

Supplemental Material

for

**Terpenoids of the swamp cypress subfamily (Taxodioideae),
Cupressaceae, an overview by GC-MS**

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Figures SM-1 through SM-7. Mass spectra of the terpenoids from the Taxodioideae resins (ordered in ascending molecular weights).

Figure SM-1. Mass spectra of the terpenoids from the Taxodioideae resins.

- (a) Sugiol (a4, standard),
- (b) 11-Hydroxy-12-oxoabieta-7,9(11),13-triene (a.k.a. 6-deoxotaxodione, a6) or 11-hydroxy-6,7-dehydroferruginol (a6),
- (c) 6,7-Dehydroferruginol (a1),
- (d) Pisiferol (a7),
- (e) *abeo*-Pisiferol (a8),
- (f) Taxodione (a10, R=H, standard),
- (g) Salvinolone (a11, standard),
- (h) Sugiol methyl ether (a4, Me, standard).

Figure SM-2. Mass spectra of the terpenoids from the Taxodioideae resins.

- (a) 6,7-Dehydroroyleanone (a12, standard),
- (b) Taxodone (a14, standard),
- (c) 11-Hydroxysugiol (a15),
- (d) Royleanone (a13, Standard),
- (e) *abeo*-Carnosol (a16),
- (f) 6-Hydroxysalvinolone (14-deoxycoleon U, a17, standard),
- (g) Methyl pisiferate,
- (h) Methyl imbricatoloate (L4, standard).

Figure SM-3. Mass spectra of the terpenoids from the Taxodioideae resins.

- (a) Methyl imbricatoloate (L7, standard),

- (b) Taxodione acetate (a10, R=Ac),
- (c) Dimethyl dihydroagathate (L8, standard),
- (d) 7-Acetoxy-6,7-dehydroroyleanone (a25, standard),
- (e) Sugiol-TMS (a4, standard),
- (f) 11-Hydroxy-12-oxoabieta-7,9(11),13-triene-TMS (a6),
- (g) *abeo*-Pisiferol-TMS (a8),
- (h) Taxodione-TMS (a10, R=H, standard).

Figure SM-4. Mass spectra of the terpenoids from the Taxodioideae resins.

- (a) 6,7-Dehydroroyleanone-TMS (a12, standard),
- (b) Royleanone-TMS (a13, standard),
- (c) Imbricatolonic acid-TMS (L4, standard),
- (d) Methyl imbricatolonic acid-TMS (L7, standard),
- (e) 24-Methylenecycloartan-3-one (T1),
- (f) 7-Acetoxy-6,7-dehydroroyleanone-TMS (a25, standard),
- (g) 11-Hydroxy-6,7-dehydroferruginol-TMS (a6),
- (h) Pisiferol-TMS (a7).

Figure SM-5. Mass spectra of the terpenoids from the Taxodioideae resins.

- (a) 11-Hydroxyferruginol-TMS (a9),
- (b) 7-Acetoxyroyleanone-TMS (a25, standard),
- (c) Chamaecydin (a27, standard),
- (d) *Iso*-chamaecydin (a28),
- (e) 24-Ethylenecycloartan-3-one (T2),
- (f) Salvinolone-TMS (a11, standard),
- (g) Taxodone-TMS (a14, standard),
- (h) 11-Hydroxysugiol-TMS (a15).

Figure SM-6. Mass spectra of the terpenoids from the Taxodioideae resins.

- (a) *abeo*-Carnosol-TMS (a16),

- (b) 13-*epi*-Cupressic acid-TMS (L5),
- (c) *Iso*-cupressic acid-TMS (L6),
- (d) 6 β -Hydroxychamaecydin (a29, standard),
- (e) Imbricatoloic acid-TMS (L7, standard),
- (f) Taxoquinone-TMS (a18),
- (g) Horminone-TMS (a20),
- (h) 13,14-Dihydroagathic acid-TMS (L8, standard).

Figure SM-7. Mass spectra of the terpenoids from the Taxodioideae resins.

- (a) Chamaecydin-TMS (a27, standard),
- (b) *Iso*-chamaecydin-TMS (a28),
- (c) 6-Hydroxysalvinolone-TMS (a17, standard),
- (d) 6 β ,11-Dihydroxysugiol-TMS (a22),
- (e) 7-Hydroxytaxodone-TMS (a19),
- (f) 6 α -Hydroxytaxoquinone-TMS (a23, standard),
- (g) 6 β -Hydroxytaxoquinone-TMS (a24, standard),
- (h) 6 β -Hydroxychamaecydin-TMS (a29, standard).

Figure SM-2.

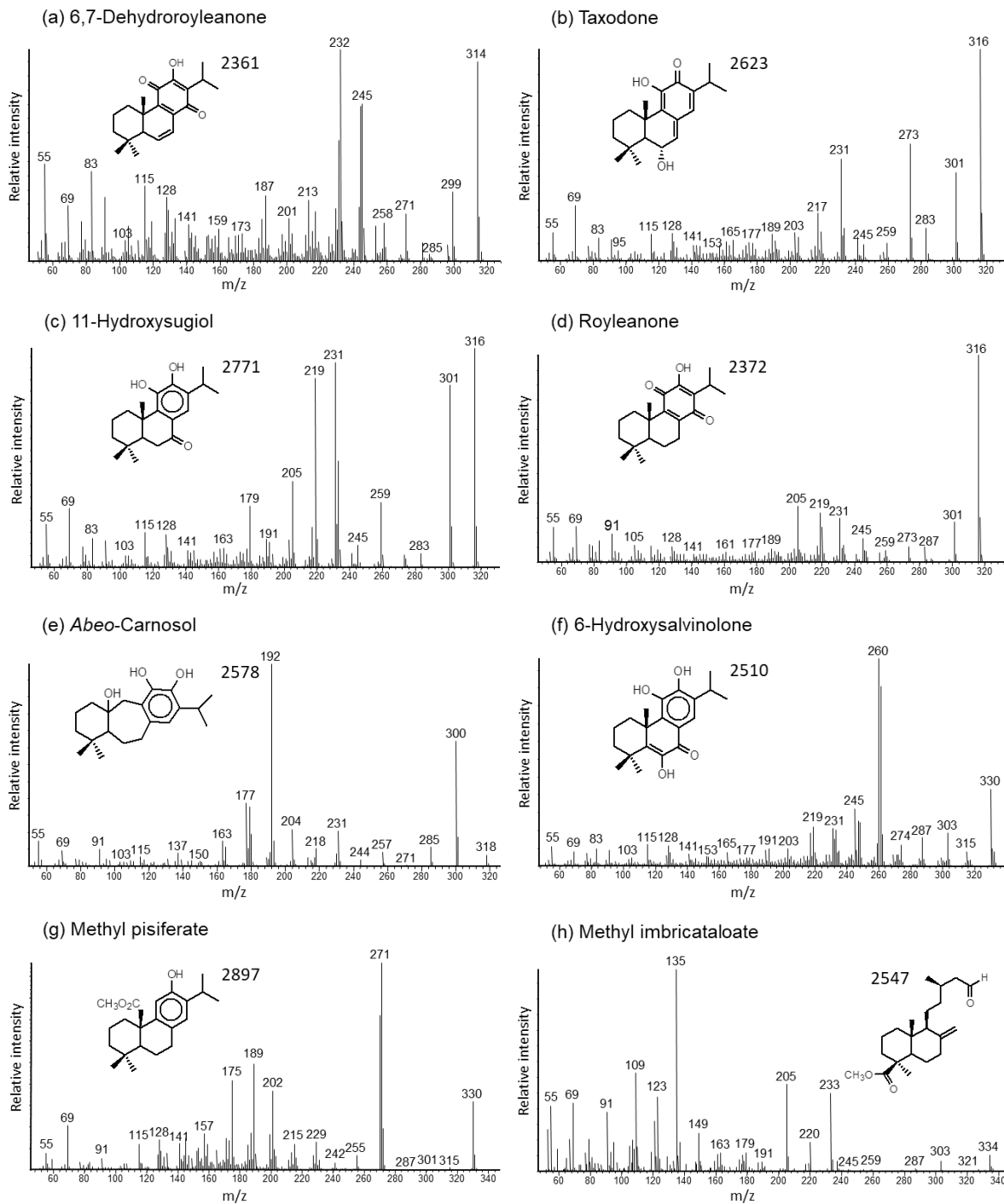


Figure SM-3.

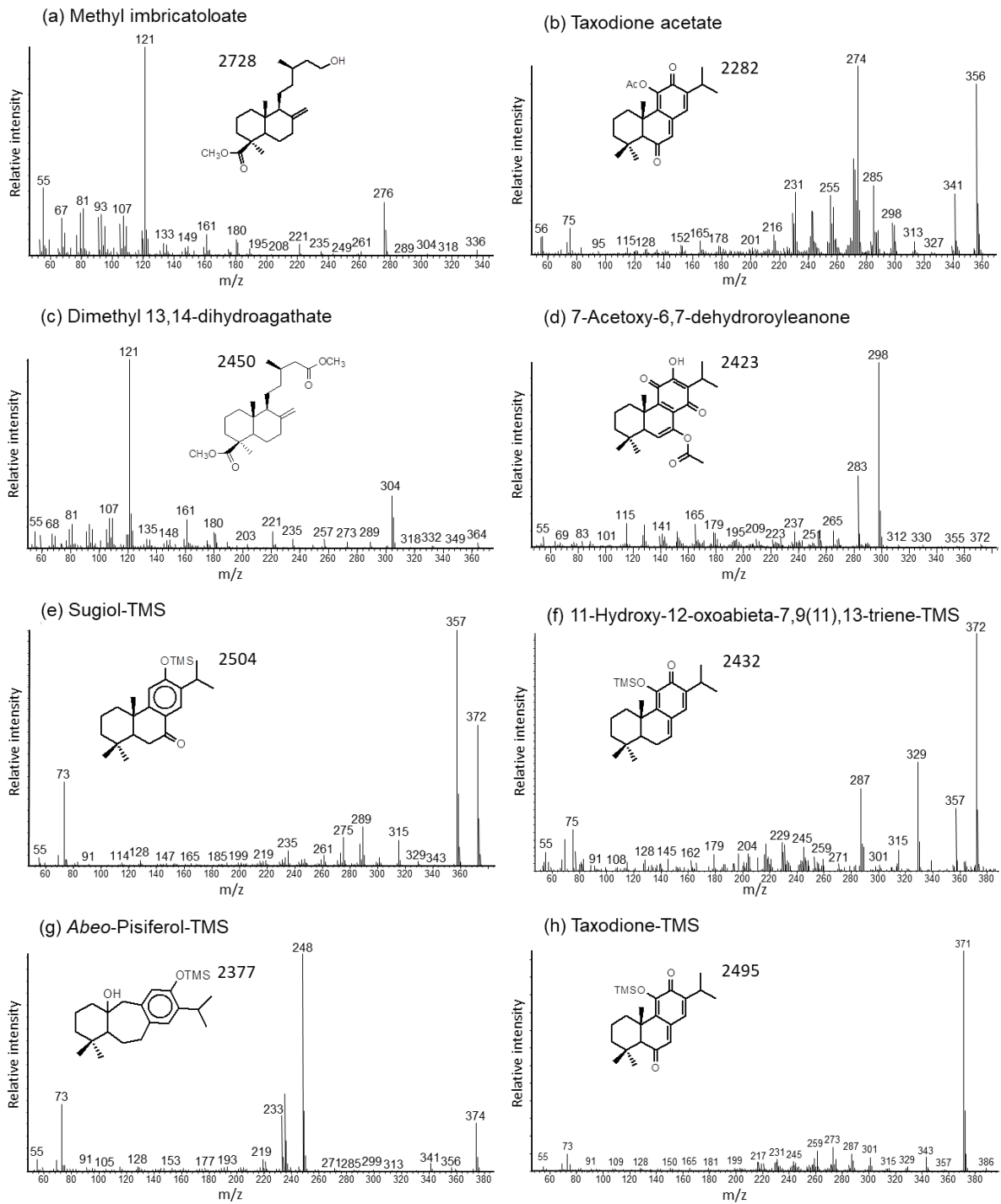


Figure SM-4.

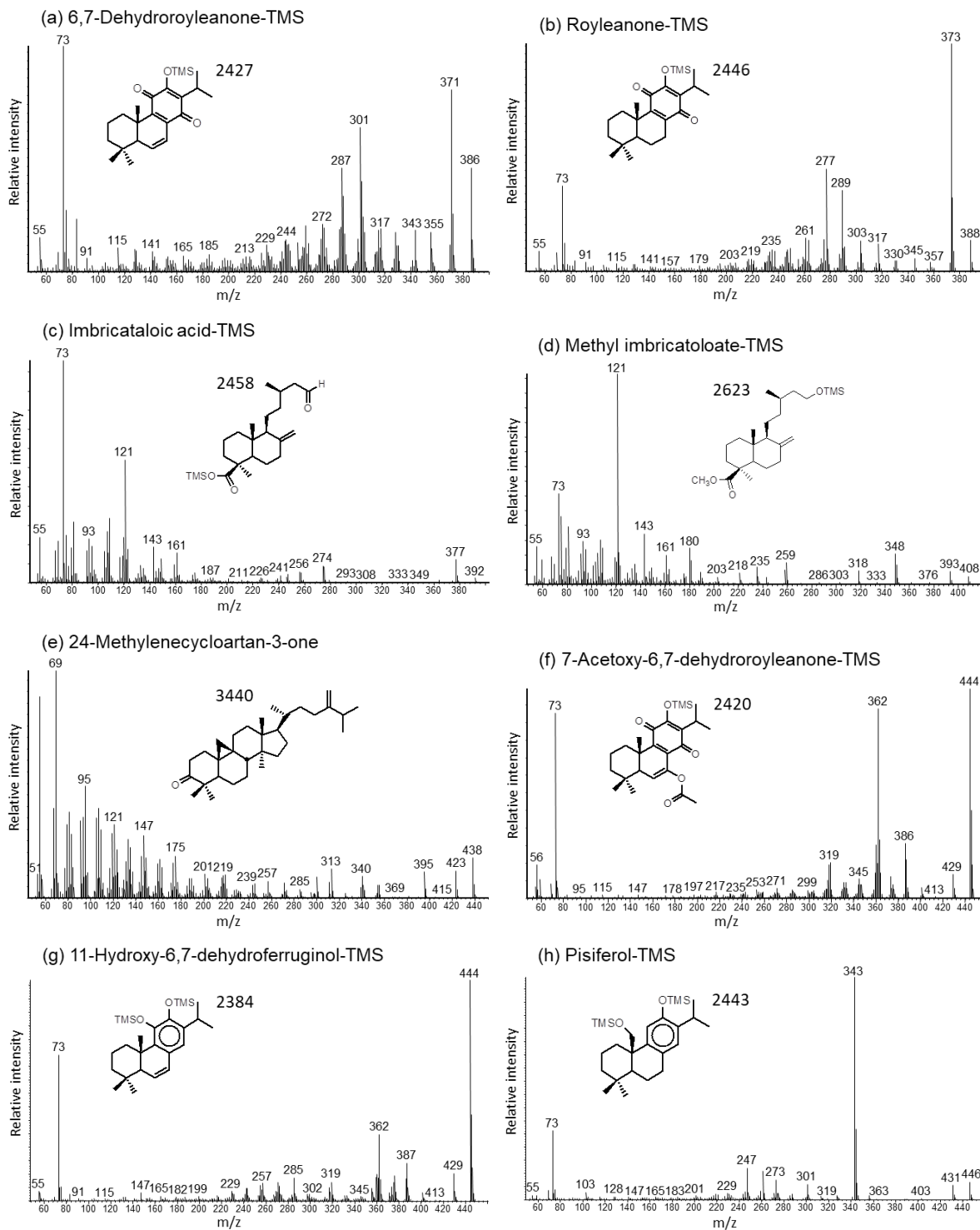


Figure SM-5.

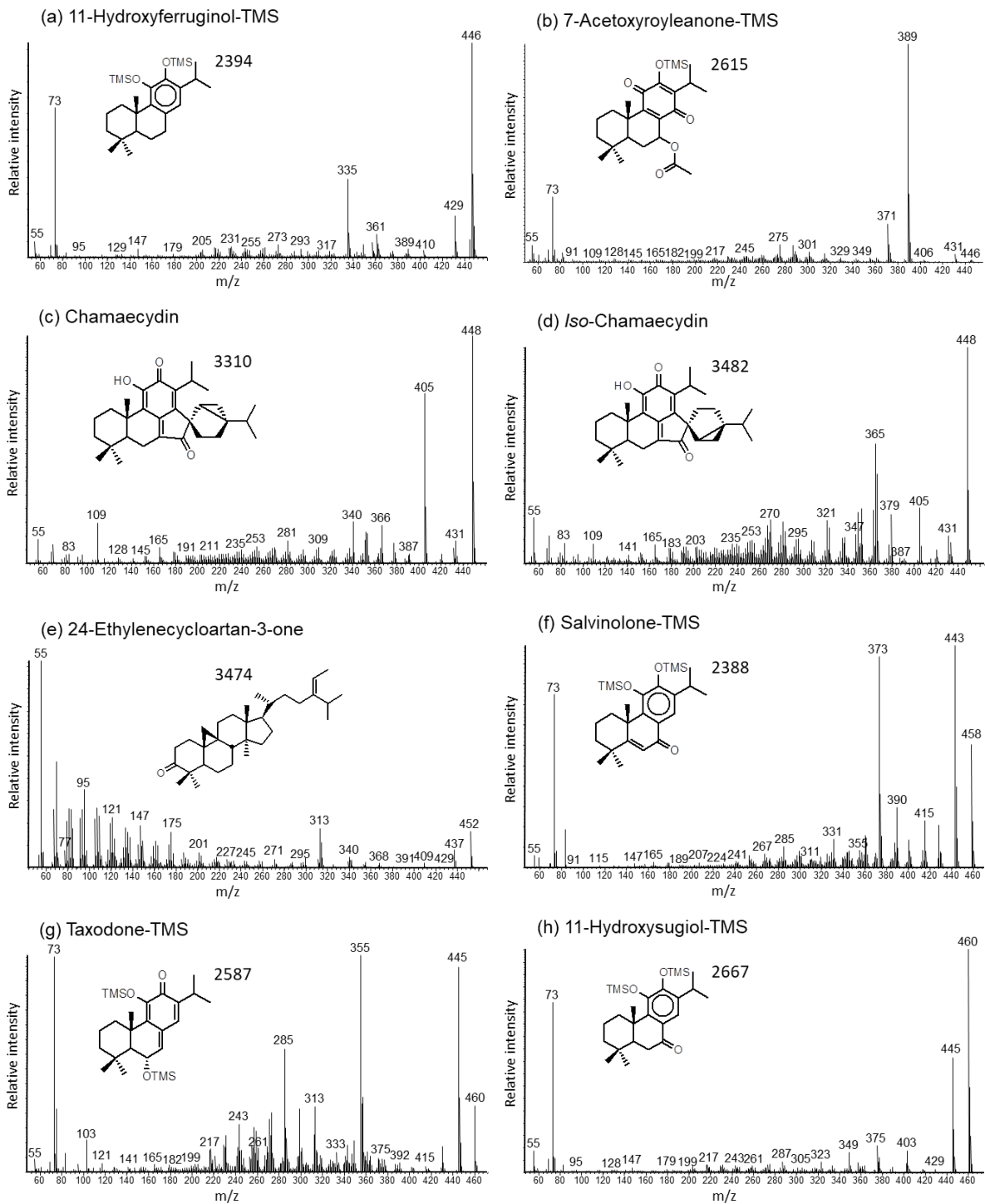


Figure SM-6.

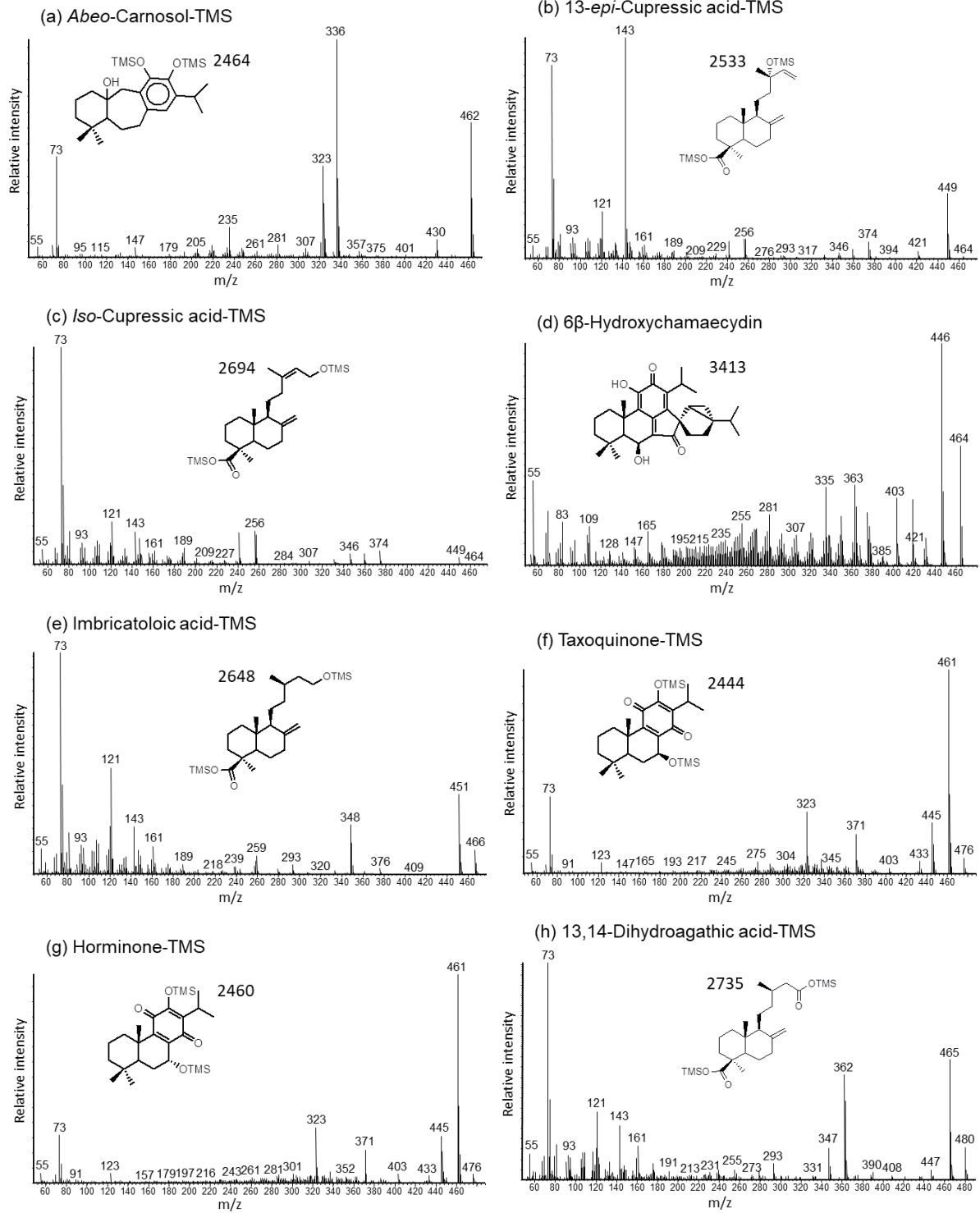


Figure SM-7.

