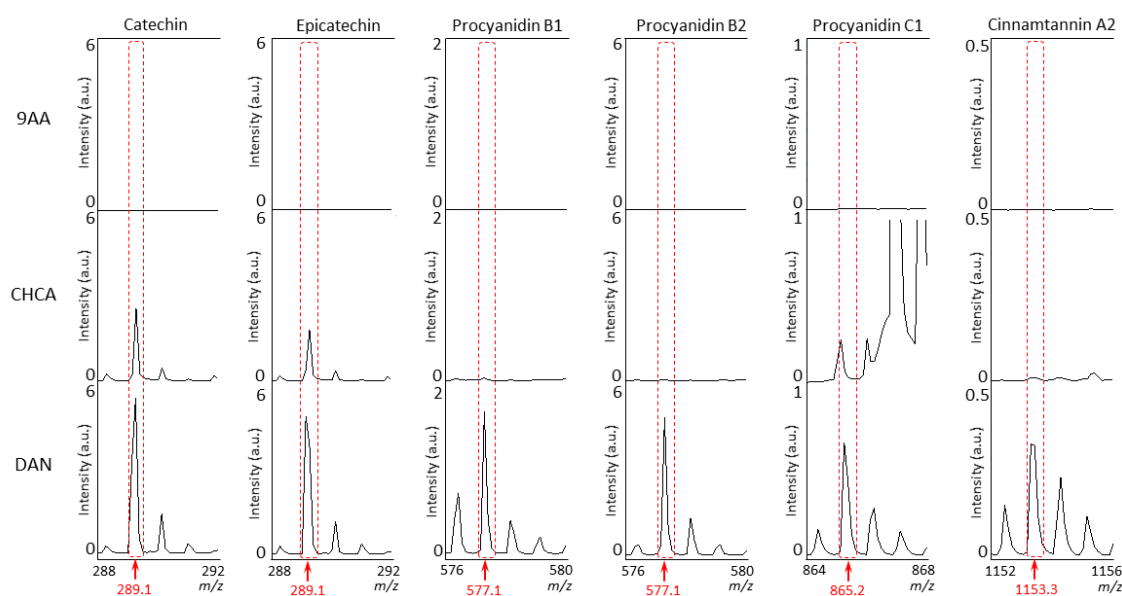
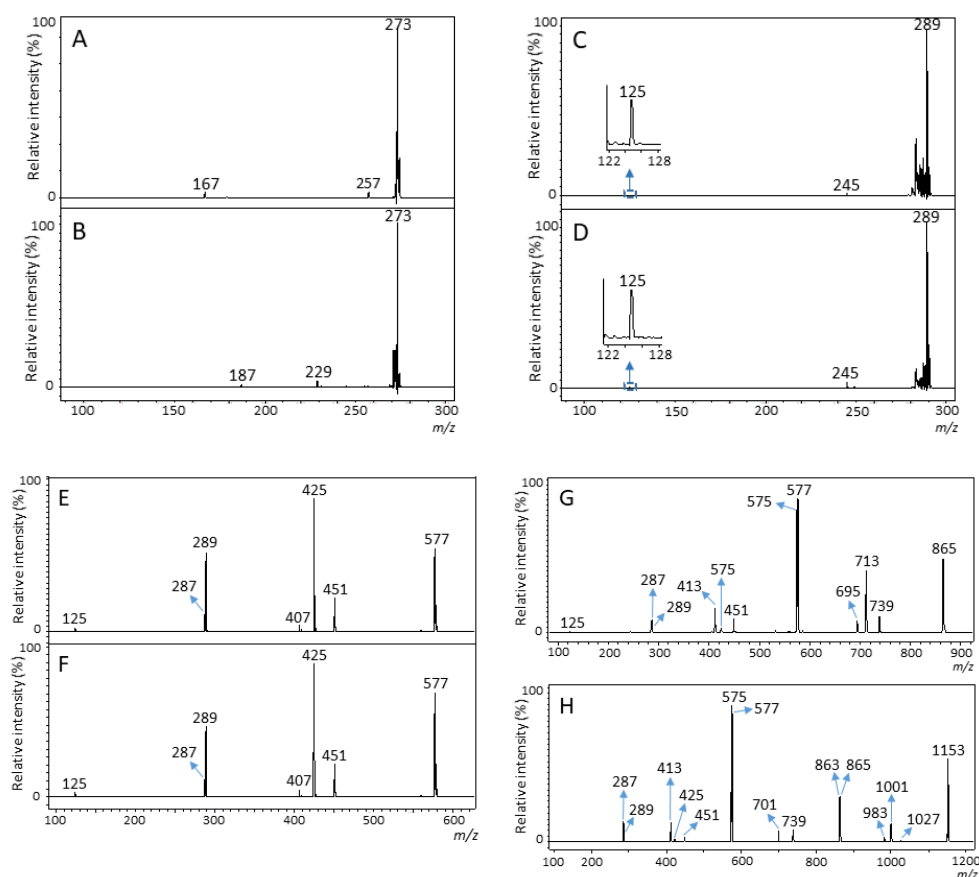


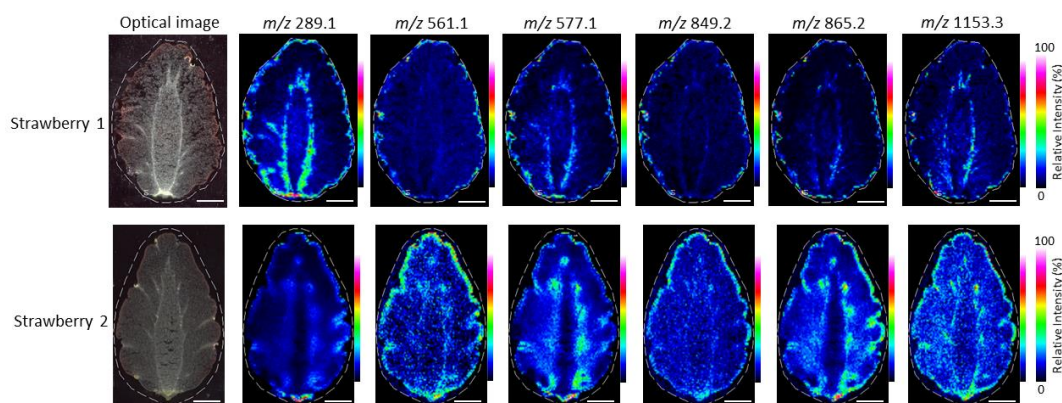
## Supplementary Materials



**Figure S1.** Mass spectra of flavan-3-ol standards by matrix-assisted laser desorption/ionization-mass spectrometry imaging. Catechin, epicatechin, procyanidin B1, procyanidin B2, procyanidin C1, and cinnamtannin A2 standards were measured using 9-aminoacridine (9AA),  $\alpha$ -cyano-4-hydroxycinnamic acid (CHCA), and 1,5-diaminonaphthalene (DAN) in the negative ion mode. The standards were detected as the  $[M - H]^-$  ion. Red dotted lines indicate each flavan-3-ol standard peak.



**Figure S2.** Matrix-assisted laser desorption/ionization-tandem mass spectrometry (MS/MS) analyses of flavan-3-ol standards. Representative MS/MS spectra of the (A) afzelechin standard  $[M - H]^-$  ion, (B) precursor ion at  $m/z$  273 with a strawberry section, (C) catechin standard  $[M - H]^-$  ion, (D) epicatechin standard  $[M - H]^-$  ion, (E) procyanidin B1 standard  $[M - H]^-$  ion, (F) procyanidin B2 standard  $[M - H]^-$  ion, (G) procyanidin C1 standard  $[M - H]^-$  ion, and (H) cinnamtannin A2 standard  $[M - H]^-$  ion. MS/MS spectra were obtained using ultrafleXtreme instrument operated in the collision-induced dissociation “LIFT” MS/MS.



**Figure S3.** Representative ion images of the identified flavan-3-ol species in strawberry fruit by matrix-assisted laser desorption/ionization-mass spectrometry imaging. These ion images were obtained from two strawberry fruits different from that shown in Figure 2. The dotted white line shows the analyzed region. Scale bar = 5 mm.