

**Table S1**

The composition of PSPAs affected by the extraction method, cultivar, part and pre-cooking of PSP.

Part	Cultivar	Composition of anthocyanins	References
Root		<b>Conventional extraction:</b> cyanidin-3-sophoroside-5-glucoside (4.4%), peonidin-3-sophoroside-5-glucoside (9.0%), cyanidin-3- <i>p</i> -hydroxybenzoyl-sophoroside-5-glucoside (4.1%), peonidin-3- <i>p</i> -hydroxybenzoyl-sophoroside-5-glucoside (1.0%), cyanidin-3-feruloyl-sophoroside-5-glucoside (2.9%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (14.0%), peonidin-3-feruloyl-sophoroside-5-glucoside (6.2%), peonidin-3-caffeoyl-sophoroside-5-glucoside (1.7%), cyanidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophoroside-5-glucoside (9.7%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (1.3%), peonidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophoroside-5-glucoside (28.1%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (17.6%)	[29]
		<b>Ultrasound-assisted extraction:</b> cyanidin-3-sophoroside-5-glucoside (4.0%), peonidin-3-sophoroside-5-glucoside (10.1%), cyanidin-3- <i>p</i> -hydroxybenzoyl-sophoroside-5-glucoside (4.3%), peonidin-3- <i>p</i> -hydroxybenzoyl-sophoroside-5-glucoside (0.8%), cyanidin-3-feruloyl-sophoroside-5-glucoside (1.2%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (13.4%), peonidin-3-feruloyl-sophoroside-5-glucoside (6.5%), peonidin-3-caffeoyl-sophoroside-5-glucoside (1.9%), cyanidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophoroside-5-glucoside (10.6%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (1.4%), peonidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophoroside-5-glucoside (28.9%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (16.9%)	
		<b>Accelerated-solvent extraction:</b> cyanidin-3-sophoroside-5-glucoside (2.0%), peonidin-3-sophoroside-5-glucoside (5.9%), cyanidin-3- <i>p</i> -hydroxybenzoyl-sophoroside-5-glucoside (4.2%), peonidin-3- <i>p</i> -hydroxybenzoyl-sophoroside-5-glucoside (0.5%), cyanidin-3-feruloyl-sophoroside-5-glucoside (0.8%), cyanidin-3-caffeoyl-sophoroside-5-glucoside	

		<p>(11.2%), peonidin-3-feruloyl-sophoroside-5-glucoside (3.7%), peonidin-3-caffeoyl-sophoroside-5-glucoside (2.4%), cyanidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (15.8%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (1.4%), peonidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (24.8%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (27.2%)</p> <p>Cyanidin-3-sophoroside-5-glucoside (3.16%), cyaniding-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (13.46%), cyanidin-3-feruloyl-sophoroside-5-glucoside (2.31%), cyaniding-3-caffeoyl-sophoroside-5-glucoside (2.78%), cyaniding-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (16.79%), peonidin-3-caffeoyl-sophoroside-5-glucoside (49.1%), cyaniding-3-caffeoyl-feruloyl-sophoroside-5-glucoside (6.34%), peonidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (6.07%)</p> <p><b>Provenances 1:</b> cyaniding-3-sophoroside-5-glucoside, peonidin-3-sophoroside-5-glucoside, cyaniding-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, cyaniding-3-caffeoyl-sophoroside-5-glucoside, peonidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-sophoroside-5-glucoside, cyaniding-3-feruloyl-sophoroside-5-glucoside, peonidin-3-feruloyl-sophoroside-5-glucoside, cyaniding-3-dicaffeoyl-sophoroside-5-glucoside, cyaniding-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, cyaniding-3-caffeoyl-sophoroside-5-glucoside, cyaniding-3-caffeoyl-feruloyl-sophoroside-5-glucoside, peonidin-3-dicaffeoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-<i>p</i>-coumaroyl-sophoroside-5-glucoside, pelargonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside, peonidin-3-feruloyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside</p> <p><b>Provenances 2:</b> cyaniding-3-sophoroside-5-glucoside, peonidin-3-sophoroside-5-glucoside, cyanidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-sophoroside-5-glucoside, peonidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-sophoroside-5-glucoside, cyanidin-3-feruloyl-sophoroside-5-glucoside, peonidin-3-feruloyl-sophoroside-5-glucoside, cyanidin-3-dicaffeoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-sop</p>	
Root			[24]
Root	Provenances 1, 2 and 3		[60]

Root

Root

**Provenances 3:** cyanidin-3-sophoroside-5-glucoside, peonidin-3-sophoroside-5-glucoside, cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-sophoroside-5-glucoside, peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-sophoroside-5-glucoside, cyanidin-3-feruloyl-sophoroside-5-glucoside, peonidin-3-feruloyl-sophoroside-5-glucoside, cyanidin-3-dicaffeoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside, peonidin-3-dicaffeoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-*p*-coumaroyl-sophoroside-5-glucoside

Cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside, cyanidin-3-feruloyl-sophoroside-5-glucoside, peonidin-3-feruloyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside

Cyanidin-3-sophoroside-5-glucoside, peonidin-3-sophoroside-5-glucoside, cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside, cyanidin-3-feruloyl-sophoroside-5-glucoside, peonidin-3-feruloyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-sophoroside-5-glucoside, peonidin-3-dicaffeoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-

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	9, 8-24-15, 8-33-5, Rizishu-7a, Rizishu-13a, 8-45-9, Wanzishu-56a, Yusuji-43a and Yuzishu-263a	-caffeoyl-feruloyl-sophoroside-5-glucoside	
Root	Yamakawamurasaki	<p>Cyanidin-3-sophoroside-5-glucoside (3.5%), peonidin-3-sophoroside-5-glucoside (3.8%), cyanidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (2.9%), peonidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (4.3%), cyanidin-3-feruloyl-sophoroside-5-glucoside (4.8%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (3.9%), cyanidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (25.9%), peonidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (14.9%), peonidin-3-caffeoyl-sophoroside-5-glucoside (12.6%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (4.7%)</p> <p><b>Outer layer of Sinjami:</b> cyanidin-3-sophoroside-5-glucoside (0.22%), peonidin-3-sophoroside-5-glucoside (1.21%), cyanidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-glucoside (1.6%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.24%), peonidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (8.78%), peonidin-3-caffeoyl-sophoroside-5-glucoside (1.38%), cyanidin-3-feruloyl-sophoroside-5-glucoside (1.68%), peonidin-3-feruloyl-sophoroside-5-glucoside (9.78%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.24%), cyanidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (6.13%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.02%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (2.9%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (2.22%), peonidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (40.62%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (22.46%), peonidin-3-feruloyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (0.5%)</p> <p><b>Outer layer of Danjami:</b> cyanidin-3-sophoroside-5-glucoside (0.97%), peonidin-3-sophoroside-5-glucoside (2.18%), cyanidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-glucoside (3.31%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.24%), peonidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (13.29%), peonidin-3-caffeoyl-sophoroside-5-glucoside</p>	[35]
Root (inner layer and outer layer)	Sinjami, Jami, Danjami, Yeonjami and Borami	<p>Cyanidin-3-sophoroside-5-glucoside (0.97%), peonidin-3-sophoroside-5-glucoside (2.18%), cyanidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-glucoside (3.31%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.24%), peonidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (13.29%), peonidin-3-caffeoyl-sophoroside-5-glucoside</p>	[64]

(0.39%), cyanidin-3-feruloyl-sophoroside-5-glucoside (0.73%), peonidin-3-feruloyl-sophoroside-5-glucoside (1.53%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.39%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (14.58%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.06%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (1.91%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (7.08%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (47.02%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (5.86%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.05%)

**Outer layer of Yeonjami:** cyanidin-3-sophoroside-5-glucoside (0.81%), peonidin-3-sophoroside-5-glucoside (4.91%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-glucoside (1.67%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.19%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (10.06%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.86%), cyanidin-3-feruloyl-sophoroside-5-glucoside (1.61%), peonidin-3-feruloyl-sophoroside-5-glucoside (7.67%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.07%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (6.37%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.06%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (2.63%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (6.65%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (35.66%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (20.53%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.29%)

**Outer layer of Jami:** cyanidin-3-sophoroside-5-glucoside (0.27%), peonidin-3-sophoroside-5-glucoside (0.02%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-glucoside (0.66%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.4%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.98%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.43%), cyanidin-3-feruloyl-sophoroside-5-glucoside (0.96%), peonidin-3-feruloyl-sophoroside-5-glucoside (0.9%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.32%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (19.29%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.14%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside

de (12.46%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (0.95%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (36.41%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (24.85%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.92%)

**Outer layer of Borami:** cyanidin-3-sophoroside-5-glucoside (0.07%), pelargonidin-3-sophoroside-5-glucoside (0.51%), peonidin-3-sophoroside-5-glucoside (0.53%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-glucoside (0.11%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.1%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.82%), peonidin-3-caffeoyl-sophoroside-5-glucoside (1.57%), pelargonidin-3-caffeoyl-sophoroside-5-glucoside (0.11%), peonidin-3-feruloyl-sophoroside-5-glucoside (0.97%), pelargonidin-3-feruloyl-sophoroside-5-glucoside (0.78%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (5.8%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (6.51%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (1.86%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (44.12%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (20.74%), pelargonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (14.48%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.89%)

**Inner layer of Sinjami:** cyanidin-3-sophoroside-5-glucoside (0.19%), peonidin-3-sophoroside-5-glucoside (1.07%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-glucoside (1.12%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.17%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (9.19%), peonidin-3-caffeoyl-sophoroside-5-glucoside (1.22%), cyanidin-3-feruloyl-sophoroside-5-glucoside (1.35%), peonidin-3-feruloyl-sophoroside-5-glucoside (8.86%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.27%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.81%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.01%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (2.71%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (3.04%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (42.91%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (22.65%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.89%)

e-5-glucoside (0.41%)

**Inner layer of Danjami:** cyanidin-3-sophoroside-5-glucoside (1.08%), peonidin-3-sophoroside-5-glucoside (2.42%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-glucoside (4.08%), cyanidin-3-caffeoyl sophoroside-5-glucoside (0.13%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (15.96%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.44%), cyanidin-3-feruloyl-sophoroside-5-glucoside (0.39%), peonidin-3-feruloyl-sophoroside-5-glucoside (0.72%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.53%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (15.77%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.01%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (0.83%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (8.99%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (46.33%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (2.11%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.13%)

**Inner layer of Yeonjami:** cyanidin-3-sophoroside-5-glucoside (1.03%), peonidin-3-sophoroside-5-glucoside (5.28%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-glucoside (1.9%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.08%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (13.42%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.5%), cyanidin-3-feruloyl-sophoroside-5-glucoside (0.85%), peonidin-3-feruloyl-sophoroside-5-glucoside (4.37%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.17%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (8.03%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (1.56%), peonidin-3-dicaffeoyl sophoroside-5-glucoside (12.23%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (40.86%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (9.53%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.16%)

**Inner layer of Jami:** cyanidin-3-sophoroside-5-glucoside (0.18%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-glucoside (0.83%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (0.31%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.65%), peonidin-3-caffeoyl-sophoroside-5-glucoside (0.23%), cyanidin-3-feruloyl-sophoroside-5-glucoside

de (1.06%), peonidin-3-feruloyl-sophorose-5-glucoside (0.43%), cyanidin-3-caffeoyl-sophorose-5-glucoside (0.98%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (23.63%), peonidin-3-caffeoyl-sophorose-5-glucoside (0.28%), cyanidin-3-caffeoyl-feruloyl-sophorose-5-glucoside (12.87%), peonidin-3-dicaffeoyl-sophorose-5-glucoside (1.19%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (34.17%), peonidin-3-caffeoyl-feruloyl-sophorose-5-glucoside (22.13%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (1.04%)

**Inner layer of Borami:** cyanidin-3-sophorose-5-glucoside (0.12%), pelargonidin-3-sophorose-5-glucoside (1.13%), peonidin-3-sophorose-5-glucoside (1.64%), cyanidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (0.07%), cyanidin-3-caffeoyl-sophorose-5-glucoside (0.16%), peonidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (1.92%), peonidin-3-caffeoyl-sophorose-5-glucoside (2.8%), pelargonidin-3-caffeoyl-sophorose-5-glucoside (0.12%), peonidin-3-feruloyl-sophorose-5-glucoside (1.32%), pelargonidin-3-feruloyl-sophorose-5-glucoside (0.72%), cyanidin-3-caffeoyl-sophorose-5-glucoside (0.05%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (3.8%), cyanidin-3-caffeoyl-feruloyl-sophorose-5-glucoside (6.48%), peonidin-3-dicaffeoyl-sophorose-5-glucoside (5.2%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (42.91%), peonidin-3-caffeoyl-feruloyl-sophorose-5-glucoside (18.56%), pelargonidin-3-caffeoyl-feruloyl-sophorose-5-glucoside (12.07%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (0.88%)

**Raw PSP:** cyanidin-3-sophorose-5-glucoside (0.48%), peonidin-3-sophorose-5-glucoside (1.45%), cyanidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (4.16%), peonidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (11.03%), cyanidin-3-feruloyl-sophorose-5-glucoside (1.52%), cyanidin-3-caffeoyl-sophorose-5-glucoside (1.27%), peonidin-3-feruloyl-sophorose-5-glucoside (3.48%), cyanidin-3-dicaffeoyl-sophorose-5-glucoside (1.65%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (10.21%), peonidin-3-caffeoyl-sophorose-5-glucoside (5.51%), cyanidin-3-caffeoyl-feruloyl-sophorose-5-glucoside (3.32%), peonidin-3-dicaffeoyl-sophorose-5-glucoside

Root

Shinzami

[26]

(3.33%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (42.18%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (9.84%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.62%)

**Steamed PSP:** cyanidin-3-sophoroside-5-glucoside (0.32%), peonidin-3-sophoroside-5-glucoside (1.29%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.07%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (9.61%), cyanidin-3-feruloyl-sophoroside-5-glucoside (1.72%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (1.37%), peonidin-3-feruloyl-sophoroside-5-glucoside (3.69%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (2.12%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (11.05%), peonidin-3-caffeoyl-sophoroside-5-glucoside (5.38%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (3.81%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (3.66%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (40.08%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (10.85%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.92%)

**Roasted PSP:** cyanidin-3-sophoroside-5-glucoside (0.83%), peonidin-3-sophoroside-5-glucoside (2.21%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.86%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (11.14%), cyanidin-3-feruloyl-sophoroside-5-glucoside (2.15%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (1.66%), peonidin-3-feruloyl-sophoroside-5-glucoside (4.38%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (1.82%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (9.76%), peonidin-3-caffeoyl-sophoroside-5-glucoside (6.1%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (3.87%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (3.67%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (36.1%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (11.05%), peonidin-3-feruloyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.4%)

Root

Funiu

**Water extract:** peonidin-3-sophoroside-5-glucoside (12.25%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.92%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (3.6%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (2.7%), peonidin-3-feruloyl-sophoroside-5-glucoside (0.83%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (0.43%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (29.78%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (4.28%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (8.41%), peonidin-3-feruloyl-*p*-coumaroyl-sophoroside-5-glucoside (7.18%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.33%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (25.64%), peonidin-3-sophoroside-5-glucoside (2.91%)

**70% Ethanol extract:** peonidin-3-sophoroside-5-glucoside (1.24%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.85%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.48%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (4.65%), peonidin-3-feruloyl-sophoroside-5-glucoside (0.57%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (21.34%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (3.45%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (11.31%), peonidin-3-feruloyl-*p*-coumaroyl-sophoroside-5-glucoside (9.81%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (38.71%), peonidin-3-sophoroside-5-glucoside (5.60%)

**High pressure carbon dioxide extract:** peonidin-3-sophoroside-5-glucoside (9.76%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.15%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (3.37%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (5.12%), peonidin-3-feruloyl-sophoroside-5-glucoside (0.79%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (0.35%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (32.24%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (4.02%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (8.44%), peonidin-3-feruloyl-*p*-coumaroyl-sophoroside-5-glucoside (6.68%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.46%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (24.03%), peonidin-3-sophoroside-5-glucoside (3.60%)

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Root

Borami, Mokpo 62, Shinzami and Zami

**Borami:** cyanidin-3-sophorside-5-glucoside (0.62%), pelargonidin-3-sophorside-5-glucoside (1.06%), peonidin-3-sophorside-5-glucoside (1.26%), cyanidin-3-*p*-hydroxybenzoyl-sophorside-5-glucoside (0.28%), cyanidin-3-caffeoyl-sophorside-5-glucoside (0.52%), peonidin-3-*p*-hydroxybenzoyl-sophorside-5-glucoside (0.74%), peonidin-3-caffeoyl-sophorside-5-glucoside (0.89%), pelargonidin-3-caffeoyl-sophorside-5-glucoside (0.92%), cyanidin-3-*p*-coumaryl-sophorside-5-glucoside (0.2%), cyanidin-3-feruloyl-sophorside-5-glucoside (0.65%), peonidin-3-*p*-coumaryl-sophorside-5-glucoside (0.4%), peonidin-3-feruloyl-sophorside-5-glucoside (1.37%), pelargonidin-3-feruloyl-sophorside-5-glucoside (1.32%), cyanidin-3-dicaffeoyl-sophorside-5-glucoside (3.96%), cyanidin-3-caffeoyl-sophorside-5-glucoside (4.31%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorside-5-glucoside (1.09%), cyanidin-3-caffeoyl-feruloyl-sophorside-5-glucoside (4.83%), pelargonidin-3-caffeoyl-sophorside-5-glucoside (11.23%), peonidin-3-caffeoyl-sophorside-5-glucoside (12.05%), peonidin-3-dicaffeoyl-sophorside-5-glucoside (11.11%), pelargonidin-3-dicaffeoyl-sophorside-5-glucoside (8.4%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorside-5-glucoside (3.12%), pelargonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorside-5-glucoside (1.71%), peonidin-3-caffeoyl-feruloyl-sophorside-5-glucoside (14.04%), peonidin-3-caffeoyl-*p*-coumaryl-sophorside-5-glucoside (2.2%), pelargonidin-3-caffeoyl-feruloyl-sophorside-5-glucoside (9.95%), pelargonidin-3-caffeoyl-*p*-coumaryl-sophorside-5-glucoside (1.78%)

**Mokpo 62:** cyanidin-3-sophorside-5-glucoside (1.2%), peonidin-3-sophorside-5-glucoside (5.43%), cyanidin-3-*p*-hydroxybenzoyl-sophorside-5-glucoside (1.3%), peonidin-3-*p*-hydroxybenzoyl-sophorside-5-glucoside (5.35%), peonidin-3-caffeoyl-sophorside-5-glucoside (0.52%), cyanidin-3-feruloyl-sophorside-5-glucoside (0.73%), peonidin-3-feruloyl-sophorside-5-glucoside (2.11%), cyanidin-3-caffeoyl-sophorside-5-glucoside (4.54%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorside-5-glucoside (4.65%), cyanidin-3-caffeoyl-feruloyl-sophorside-5-glucoside (2.35%), pelargonidin-3-caffeoyl-sophorside-5-glucoside (0.57%), peonidin-3-caffeoyl-sophorside-5-glucoside (26.15%), peonidin-3-dicaffeoyl-sophorside-5-glucoside (4.02%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorside-5-glucoside (4.02%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorside-5-glucoside (4.02%)

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ide-5-glucoside (28.24%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (12.84%)

**Shinzami:** cyanidin-3-sophorside-5-glucoside (1.02%), peonidin-3-sophorside-5-glucoside (2.7%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.28%), cyanidin-3-caffeoyl-sophorside-5-glucoside (0.65%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (11.96%), peonidin-3-caffeoyl sophorside-5-glucoside (1.09%), cyanidin-3-feruloyl-sophorside-5-glucoside (2.05%), peonidin-3-*p*-coumaryl-sophorside-5-glucoside (0.28%), peonidin-3-feruloyl-sophorside-5-glucoside (4.28%), cyanidin-3-dicaffeoyl-sophorside-5-glucoside (2.35%), cyanidin-3-caffeoyl-sophorside-5-glucoside (1.56%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorside-5-glucoside (7.94%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (3.32%), peonidin-3-caffeoyl-sophorside-5-glucoside (6.63%), peonidin-3-dicaffeoyl-sophorside-5-glucoside (6.89%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorside-5-glucoside (32.11%), peonidin-3-caffeoyl-feruloylsoph-5-glucoside (10.9%)

**Zami:** cyanidin-3-sophorside-5-glucoside (1.27%), peonidin-3-sophorside-5-glucoside (0.55%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.66%), cyanidin-3-caffeoyl-sophorside-5-glucoside (0.9%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.86%), peonidin-3-caffeoyl-sophorside-5-glucoside (0.3%), cyanidin-3-*p*-coumaryl-sophorside-5-glucoside (0.14%), cyanidin-3-feruloyl-sophorside-5-glucoside (1.66%), peonidin-3-feruloyl-sophorside-5-glucoside (0.56%), cyanidin-3-dicaffeoyl-sophorside-5-glucoside (11.77%), cyanidin-3-caffeoyl-sophorside-5-glucoside (14.77%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorside-5-glucoside (18.94%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (17.38%), pelargonidin-3-caffeoyl-sophorside-5-glucoside (0.92%), peonidin-3-caffeoyl-sophorside-5-glucoside (5.4%), peonidin-3-dicaffeoyl-sophorside-5-glucoside (5.02%), pelargonidin-3-dicaffeoyl-sophorside-5-glucoside (0.42%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorside-5-glucoside (9.25%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (7.79%), pelargonidin-3-caffeoyl-*p*-coumaryl-sophorside-5-glucoside (0.45%)

Fushu 23, Fushu 25, Ornamental Purple, Yanshu 5, Fushu 9, Fushu 24, Longzishu 4, Longzishu 6 and Fushu 317

**Leaves of Fushu 23:** cyanidin-3-sophoroside-5-glucoside (5.55%), peonidin-3-sophoroside-5-glucoside (7.69%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (26.04%), cyanidin-3-caFFEylsoph-sophoroside-5-glucoside (2.34%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (12.98%), peonidin-3-caFFEylsoph-sophoroside-5-glucoside (0.54%), cyanidin-3-*p*-coumaryl-sophoroside-5-glucoside (0.6%), cyanidin-3-feruloyl-sophoroside-5-glucoside (1.83%), peonidin-3-*p*-coumaryl-sophoroside-5-glucoside (1.47%), peonidin-3-feruloyl-sophoroside-5-glucoside (0.76%), cyanidin-3-dicaFFEyl-sophoroside-5-glucoside (7.43%), cyanidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (24.65%), cyanidin-3-caFFEoyl-*p*-coumaryl-sophoroside-5-glucoside (0.49%), cyanidin-3-caFFEoyl-feruloyl-sophoroside-5-glucoside (1.7%), peonidin-3-dicaFFEoyl-sophoroside-5-glucoside (0.88%), peonidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.64%), peonidin-3-caFFEoyl-*p*-coumaryl-sophoroside-5-glucoside (0.07%), peonidin-3-caFFEoyl-feruloyl-sophoroside-5-glucoside (0.32%)

**Leaves of Fushu 317:** cyanidin-3-sophoroside-5-glucoside (2.67%), peonidin-3-sophoroside-5-glucoside (4.85%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (7.99%), cyanidin-3-caFFEylsoph-sophoroside-5-glucoside (8.44%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.73%), peonidin-3-caFFEylsoph-sophoroside-5-glucoside (4.01%), cyanidin-3-*p*-coumaryl-sophoroside-5-glucoside (15.47%), cyanidin-3-feruloyl-sophoroside-5-glucoside (3.49%), peonidin-3-*p*-coumaryl-sophoroside-5-glucoside (11.98%), peonidin-3-feruloyl-sophoroside-5-glucoside (3.32%), cyanidin-3-dicaFFEyl-sophoroside-5-glucoside (9.28%), cyanidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (3.82%), cyanidin-3-caFFEoyl-*p*-coumaryl-sophoroside-5-glucoside (6.08%), cyanidin-3-caFFEoyl-feruloyl-sophoroside-5-glucoside (3.87%), peonidin-3-dicaFFEoyl-sophoroside-5-glucoside (4.01%), peonidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (2%), peonidin-3-caFFEoyl-*p*-coumaryl-sophoroside-5-glucoside (2.49%), peonidin-3-caFFEoyl-feruloyl-sophoroside-5-glucoside (1.48%)

**Leaves of Fushu 25:** cyanidin-3-sophoroside-5-glucoside (2.47%), peonidin-3-sophoroside-5-glucoside (1.52%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (2.0

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7%), cyanidin-3-caFFEylsoph-sophoroside-5-glucoside (8.29%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (2.95%), peonidin-3-caFFEylsoph-sophoroside-5-glucoside (2.14%), cyanidin-3-*p*-coumaryl-sophoroside-5-glucoside (12.89%), cyanidin-3-feruloyl-sophoroside-5-glucoside (4.68%), peonidin-3-*p*-coumaryl-sophoroside-5-glucoside (16.06%), peonidin-3-feruloyl-sophoroside-5-glucoside (4.45%), cyanidin-3-dicaFFEyl-sophoroside-5-glucoside (12.45%), cyanidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (5.13%), cyanidin-3-caFFEoyl-*p*-coumaryl-sophoroside-5-glucoside (8.15%), cyanidin-3-caFFEoyl-feruloyl-sophoroside-5-glucoside (2.93%), peonidin-3-dicaFFEoyl-sophoroside-5-glucoside (3.69%), peonidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.78%), peonidin-3-caFFEoyl-*p*-coumaryl-sophoroside-5-glucoside (3.34%), peonidin-3-caFFEoyl-feruloyl-sophoroside-5-glucoside (1.99%)

**Leaves of Ornamental Purple:** cyanidin-3-sophoroside-5-glucoside (3.26%), peonidin-3-sophoroside-5-glucoside (2.34%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.11%), cyanidin-3-caFFEylsoph-sophoroside-5-glucoside (7.22%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (5.35%), peonidin-3-caFFEylsoph-sophoroside-5-glucoside (4.55%), cyanidin-3-*p*-coumaryl-sophoroside-5-glucoside (17.51%), cyanidin-3-feruloyl-sophoroside-5-glucoside (3.95%), peonidin-3-*p*-coumaryl-sophoroside-5-glucoside (13.56%), peonidin-3-feruloyl-sophoroside-5-glucoside (3.76%), cyanidin-3-dicaFFEyl-sophoroside-5-glucoside (10.51%), cyanidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.33%), cyanidin-3-caFFEoyl-*p*-coumaryl-sophoroside-5-glucoside (6.88%), cyanidin-3-caFFEoyl-feruloyl-sophoroside-5-glucoside (4.38%), peonidin-3-dicaFFEoyl-sophoroside-5-glucoside (4.55%), peonidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (2.26%), peonidin-3-caFFEoyl-*p*-coumaryl-sophoroside-5-glucoside (2.82%), peonidin-3-caFFEoyl-feruloyl-sophoroside-5-glucoside (1.68%)

**Leaves of Yanshu 5:** cyanidin-3-sophoroside-5-glucoside (2.78%), peonidin-3-sophoroside-5-glucoside (6.05%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.94%), cyanidin-3-caFFEylsoph-sophoroside-5-glucoside (10.53%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.58%), peonidin-3-caFFEylsoph-sophoroside-5-glucoside

side (5.01%), cyanidin-3-*p*-coumaryl-sophoroside-5-glucoside (14.96%), cyanidin-3-feruloyl-sophoroside-5-glucoside (4.35%), peonidin-3-*p*-coumaryl-sophoroside-5-glucoside (11.59%), peonidin-3-feruloyl-sophoroside-5-glucoside (4.14%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (8.98%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.76%), cyanidin-3-caffeoyl-*p*-coumaryl-sophoroside-5-glucoside (5.88%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (4.82%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (3.88%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (2.49%), peonidin-3-caffeoyl-*p*-coumaryl-sophoroside-5-glucoside (2.41%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (1.85%)

**Roots of Fushu 9:** cyanidin-3-sophoroside-5-glucoside (3.65%), peonidin-3-sophoroside-5-glucoside (6.23%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (3.71%), cyanidin-3-caffeoylsoph-sophoroside-5-glucoside (2.22%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.45%), peonidin-3-caffeoylsoph-sophoroside-5-glucoside (1.28%), cyanidin-3-feruloyl-sophoroside-5-glucoside (14.82%), peonidin-3-feruloyl-sophoroside-5-glucoside (25.49%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (1.35%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.23%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (11.83%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (16.9%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.97%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (4.85%)

**Roots of Fushu 24:** cyanidin-3-sophoroside-5-glucoside (6.25%), peonidin-3-sophoroside-5-glucoside (6.97%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (5.92%), cyanidin-3-caffeoylsoph-sophoroside-5-glucoside (13.03%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (24.01%), peonidin-3-caffeoylsoph-sophoroside-5-glucoside (1.34%), cyanidin-3-feruloyl-sophoroside-5-glucoside (2.1%), peonidin-3-*p*-coumaryl-sophoroside-5-glucoside (7.2%), peonidin-3-feruloyl-sophoroside-5-glucoside (6.02%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (5.4%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (1.58%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (18.44%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.73%)

**Roots of Longzishu 4:** cyanidin-3-sophoroside-5-glucoside (0.91%), peonidin-3-sophoroside-5-glucoside (3.6%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (2.27%), cyanidin-3-caFFEylsoph-sophoroside-5-glucoside (11.32%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.16%), cyanidin-3-feruloyl-sophoroside-5-glucoside (5.98%), peonidin-3-*p*-coumaryl-sophoroside-5-glucoside (1.97%), peonidin-3-feruloyl-sophoroside-5-glucoside (5.5%), cyanidin-3-dicaFFEyl-sophoroside-5-glucoside (11.72%), cyanidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (2.13%), cyanidin-3-caFFEoyl-feruloyl-sophoroside-5-glucoside (12.15%), peonidin-3-dicaFFEoyl-sophoroside-5-glucoside (28.56%), peonidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (12.74%)

**Roots of Longzishu 6:** cyanidin-3-sophoroside-5-glucoside (1.26%), peonidin-3-sophoroside-5-glucoside (10.72%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.93%), cyanidin-3-caFFEylsoph-sophoroside-5-glucoside (10.92%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.92%), peonidin-3-caFFEylsoph-sophoroside-5-glucoside (1.43%), cyanidin-3-feruloyl-sophoroside-5-glucoside (7.54%), peonidin-3-*p*-coumaryl-sophoroside-5-glucoside (3.31%), peonidin-3-feruloyl-sophoroside-5-glucoside (24.02%), cyanidin-3-dicaFFEyl-sophoroside-5-glucoside (5.5%), cyanidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.56%), cyanidin-3-caFFEoyl-feruloyl-sophoroside-5-glucoside (1.47%), peonidin-3-dicaFFEoyl-sophoroside-5-glucoside (24.77%), peonidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.63%)

**Roots of Fushu 317:** cyanidin-3-sophoroside-5-glucoside (4.16%), peonidin-3-sophoroside-5-glucoside (5.69%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (11.14%), cyanidin-3-caFFEylsoph-sophoroside-5-glucoside (1.98%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (13.38%), peonidin-3-caFFEylsoph-sophoroside-5-glucoside (1.32%), cyanidin-3-feruloyl-sophoroside-5-glucoside (1.12%), peonidin-3-*p*-coumaryl-sophoroside-5-glucoside (5.07%), peonidin-3-feruloyl-sophoroside-5-glucoside (1.71%), cyanidin-3-dicaFFEyl-sophoroside-5-glucoside (4.12%), cyanidin-3-caFFEoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (3.19%), cyanidin-3-caFFEoyl-feruloyl-sophor

		<p>oside-5-glucoside (8.14%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (3.67%), peonidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (16.5%), peonidin-3-caffeoyl-<i>p</i>-coumaryl-sophoroside-5-glucoside (18.01%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (0.81%)</p>
Root	Yan 176	<p>Cyanidin-caffeoyl-fumaroy-sophoroside-3-glucoside, peonidin-caffeoyl-hydroxybenzoyl-3-glucoside, peonidin-caffeoyl-sophoroside-3-glucoside, peonidin-caffeoyl-fumaroyl-sophoroside-3-glucoside [32]</p>
Root		<p>Cyanidin-3-sophoroside-5-glucoside, peonidin-3-sophoroside-5-glucoside, cyanidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, cyanidin-3-feruloyl-sophoroside-5-glucoside, peonidin-3-feruloyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside [52]</p>
Root	Eshu 8	<p>Cyanidin-3-dicaffeoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-sophoroside-5-glucoside, peonidin-3-dicaffeoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside, peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside [71]</p>
Root	Chiran Murasaki, Tanegashima Murasaki, Naka Murasaki and Purple sweet	<p><b>Chiran Murasaki:</b> cyanidin-3-sophoroside-5-glucoside (3.9%), peonidin-3-sophoroside-5-glucoside (12.2%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (9.4%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (6.5%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (5.7%), peonidin-3-caffeoyl-sophoroside-5-glucoside/peonidin-3-caffeoyl-<i>p</i>-hydroxybenzoyl-sophoroside-5-glucoside (44.8%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (17.5%) [74]</p> <p><b>Tanegashima Murasaki:</b> cyanidin-3-sophoroside-5-glucoside (11.6%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (0.8%), cyanidin-3-caffeoyl-sophoroside-5-glucoside</p>

	(45.5%), cyanidin-3-caffeoyl-feruloyl-sophorose-5-glucose (27.9%), peonidin-3-caffeoyl-sophorose-5-glucose/peonidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophorose-5-glucose (4.2%),	
	<b>Naka Murasaki:</b> cyanidin-3-sophorose-5-glucose (14.6%), cyanidin-3-dicaffeoyl-sophorose-5-glucose (10.2%), cyanidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophorose-5-glucose (13.1%), cyanidin-3-caffeoyl-sophorose-5-glucose (40%), cyanidin-3-caffeoyl-feruloyl-sophorose-5-glucose (12.8%), peonidin-3-caffeoyl-sophorose-5-glucose/peonidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophorose-5-glucose (9.3%),	
	<b>Purple sweet:</b> cyanidin-3-sophorose-5-glucose (7.9%), peonidin-3-sophorose-5-glucose (33.8%), cyanidin-3-caffeoyl-sophorose-5-glucose (4.5%), cyanidin-3-caffeoyl-feruloyl-sophorose-5-glucose (5.7%), peonidin-3-dicaffeoyl-sophorose-5-glucose (10.2%), peonidin-3-caffeoyl-sophorose-5-glucose/peonidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophorose-5-glucose (29.1%), peonidin-3-caffeoyl-feruloyl-sophorose-5-glucose (8.8%)	
Root	Peonidin-3- <i>p</i> -hydroxybenzoyl-sophorose-5-glucose (10.4%), peonidin-3-feruloylsophorose-5-glucose (4.73%), cyanidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophorose-5-glucose (3.74%), peonidin-3-caffeoyl-sophorose-5-glucose (26.01%), peonidin-dicaffeoyl-sophorose-5-glucose (9.79%), peonidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophorose-5-glucose (29.43%), peonidin-caffeoyl-feruloyl-sophorose-5-glucose (15.9%)	[44]
Leaves and roots P40	<b>Leaves of P40:</b> cyanidin-3-sophorose-5-glucose (10%), peonidin-3-sophorose-5-glucose (2.11%), cyanidin-3- <i>p</i> -hydroxybenzoyl-sophoreside-5-glucose (7.11%), cyanidin-3-caffeoyl-sophorose-5-glucose (8.68%), peonidin-3- <i>p</i> -hydroxybenzoyl-sophorose-5-glucose (2.63%), peonidin-3-caffeoyl-sophoreside-5-glucose (2.63%), cyanidin-3-feruloyl-sophorose-5-glucose (2.89%), cyanidin-3-dicaffeoyl-sophorose-5-glucose (30.53%), cyanidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophorose-5-glucose (25.79%), cyanidin-3-caffeoyl-feruloyl-sophorose-5-glucose (5%), peonidin-3-dicaffeoyl-sophorose-5-glucose (6.05%), peonidin-3-caffeoyl- <i>p</i> -hydroxybenzoyl-sophores	[65]

ide-5-glucoside (3.42%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (2.63%), peonidin-3-caffeoyl-*p*-coumaryl-sophoroside-5-glucoside (2.89%)

**Roots of P40:** cyanidin-3-sophoroside-5-glucoside (2.38%), peonidin-3-sophoroside-5-glucoside (0.4%), cyanidin-3-*p*-hydroxybenzoyl-sophoreside-5-glucoside (4.62%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (1.37%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.01%), peonidin-3-caffeoyl-sopheroside-5-glucoside (0.36%), cyanidin-3-feruloyl-sophoroside-5-glucoside (2.27%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (11.31%), cyanidin-3-caffeoyl-phydroxybenzoyl-sophoroside-5-glucoside (43.27%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (14.33%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (2.91%), peonidin-3-caffeoyl-phydroxybenzoyl-sophoreside-5-glucoside (12.37%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (2.63%), peonidin-3-caffeoyl-*p*-coumaryl-sophoroside-5-glucoside (0.45%)

Cyanidin-3-sophoroside-5-glucoside (4.41%), peonidin-3-sophoroside-5-glucoside (25.92%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (2.94%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (9.41%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (3.07%), peonidin-3-feruloyl-sophoroside-5-glucoside (8.36%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (3.61%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.92%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (2.06%), peonidin-3-caffeoyl-sophoroside-5-glucoside (18.01%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (8.6%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (7.76%)

Root

[75]

Root

Yamagawamurasaki

Cyanidin-3-*p*-hydroxybenzoyl-caffeyl-glucopyranoside-5-glucoside, cyanidin-3-dicaffeyl-glucopyranoside-5-glucoside, cyanidin-3-ferulyl-caffeyl-glucopyranoside-5-glucoside, peonidin-3-dicaffeyl-glucopyranoside-5-glucoside, peonidin-3-*p*-hydroxybenzoyl-caffeyl-glucopyranoside-5-glucoside, peonidin-3-ferulyl-caffeyl-glucopyranoside-5-glucoside

[76]

Root

Stokes Purple, Okinawa and  
NC 415 clone

**Stokes Purple:** cyanidin-3-sophorose-5-glucoside (1.48%), peonidin-3-sophorose-5-glucoside (2.52%), cyanidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (1.48%), peonidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (5%), cyanidin-3-feruloyl-sophorose-5-glucoside (0.96%), cyanidin-3-caffeoyl-sophorose-5-glucoside (8.95%), cyanidin-3-dicaffeoyl-sophorose-5-glucoside (1.69%), peonidin-3-caffeoyl-sophorose-5-glucoside/cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (26.09%), cyanidin-3-caffeoyl-feruloyl-sophorose-5-glucoside (3.86%), peonidin-dicaffeoyl-sophorose-5-glucoside (2.59%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (33.44%), peonidin-caffeoyl-feruloyl-sophorose-5-glucoside (8.54%)

**Okinawa:** cyanidin-3-sophorose-5-glucoside (8.37%), cyanidin-3-caffeoyl-sophorose-5-glucoside (2.9%), cyanidin-3-feruloyl-sophorose-5-glucoside (3.46%), cyanidin-3-caffeoyl-sophorose-5-glucoside (32.51%), cyanidin-3-dicaffeoyl-sophorose-5-glucoside (13.38%), peonidin-3-caffeoyl-sophorose-5-glucoside/cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (6.83%), cyanidin-3-caffeoyl-feruloyl-sophorose-5-glucoside (29.76%), cyanidin-3-caffeoyl-*p*-coumaryl-sophorose-5-glucoside (1.37%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (0.49%), peonidin-caffeoyl-feruloyl-sophorose-5-glucoside (0.92%)

[27]

**NC 415 clone:** cyanidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (2.74%), peonidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (4.28%), cyanidin-3-feruloyl-sophorose-5-glucoside (0.67%), cyanidin-3-caffeoyl-sophorose-5-glucoside (7.62%), cyanidin-3-dicaffeoyl-sophorose-5-glucoside (3.91%), peonidin-3-caffeoyl-sophorose-5-glucoside/cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (31.97%), cyanidin-3-caffeoyl-feruloyl-sophorose-5-glucoside (3.24%), peonidin-dicaffeoyl-sophorose-5-glucoside (4.57%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (34.76%), peonidin-caffeoyl-feruloyl-sophorose-5-glucoside (4.17%)

**Raw PSP:** cyanidin-3-sophoroside-5-glucoside (8.57%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (8.71%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (4.18%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.38%), cyanidin-3-feruloyl-sophoroside-5-glucoside (6.81%), peonidin-3-feruloyl-sophoroside-5-glucoside (2.06%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (9.86%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (16.54%), peonidin-3-caffeoyl-sophoroside-5-glucoside (19.77%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (12.19%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (8.34%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (1.58%)

**Baked PSP:** cyanidin-3-sophoroside-5-glucoside (9.36%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (15.12%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (6.06%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (2.76%), cyanidin-3-feruloyl-sophoroside-5-glucoside (9.21%), peonidin-3-feruloyl-sophoroside-5-glucoside (2.15%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (7.44%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (15.04%), peonidin-3-caffeoyl-sophoroside-5-glucoside (12.82%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (10.28%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (8.37%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (1.53%)

**Steamed PSP:** cyanidin-3-sophoroside-5-glucoside (19.24%), cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (20.95%), cyanidin-3-caffeoyl-sophoroside-5-glucoside (8.1%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (2.57%), cyanidin-3-feruloyl-sophoroside-5-glucoside (18.38%), peonidin-3-feruloyl-sophoroside-5-glucoside (1.09%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (3.97%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.52%), peonidin-3-caffeoyl-sophoroside-5-glucoside (8.33%), cyanidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (7.40%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (4.44%), peonidin-3-caffeoyl-feruloyl-sophoroside-5-glucoside (1.01%)

**Micro-wave PSP:** cyanidin-3-sophoroside-5-glucoside (14.43%), cyanidin-3-*p*-hydrox

ybenzoyl-sophorose-5-glucoside (36.24%), cyanidin-3-cafeoyl-sophorose-5-glucoside (6.67%), peonidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (6.82%), cyanidin-3-feruloyl-sophorose-5-glucoside (11.22%), peonidin-3-feruloyl-sophorose-5-glucoside (1.18%), cyanidin-3-dicafeoyl-sophorose-5-glucoside (2.59%), cyanidin-3-cafeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (6.51%), peonidin-3-cafeoyl-sophorose-5-glucoside (5.1%), cyanidin-3-cafeoyl-feruloyl-sophorose-5-glucoside (3.76%), peonidin-3-cafeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (4.71%), peonidin-3-cafeoyl-feruloyl-sophorose-5-glucoside (0.78%)

**Pressured cook PSP:** cyanidin-3-sophorose-5-glucoside (15.71%), cyanidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (21.63%), cyanidin-3-cafeoyl-sophorose-5-glucoside (7.04%), peonidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (2.58%), cyanidin-3-feruloyl-sophorose-5-glucoside (16.05%), peonidin-3-feruloyl-sophorose-5-glucoside (1.37%), cyanidin-3-dicafeoyl-sophorose-5-glucoside (4.46%), cyanidin-3-cafeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (7.64%), peonidin-3-cafeoyl-sophorose-5-glucoside (9.1%), cyanidin-3-cafeoyl-feruloyl-sophorose-5-glucoside (8.41%), peonidin-3-cafeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (4.89%), peonidin-3-cafeoyl-feruloyl-sophorose-5-glucoside (1.12%)

**Fried PSP:** cyanidin-3-sophorose-5-glucoside (11.42%), cyanidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (16.02%), cyanidin-3-cafeoyl-sophorose-5-glucoside (5.83%), peonidin-3-*p*-hydroxybenzoyl-sophorose-5-glucoside (1.64%), cyanidin-3-feruloyl-sophorose-5-glucoside (10.02%), peonidin-3-feruloyl-sophorose-5-glucoside (1.89%), cyanidin-3-dicafeoyl-sophorose-5-glucoside (8.22%), cyanidin-3-cafeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (14.13%), peonidin-3-cafeoyl-sophorose-5-glucoside (12.33%), cyanidin-3-cafeoyl-feruloyl-sophorose-5-glucoside (11.42%), peonidin-3-cafeoyl-*p*-hydroxybenzoyl-sophorose-5-glucoside (5.92%), peonidin-3-cafeoyl-feruloyl-sophorose-5-glucoside (1.23%)

Leave and root      Bhu Krishna

**Leaves of Bhu Krishna:** cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.2%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.68%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (8.5%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (31.1%), cyanidin-3-caffeoyl-feruolyl-sophoroside-5-glucoside (1.8%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (3.13%), peonidin-3-caffeoyl-sophoroside-5-glucoside (10.35%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (40.02%), peonidin-3-caffeoyl-feruolyl-sophoroside-5-glucoside (2.22%)

**Roots of Bhu Krishna:** cyanidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (0.74%), peonidin-3-*p*-hydroxybenzoyl-sophoroside-5-glucoside (1.75%), cyanidin-3-dicaffeoyl-sophoroside-5-glucoside (4.97%), cyanidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (8.54%), cyanidin-3-caffeoyl-feruolyl-sophoroside-5-glucoside (7.49%), peonidin-3-dicaffeoyl-sophoroside-5-glucoside (20.24%), peonidin-3-caffeoyl-sophoroside-5-glucoside (6.22%), peonidin-3-caffeoyl-*p*-hydroxybenzoyl-sophoroside-5-glucoside (32.24%), peonidin-3-caffeoyl-feruolyl-sophoroside-5-glucoside (17.8%)

[31]