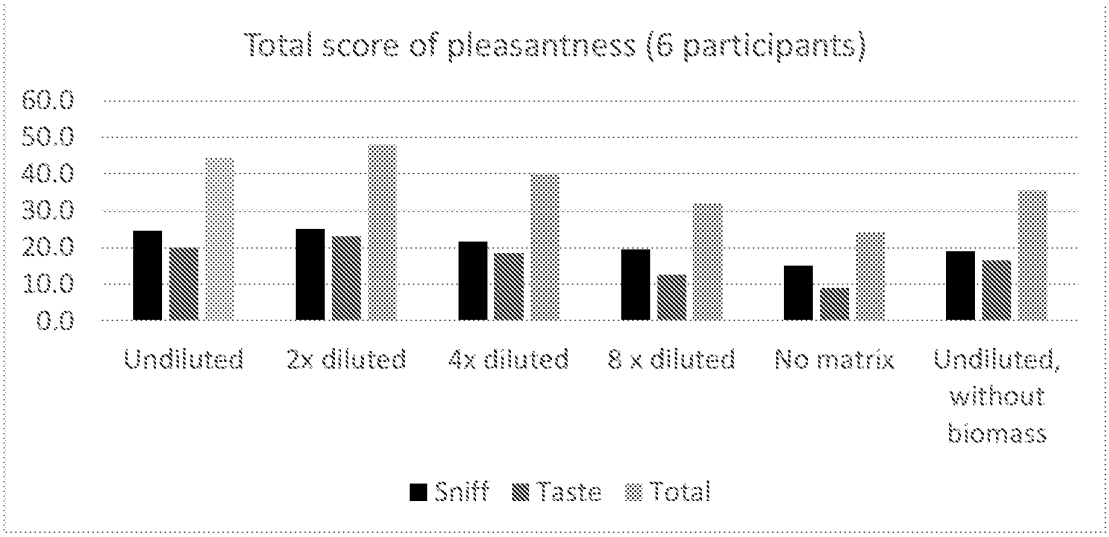


Figure 10

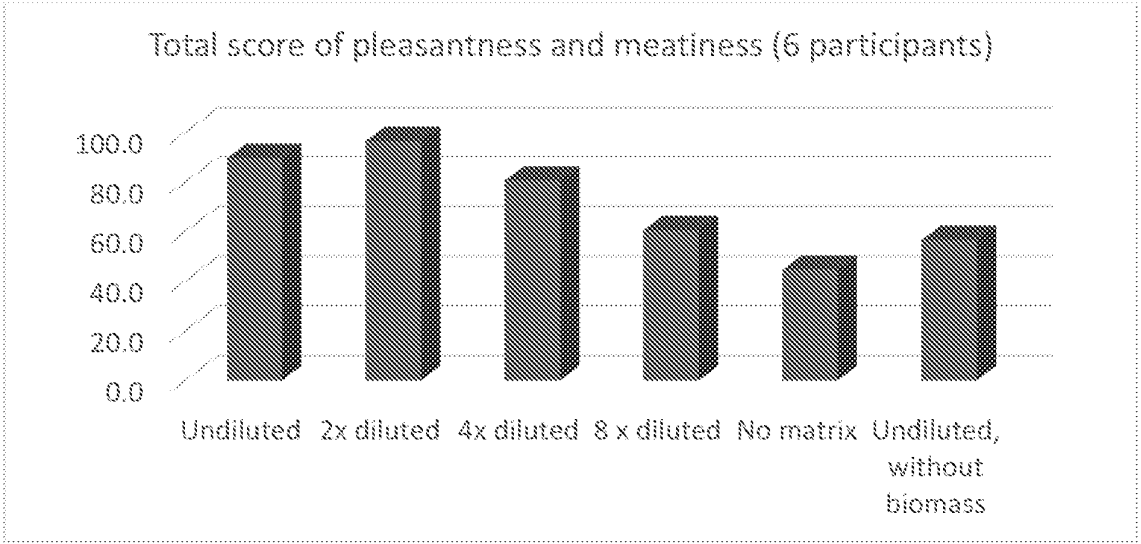


Figure 11

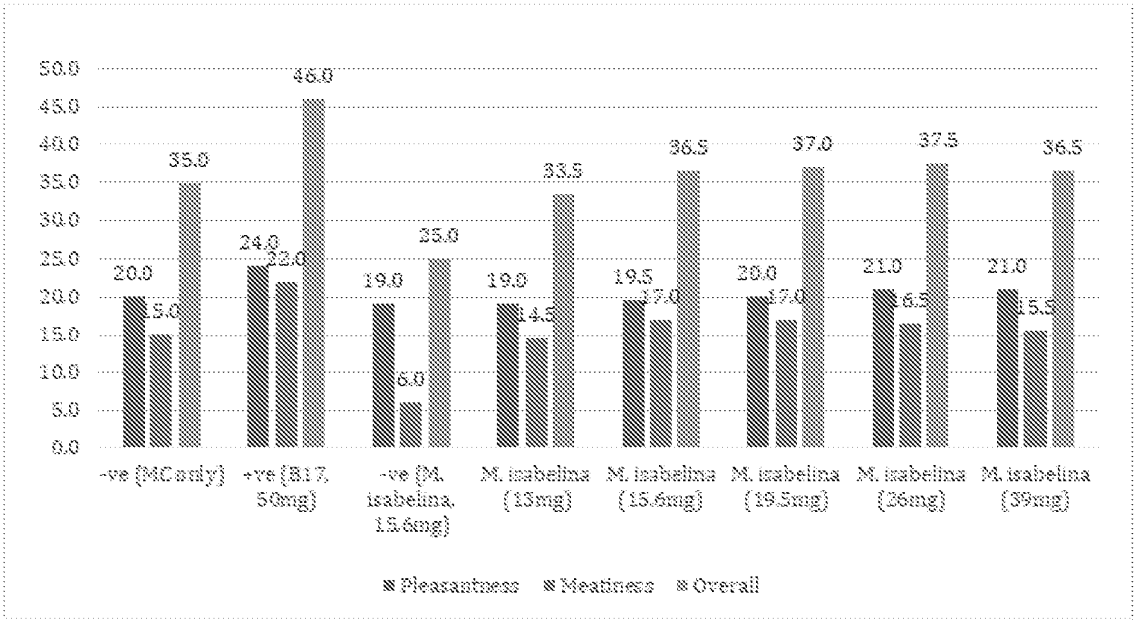
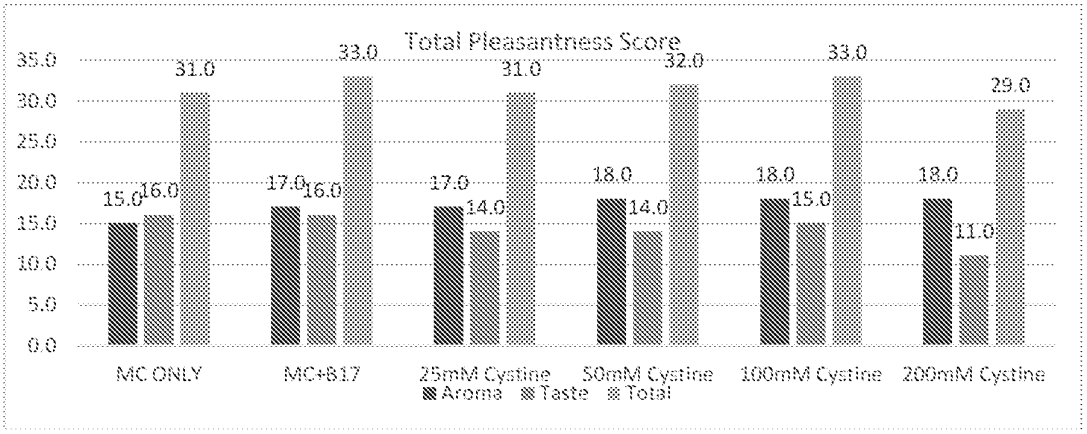
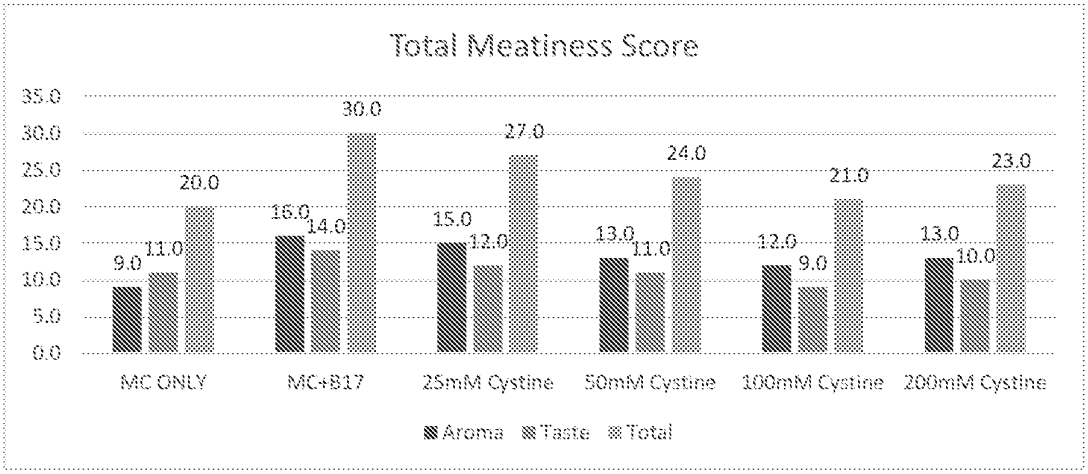

50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
20.0
15.0
35.0
24.0
22.0
46.0
19.0
6.0
25.0
19.0
14.5
33.5
19.5
17.0
36.5
20.0
17.0
37.0
21.0
16.5
37.5
21.0
15.5
36.5
-ve (MCaddy)
+ve (B17. 50mg)
-ve (M. isabelina. 15.6mg)
M. isabelina (13mg)
M. isabelina (15.6mg)
M. isabelina (19.5mg)
M. isabelina (26mg)
M. isabelina (39mg)
Pleasantness
Meatiness
Overall

Figure 12

A.



B.



C.

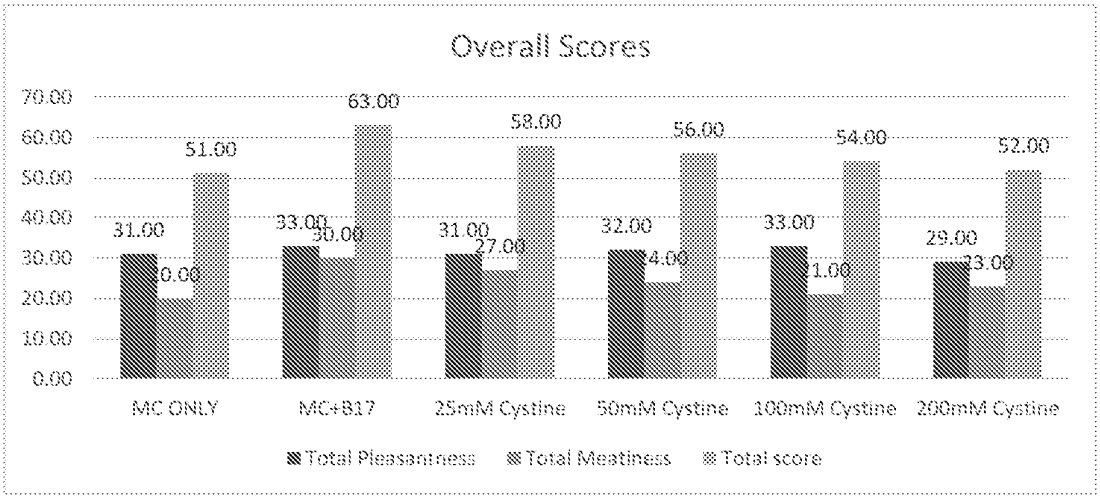
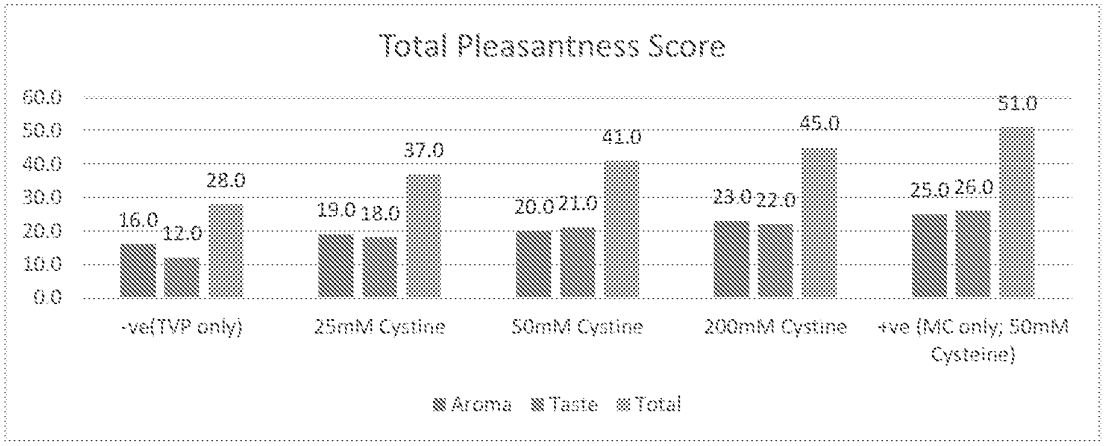
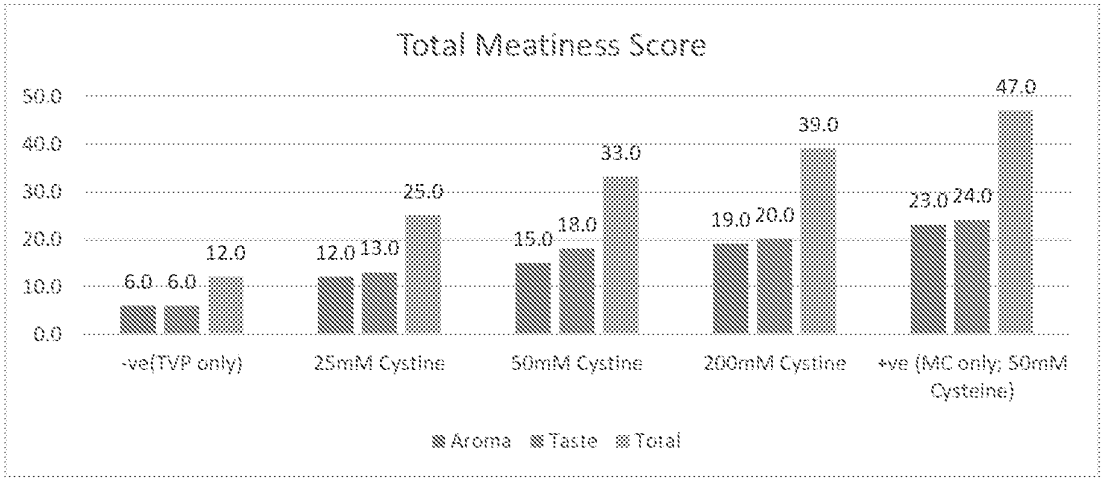


Figure 13

A.



B.



C.

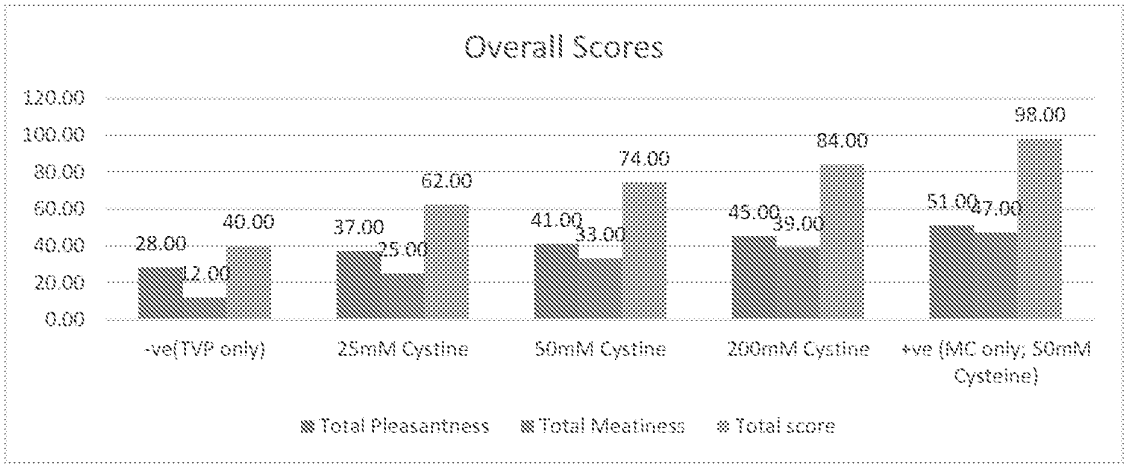
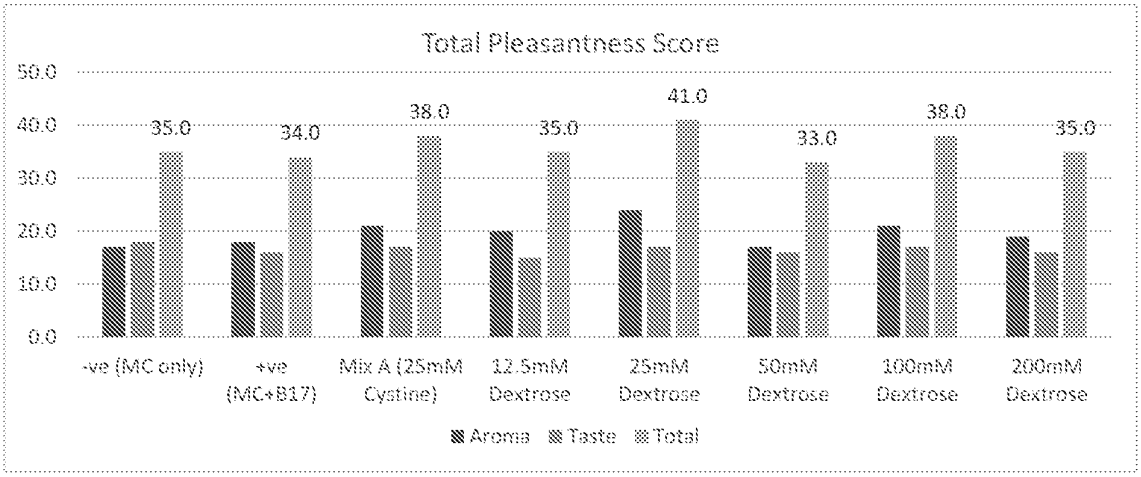
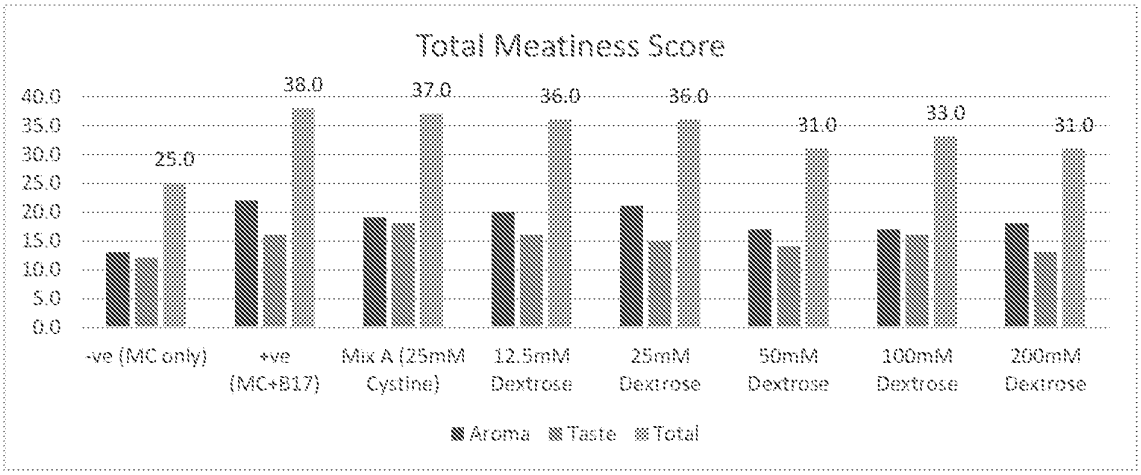


Figure 14

A.



B.



C.

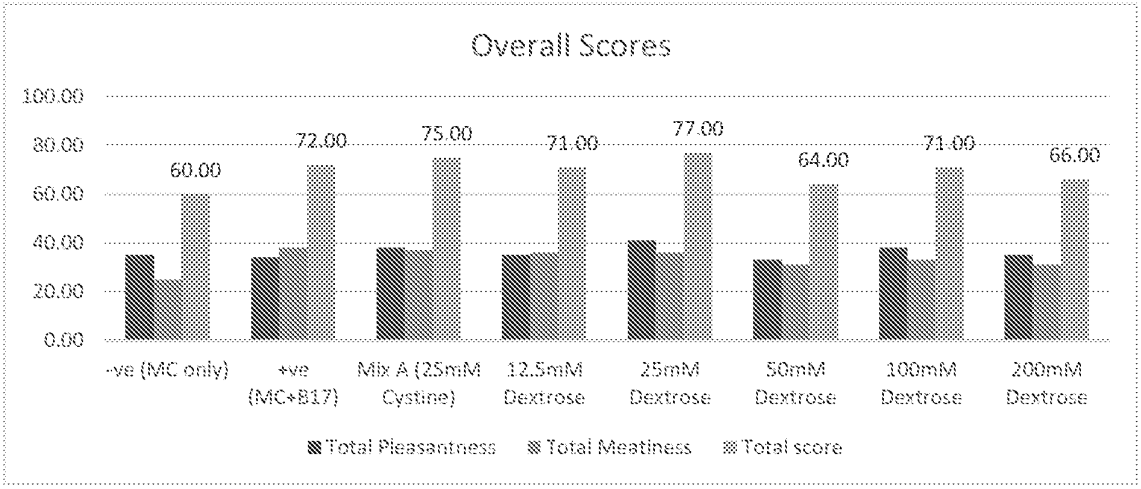
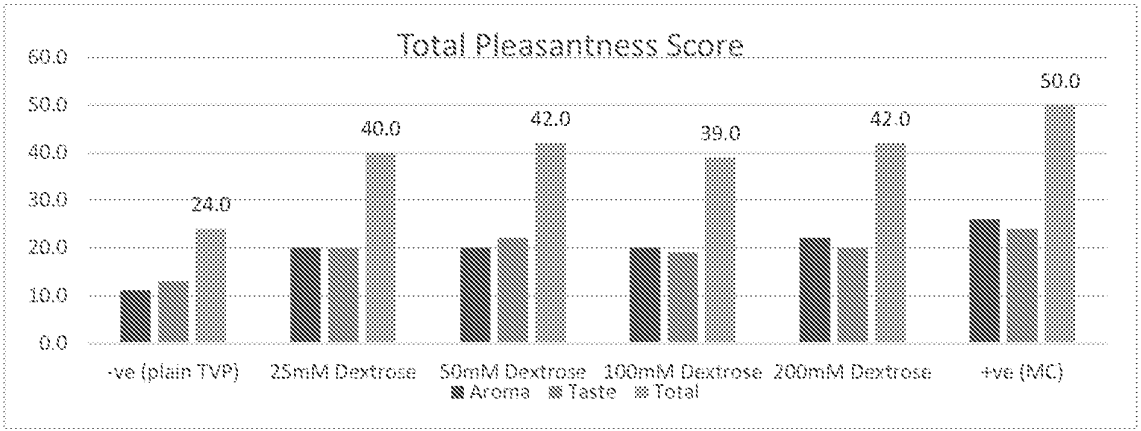
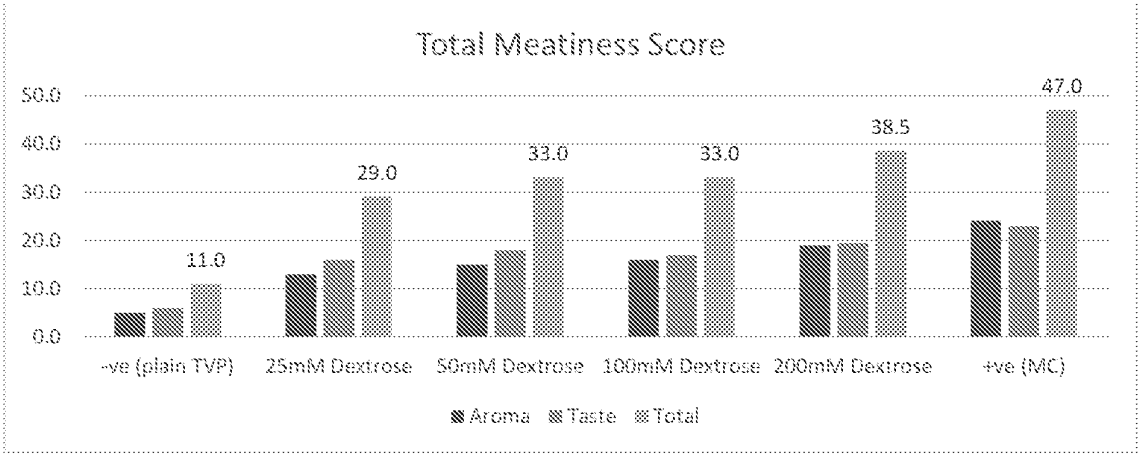


Figure 15

A.



B.



C.

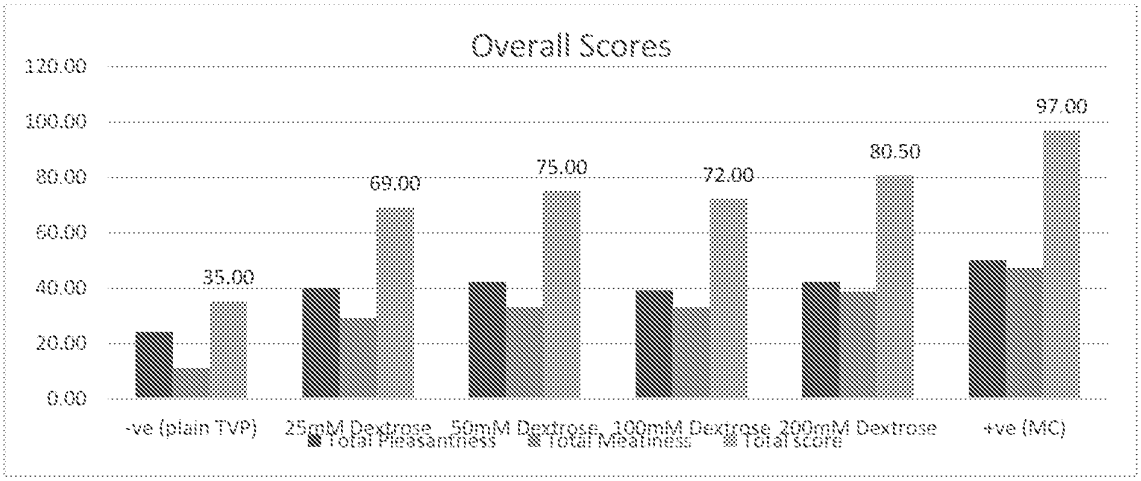
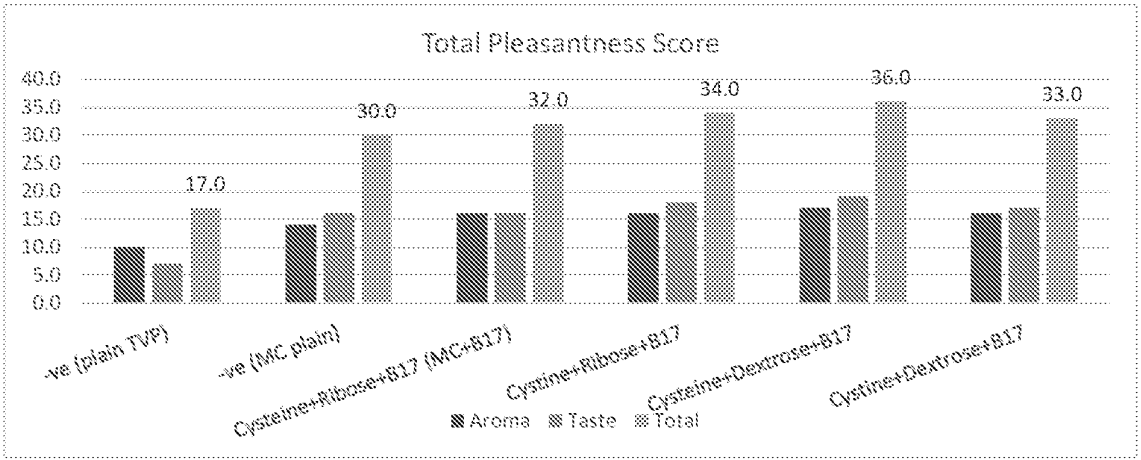
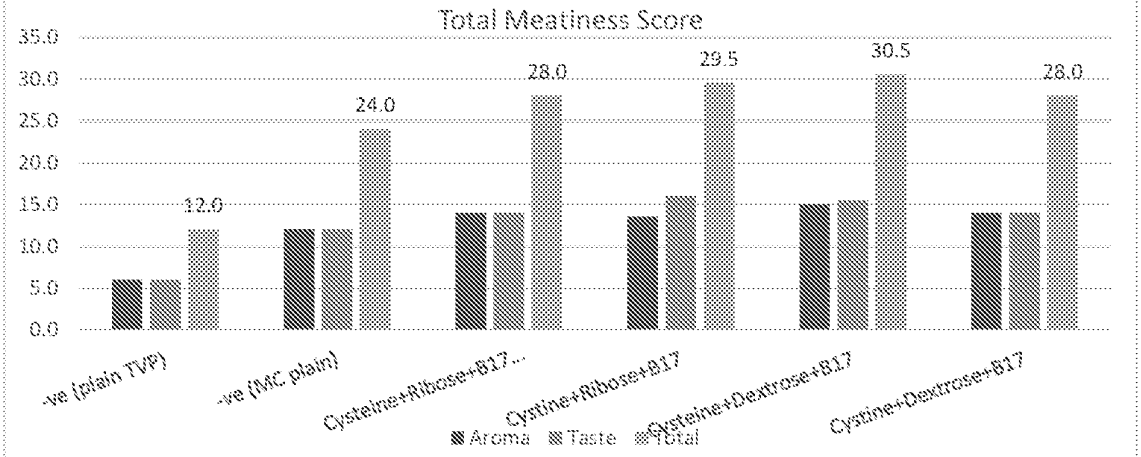


Figure 16

A.



B.



C.

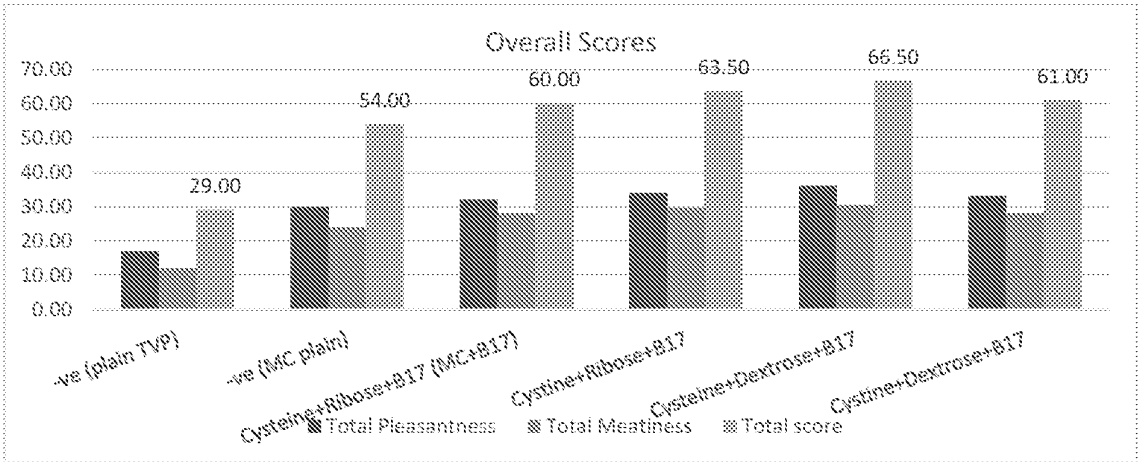
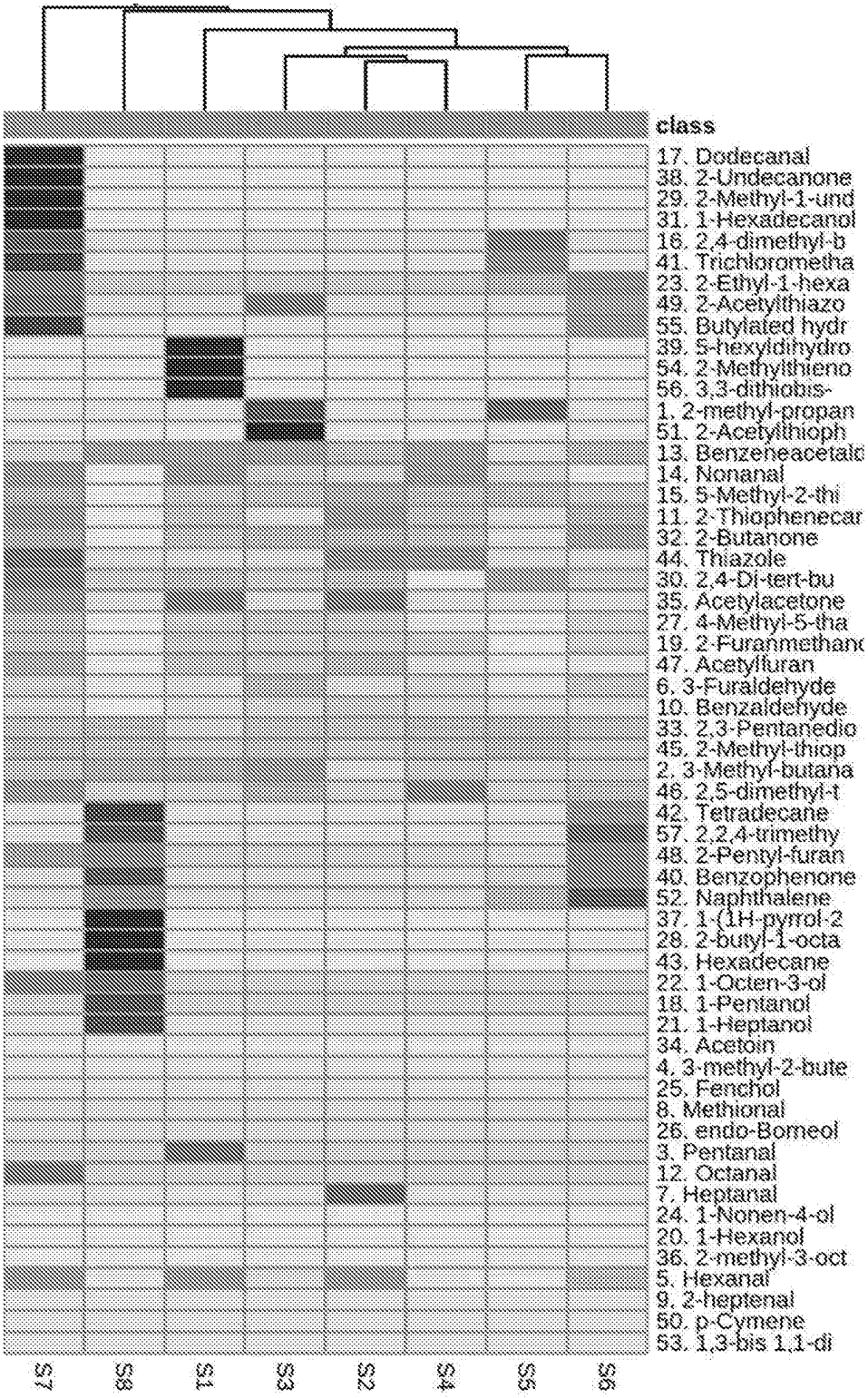


Figure 17


class
17. Dodecanal
38. 2-Undecanone
29. 2-Methyl-1-und
31. 1-Hexadecanol
16. 2,4-dimethyl-b
41. Trichlorometha
23. 2-Ethyl-1-hexa
49. 2-Acetylthiazo
55. Butylated hydr
39. 5-hexyldihydro
54. 2-Methylthieno
56. 3,3-dithiobis-
1. 2-methyl-propan
51. 2-Acetylthioph
13. Benzeneacetald
14. Nonanal
15. 5-Methyl-2-thi
11. 2-Thiophenecar
32. 2-Butanone
44. Thiazole
30. 2,4-Di-tert-bu
35. Acetylacetone
27. 4-Methyl-5-tha
19. 2-Furanmethanc
47. Acetylfuran
6. 3-Furaldehyde
10. Benzaldehyde
33. 2,3-Pentanedio
45. 2-Methyl-thiop
2. 3-Methyl-butana
46. 2,5-dimethyl-t
42. Tetradecane
57. 2,2,4-trimethy
48. 2-Pentyl-furan
40. Benzophenone
52. Naphthalene
37. 1-(1H-pyrrol-2
28. 2-butyl-1-octa
43. Hexadecane
22. 1-Octen-3-ol
18. 1-Pentanol
21. 1-Heptanol
34. Acetoin
4. 3-methyl-2-bute
25. Fenchol
8. Methional
26. endo-Borneol
3. Pentanal
12. Octanal
7. Heptanal
24. 1-Nonen-4-ol
20. 1-Hexanol
36. 2-methyl-3-oct
5. Hexanal
9. 2-heptenal
50. p-Cymene
53. 1,3-bis 1,1-di
S7
S8
S1
S3
S2
S4
S5
S6

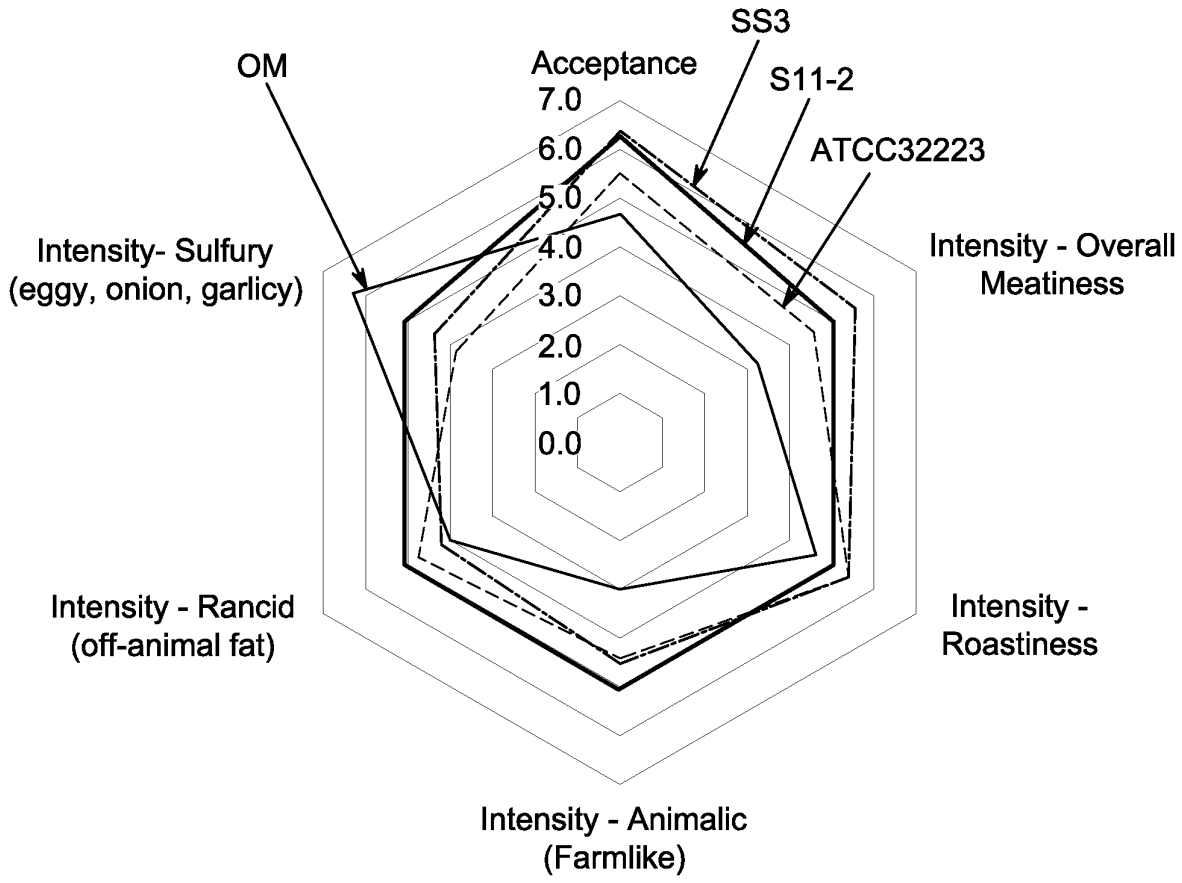

SS3
Acceptance
S11-2
ATCC32223
OM
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Intensity- Sulfury
(eggy, onion, garlicy)
Intensity - Overall
Meatiness
Intensity - Rancid
(off-animal fat)
Intensity -
Roastiness
Intensity - Animalic
(Farmlike)

Figure 18

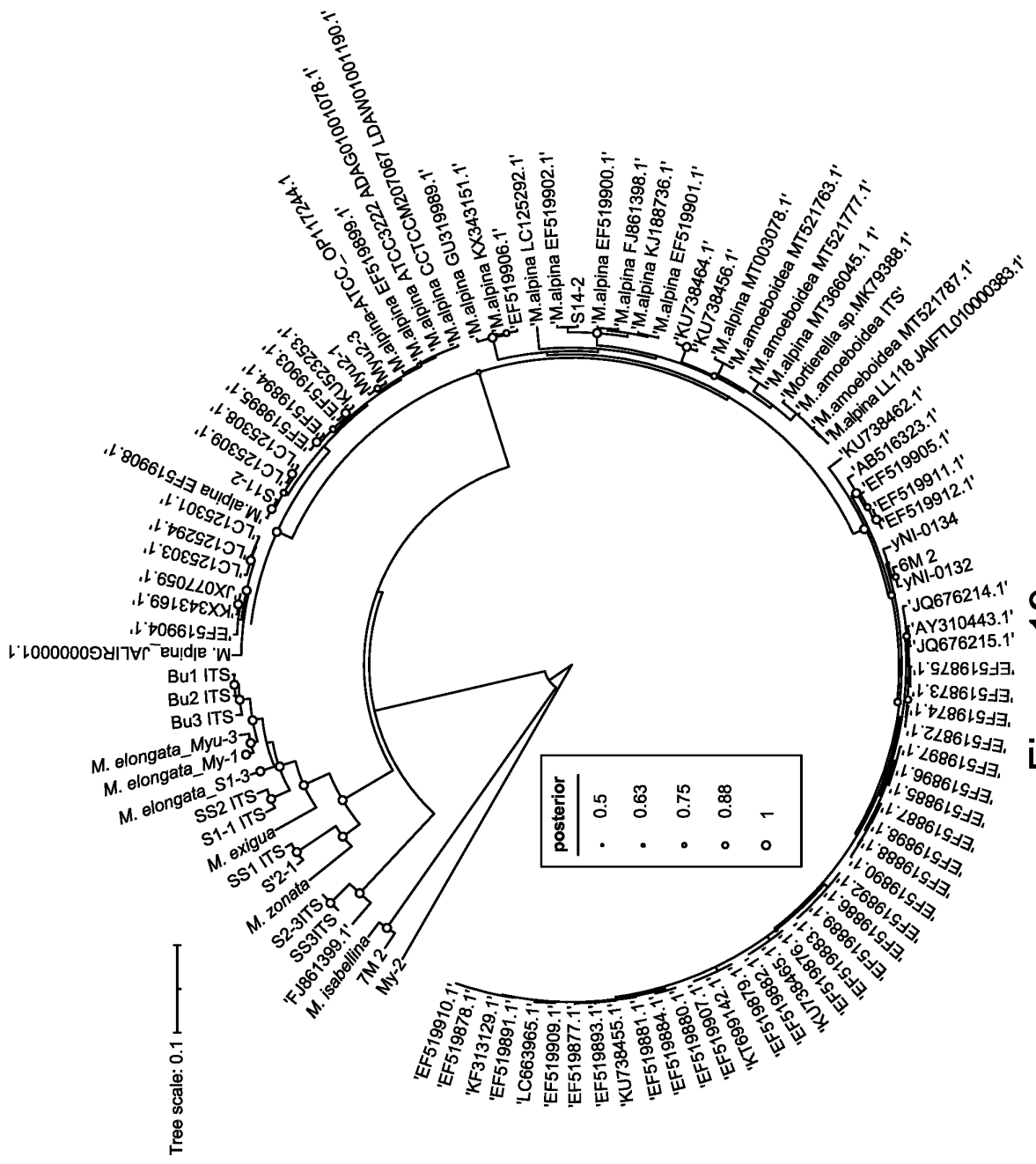

posterior
0.5
0.63
0.75
0.88
1
Tree scale: 0.1
M. alpina_JALIRG000000001.1
Bu1 ITS
Bu2 ITS
Bu3 ITS
M. elongata_Myu-3
M. elongata_My-1
M. elongata_S1-3
SS2 ITS
S1-1 ITS
M. exigua
SS1 ITS
S'2-1
M. zonata
S2-3ITS
SS3ITS
'FJ861399.1'
M. isabellina
7M 2
My-2
'EF519910.1'
'EF519878.1'
'KF313129.1'
'EF519891.1'
'LC663965.1'
'EF519909.1'
'EF519877.1'
'EF519893.1'
'KU738455.1'
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5M 2
yNI-0134
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'EF519905.1'
'AB516323.1'
'KU738462.1'
M.alpina LL118 JAIFTL010000383.1'
'M.amoeboidea MT521787.1'
'Mortierella sp.MK79388.1'
'M.alpina MT366045.1 1'
'M.amoeboidea MT521777.1'
'M.amoeboidea MT521763.1'
'M.amoeboidea MT003078.1'
'KU738456.1'
'KU738464.1'
'M.alpina EF519901.1'
'M.alpina KJ188736.1'
'M.alpina FJ861398.1'
'M.alpina EF519900.1'
'S14-2
'M.alpina EF519902.1'
'M.alpina LC125292.1'
'EF519906.1'
'M.alpina KX343151.1'
'M.alpina GU319989.1'
'M.alpina CCTCCM207067 LDAW01001078.1'
'M.alpina ATCC32222 ADAG01001190.1'
OP717244.1
M.alpina EF519899.1'
MyU2-3
MyU2-1
EF519903.1'
EF519894.1'
EF519895.1'
EF519908.1'
LC125309.1'
S11-2
M.alpina EF519908.1'
LC125301.1'
LC125294.1'
LC125303.1'
JX077059.1'
KX343169.1'
EF519904.1'

Figure 19