

Quantitation of phenolic compounds related to antioxidant and anti-osteoporosis activities in ripe and unripe maesil (*Prunus mume*)

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Table S1. MS and MS/MS spectra of compounds **1-9** in mume fruits

Table S2. UV spectra of compounds **1-9** in mume fruits

Figure S1. Column selectivity of compounds **1-9** on various kinds of columns (**1**, neochlorogenic acid (NCA); **2**, benzyl- β -D-glucopyranoside (BGP); **3**, β -D-glucopyranosyl benzoate (GPB); **4**, amygdalin; **5**, 3,4,5-trimethoxyphenyl- β -D-glucopyranoside (TMPGP); **6**, prunasin; **7**, benzyl- α -L-arabino pyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside (BAPGP); **8**, benzyl- β -D-xylopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside (BXPGP); **9**, (-)-epicatechin)

Figure S2. Eluent buffer concentration selectivity of compounds **1-9** on a PFP column (**1**, neochlorogenic acid (NCA); **2**, benzyl- β -D-glucopyranoside (BGP); **3**, β -D-glucopyranosyl benzoate (GPB); **4**, amygdalin; **5**, 3,4,5-trimethoxyphenyl- β -D-glucopyranoside (TMPGP); **6**, prunasin; **7**, benzyl- α -L-arabino pyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside (BAPGP); **8**, benzyl- β -D-xylopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside (BXPGP); **9**, (-)-epicatechin)

Figure S3. Eluent pH selectivity of compounds **1-9** on a PFP column (**1**, neochlorogenic acid (NCA); **2**, benzyl- β -D-glucopyranoside (BGP); **3**, β -D-glucopyranosyl benzoate (GPB); **4**, amygdalin; **5**, 3,4,5-trimethoxyphenyl- β -D-glucopyranoside (TMPGP); **6**, prunasin; **7**, benzyl- α -L-arabino pyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside (BAPGP); **8**, benzyl- β -D-xylopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside (BXPGP); **9**, (-)-epicatechin)

Figure S4. Column selectivity of compounds **1-9** on a PFP column (1: NCA, 2: BGP, 3: GPB, 4: amygdalin, 5: TMPGP, 6: prunasin, 7: BAPGP, 8: BXPGP, 9: (-)-epicatechin)

Figure S5. Extraction effects of various extraction solvent for compounds **1-9** in mume fruits

Figure S6. Extraction effects with different methanol-water ratio for compounds **1-9** in mume fruits

Figure S7. Extraction effects by extraction process method for compounds **1-9** in *P. mume* fruits

Table S1.

Compounds	MS spectra	MS/MS spectra
1	<p>- In positive mode</p>	

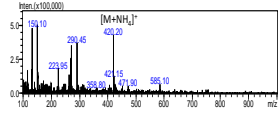
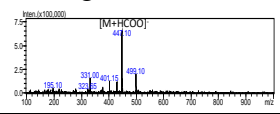
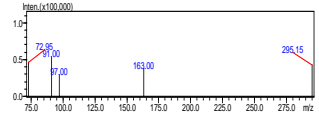
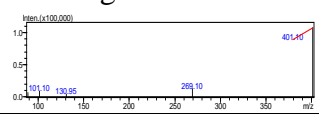
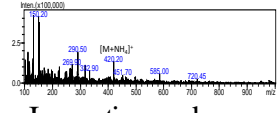
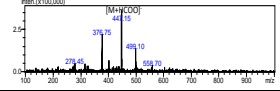
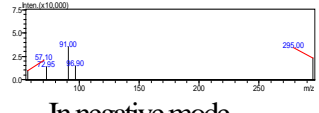
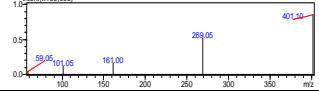
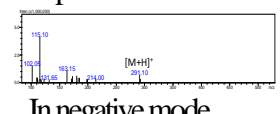
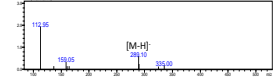
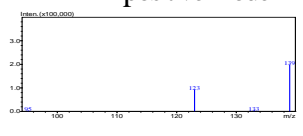
	 <p>- In negative mode</p>  <p>- In positive mode</p>	 <p>- In negative mode</p>  <p>- In positive mode</p>
8	 <p>- In negative mode</p>  <p>- In positive mode</p>	 <p>- In negative mode</p>  <p>- In positive mode</p>
9	 <p>- In negative mode</p>  <p>- In positive mode</p>	 <p>- In positive mode</p>

Table S2.

Peaks	HPLC chromatograms	UV spectra	Peaks	HPLC chromatograms	UV spectra
1			6		
2			7		
3			8		
4			9		
5					

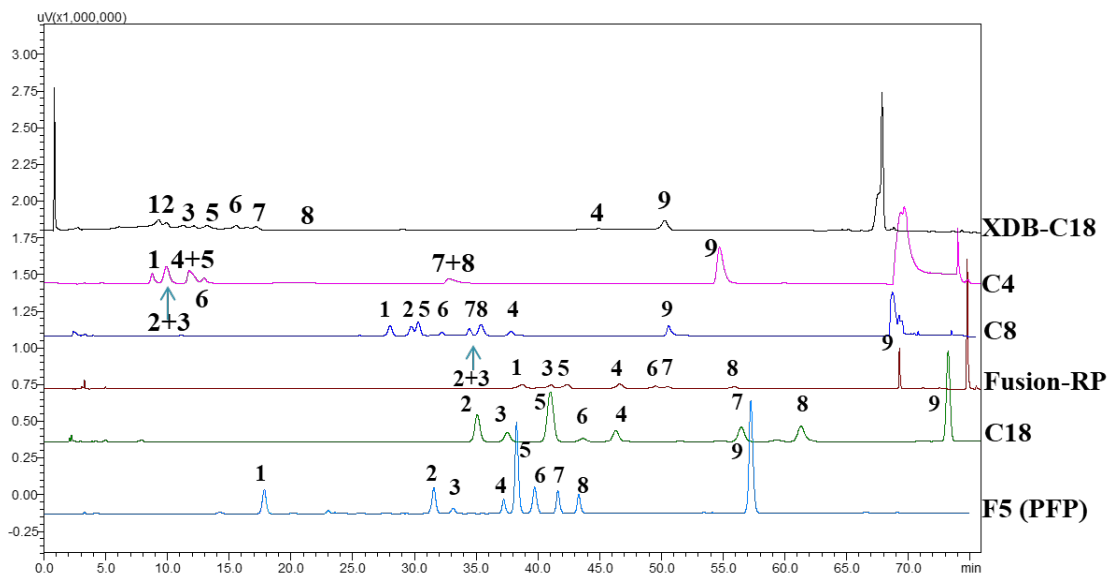


Figure S1.

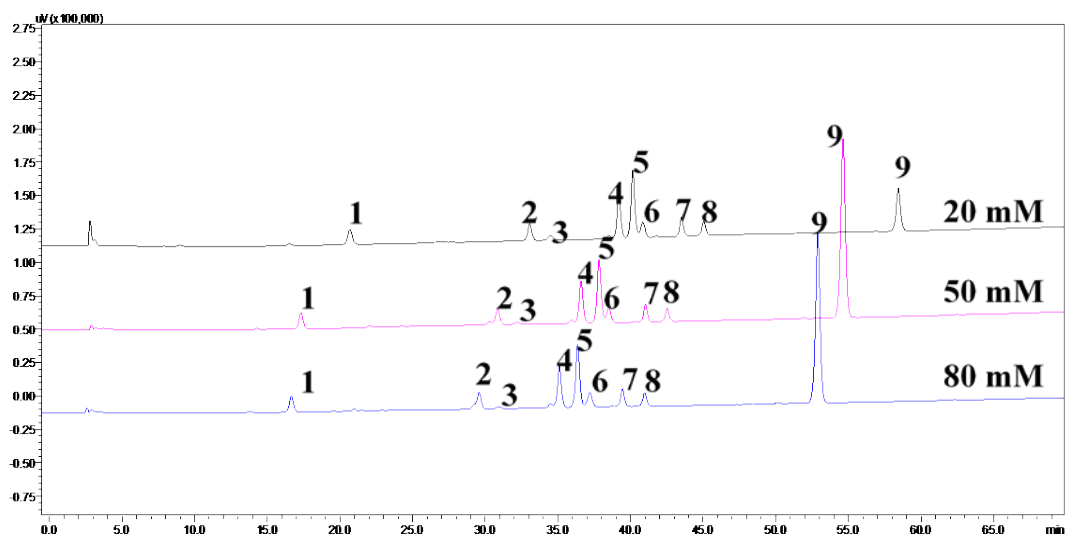


Figure S2.

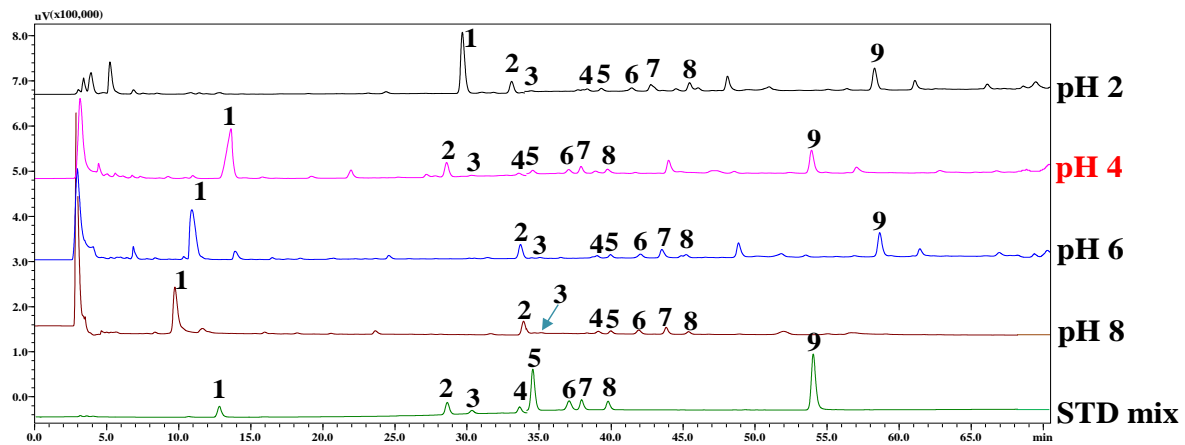


Figure S3.

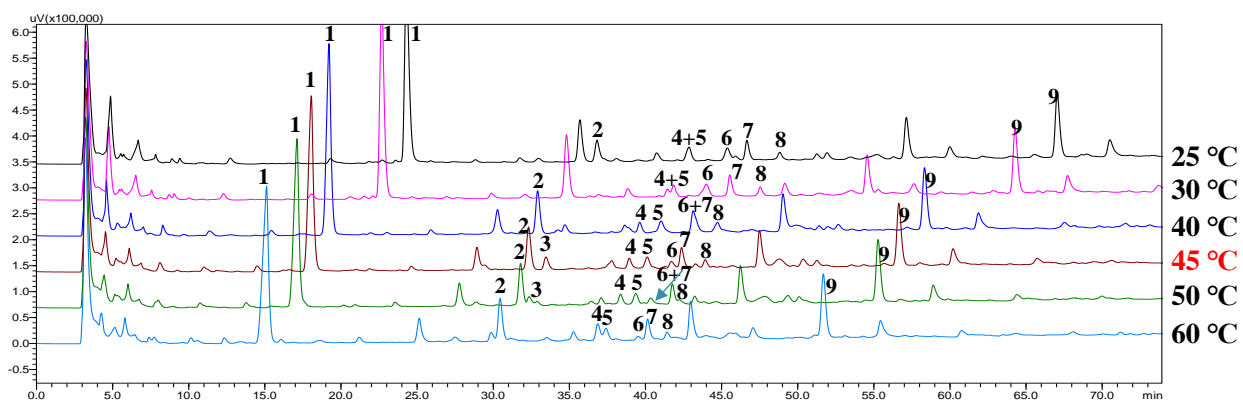


Figure S4.

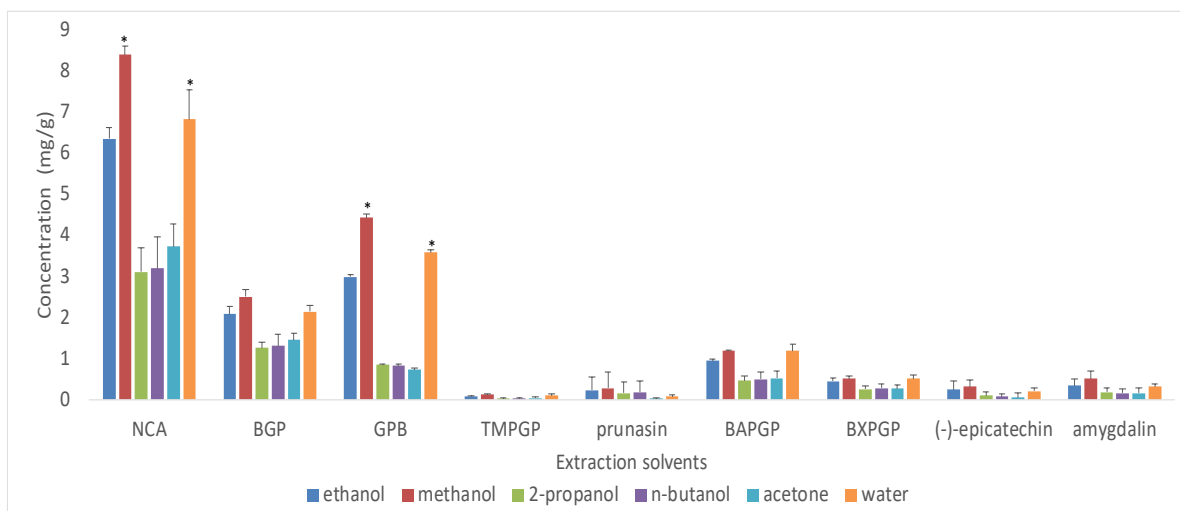


Figure S5.

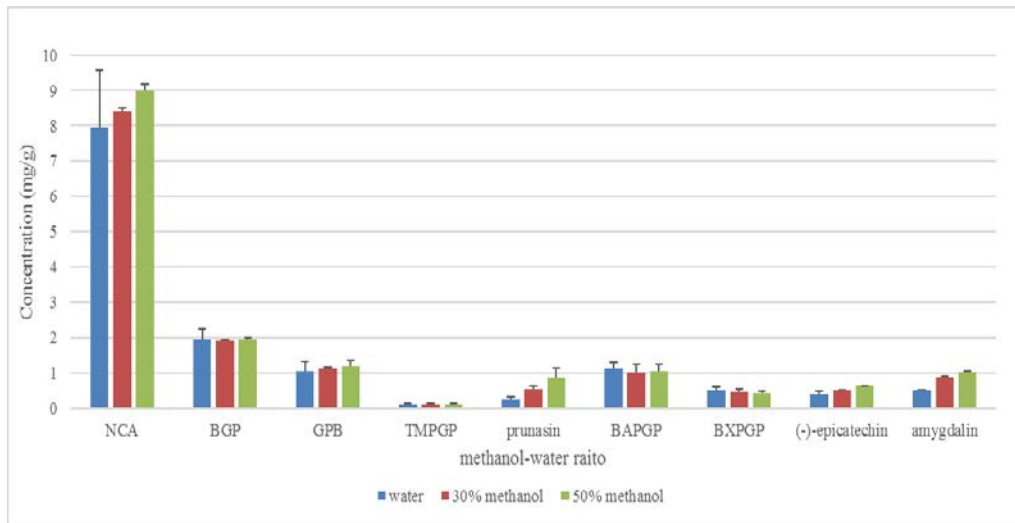


Figure S6.

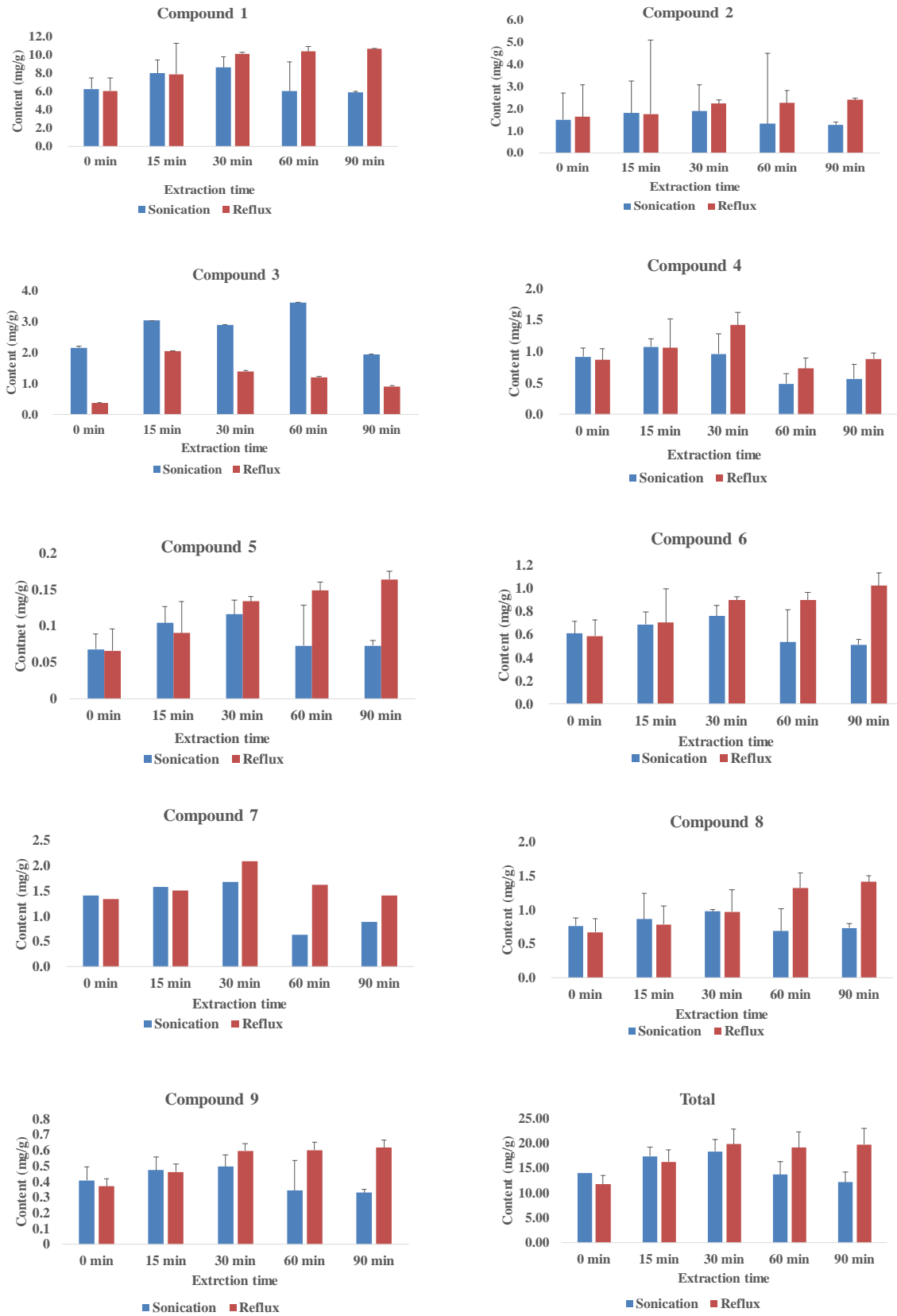


Figure S7.