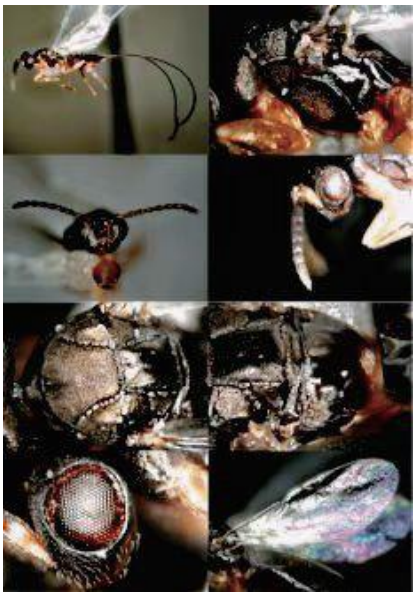
Ceratosolen emarginatus

Philotrypesis longicaudata

Sycoscapter roxburghi

Sycophaga sp. 1

Sycophaga sp. 2



Sycophaga sp. 3

附录 1　榕小蜂形态特征鉴别图

Appendix 1　Identification diagram of morphological characteristics of fig wasps

附录 2　自然生境和植物园挥发物组成及相对含量

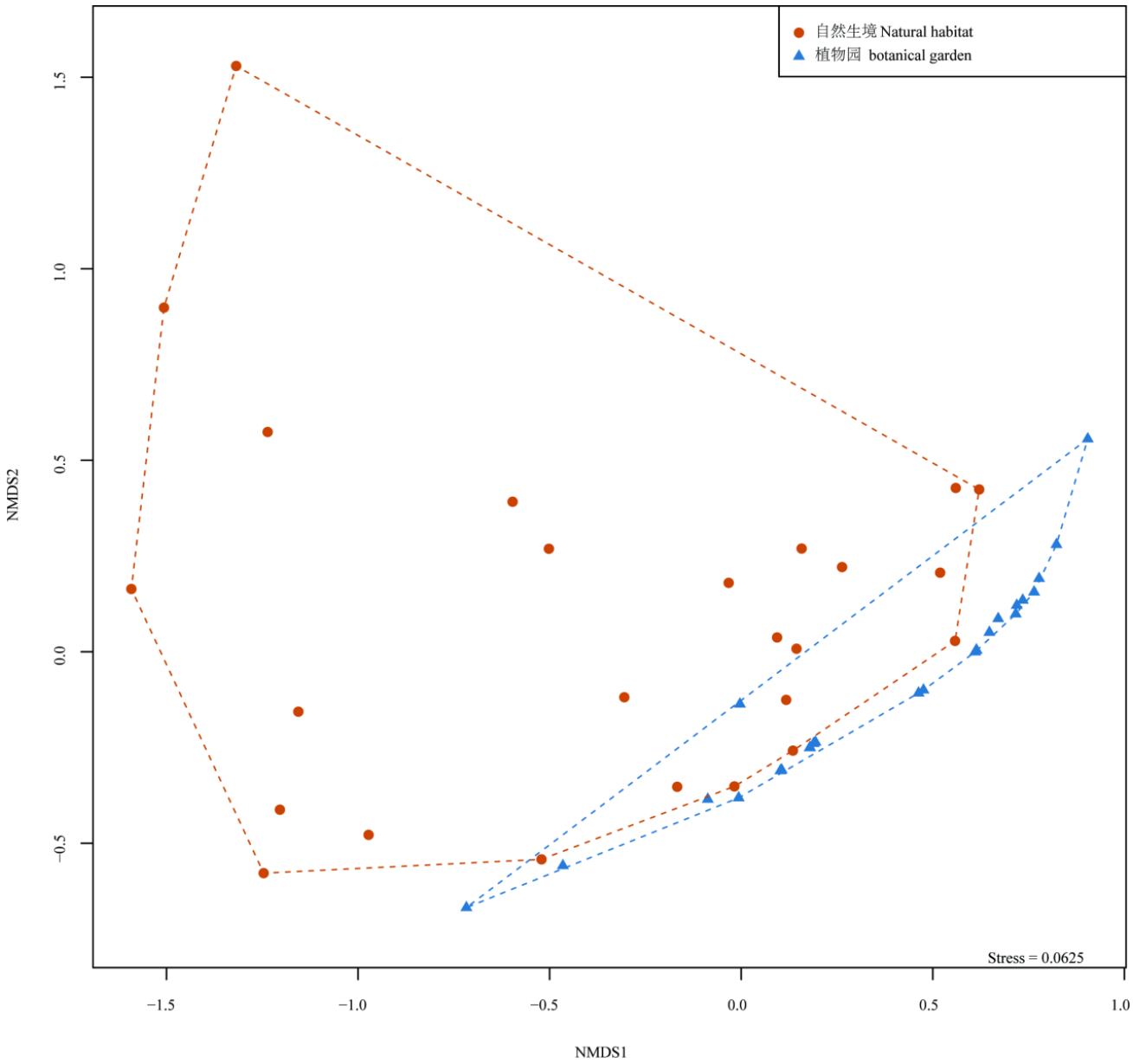
Appendix 2　Composition and relative abundance of volatile compounds in the natural habitat and botanical garden

化合物名称 Names	保留指数 RI	编号 Code	自然生境 BB (N=11)	植物园 XTBG (N=13)
Monoterpenoids				
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-, (1S)-	1154	M1	29.71±12.43	26.00±5.00
Camphor	1155	M2	38.62±13.41	—
Limonene	1035	M3	—	12.29±6.21
D-Limonene	1036	M4	—	9.74±5.14
Tricyclo[6.3.3.0]tetradec-4-ene,10,13-dioxo-	1709	UnM1	—	4.38±1.73
Sesquiterpenoids				
Cedrene	1418	S1	1.75±0.82	5.20±1.44
1H-Benzocycloheptene,2,4a,5,6,7,8,9,9a-octahydro-3,5,5-trimethyl-9-methylene-, (4aS-cis)-	1450	S2	1.58±0.91	2.06±1.05
(3S,3aS,6R,8aS)-3,7,7-Trimethyl-8-methyleneoctahydro-1H-3a,6-methanoazulene	1461	S3	1.67	6.05±2.57
(3S,3aS,6R,8aS)-3,8,8-Trimethyl-7-methyleneoctahydro-1H-3a,6-methanoazulene	1462	S4	—	1.93±1.048
2,6-Bis(1,1-dimethylethyl)-4-(1-oxopropyl)phenol	1638	S5	4.27±2.95	—
Ylangene	1374	S6	—	0.91±0.52
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6,9-tetramethyl-, (1R,2S,7R,8R)-	1383	S7	—	1.56±0.64
(1R,2S,6S,7S,8S)-8-Isopropyl-1-methyl-3-methylenetricyclo[4.4.0.02,7]decane-rel-	1434	S8	—	1.87±1.09
cis-β-Farnesene	1435	S9	—	2.03±1.22
Azulene,1,2,3,5,6,7,8,8a-octahydro-1,4-dimethyl-7-(1-methylethenyl)-,[1S-(1α,7α,8aβ)]-	1467	S10	—	2.13±0.82
γ-Muurolene	1473	S11	—	1.54±0.57
cis-(-)-2,4a,5,6,9a-Hexahydro-3,5,5,9-tetramethyl(1H)benzocycloheptene	1474	S12	—	4.15±2.27
Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-methylethenyl)-, [1S-(1α,4β,5α)]-	1478	S13	—	2.08±1.31
(3S,3aR,6R,8aS)-3,7,7-Trimethyl-8-methylenehexahydro-1H-3a,6-methanoazulen-2(3H)-one	1492	S14	—	8.22±2.86
Aromatic				
Didodecyl phthalate	801	AR1	2.86±1.61	—
1,2-Benzenedicarboxylic acid, butyl octyl ester	1886	AR2	—	0.90±0.49
Aliphatics				

化合物名称 Names	保留指数 RI	编号 Code	自然生境 BB (N=11)	植物园 XTBG (N=13)
9-Octadecen-12-ynoic acid, methyl ester	977	AL1	1.39±0.83	—
1,6-Anhydro-2,4-dideoxy-β-D-arabo-hexopyranose	1109	AL2	0.61±0.32	—
3,6-Octadecadiynoic acid, methyl ester	1134	AL3	6.34±3.76	—
Cyclopentanol, 2-methyl-, trans-	1137	AL4	1.29±0.76	1.09±0.59
3-(Prop-2-enoyloxy)tetradecane	1229	AL5	0.69±0.34	—
1,6-Anhydro-2,4-dideoxy-β-D-ribo-hexopyranose	1259	AL6	2.01±1.56	—
2-Propenoic acid, 1-methylundecyl ester	1489	AL7	0.93±0.51	—
Z,Z,Z-1,4,6,9-Nonadecatetraene	1523	AL8	2.48±1.90	—
Oxirane, (3,3-dimethylbutyl)-	1217	AL9	1.79±0.95	—
Heptane	700	AL10	—	3.93±2.25
Hexane, 2,2,5,5-tetramethyl-	1069	AL11	—	1.17±0.66
1-Butanol, 4-butoxy-	1260	AL12	—	0.77±0.54
Cyclopropanetetradecanoic acid, 2-octyl-, methyl ester	1417	UnAL	1.30±0.77	—
Unknown Compounds				
1H-Cyclopenta[c]furan-3(3aH)-one,6,6a-dihydro-1-(1,3-dioxolan-2-yl)-,(3aR,1-trans,6a-cis)-	1524	unknown	0.71±0.50	—

检测到的化合物根据一般的生物合成起源被分为四组及一个未鉴定出的未知化合物。每个挥发性有机化合物百分比呈现了平均值(±标准误)。N: 表示用于挥发物提取的大果榕榕果数量。

The detected compounds are divided into four groups based on their general biosynthetic origin, as well as an unidentified unknown compound. The percentage of each volatile organic compound is presented as the mean (± standard error). N: Indicates the number of figs used for volatile extraction.



附录 3 自然生境和植物园榕小蜂群落的 **NMDS** 分析。榕小蜂群落距离矩阵基于 **Bray-Curtis** 距离。

Appendix 3 NMDS analysis of fig wasp communities in the natural habitat and the botanical garden. Fig wasps communities distance.