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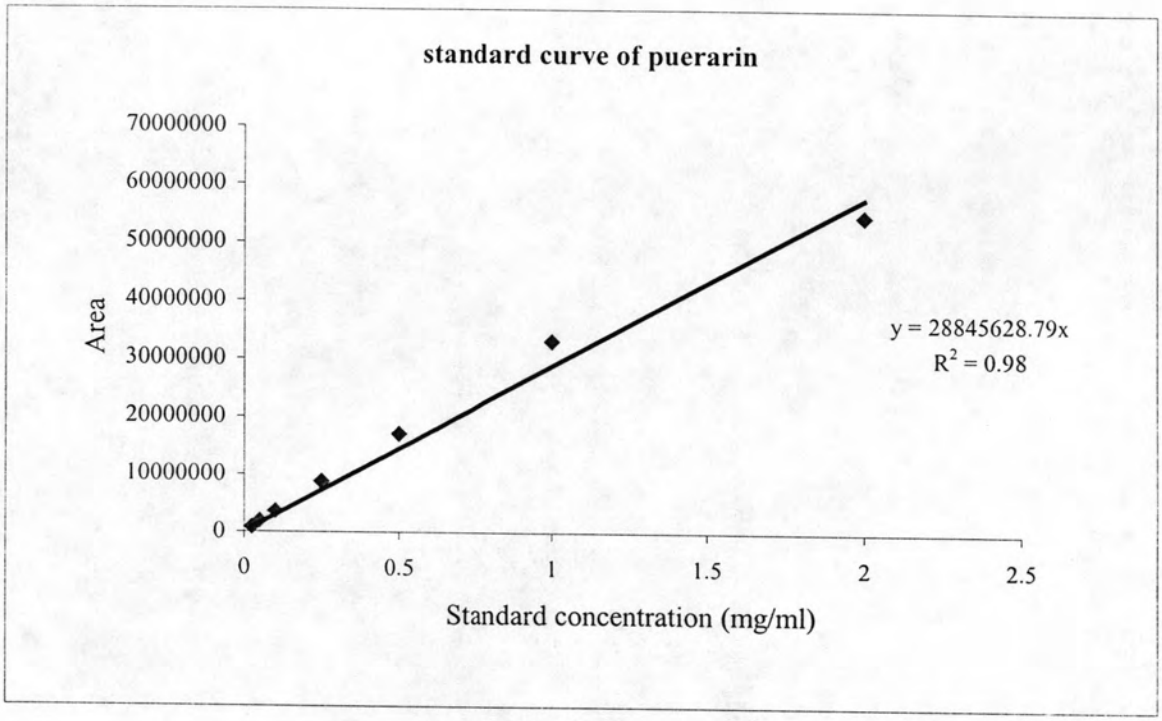
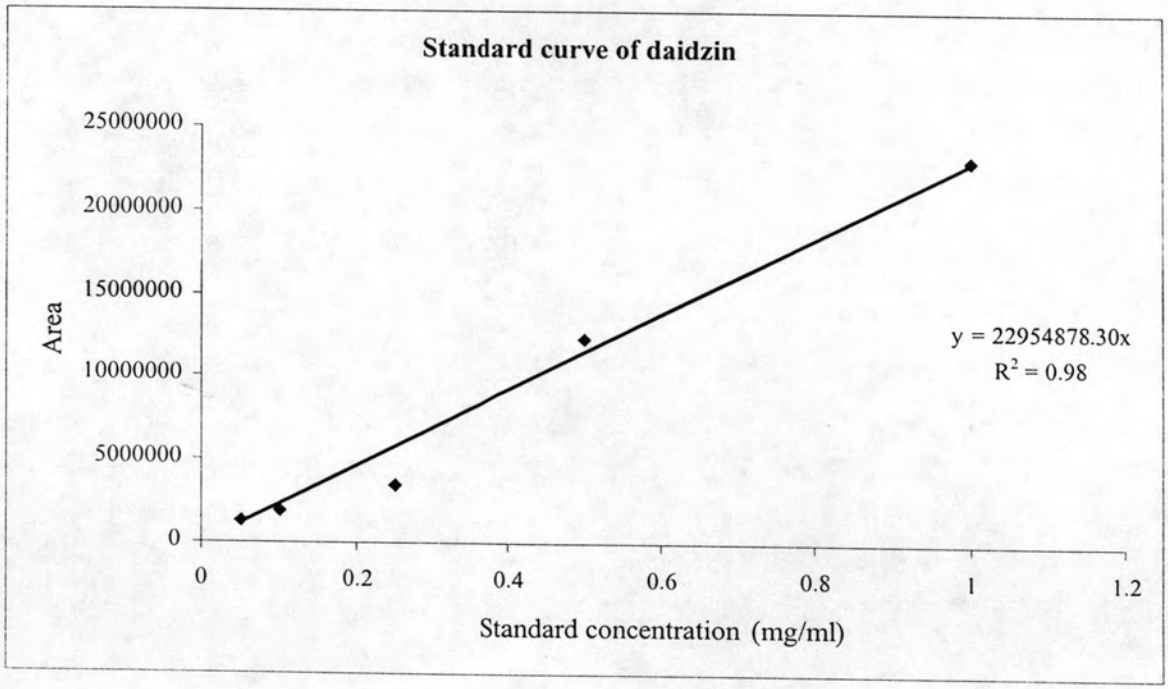
APPENDICES

APPENDIX A


standard curve of puerarin
70000000
60000000
50000000
40000000
30000000
20000000
10000000
0
Area
0
0.5
1
1.5
2
2.5
Standard concentration (mg/ml)
y = 28845628.79x
R2 = 0.98


Standard curve of daidzin
25000000
20000000
15000000
10000000
5000000
0
Area
0
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0.6
0.8
1
1.2
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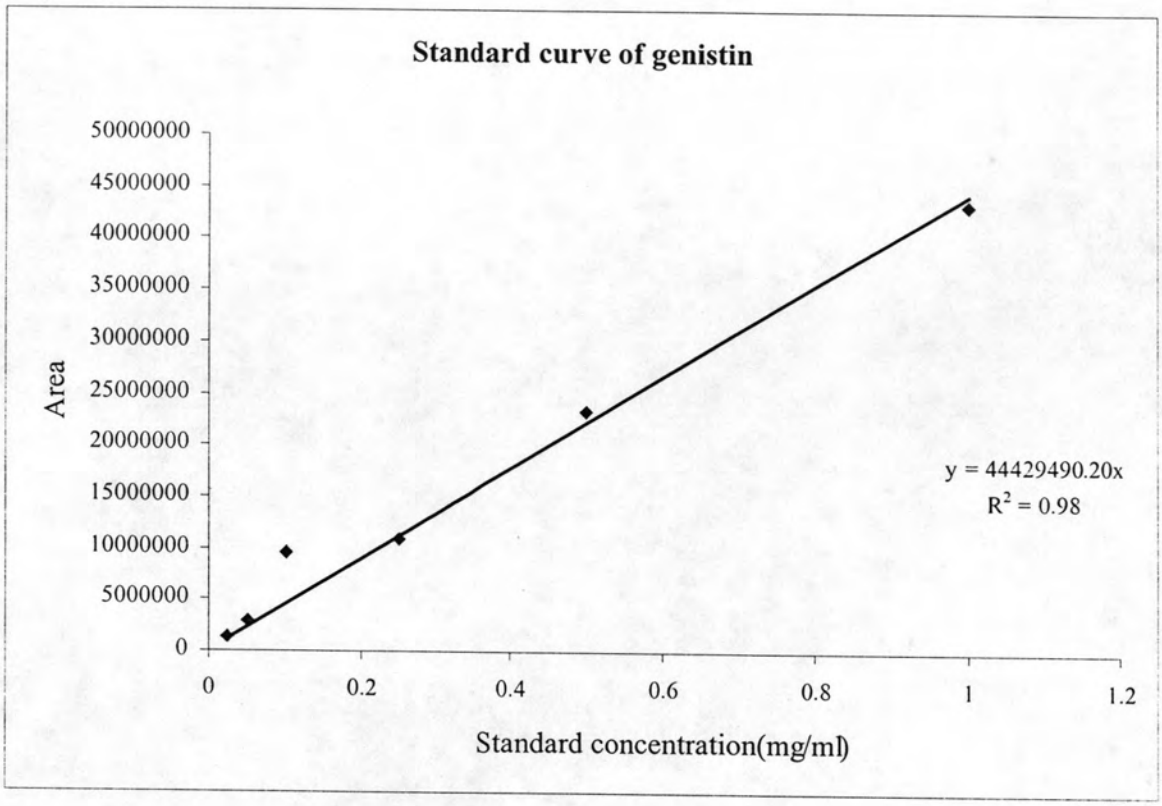
Standard curve of genistin
Area
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45000000
40000000
35000000
30000000
25000000
20000000
15000000
10000000
5000000
0
0
0.2
0.4
0.6
0.8
1
1.2
Standard concentration(mg/ml)
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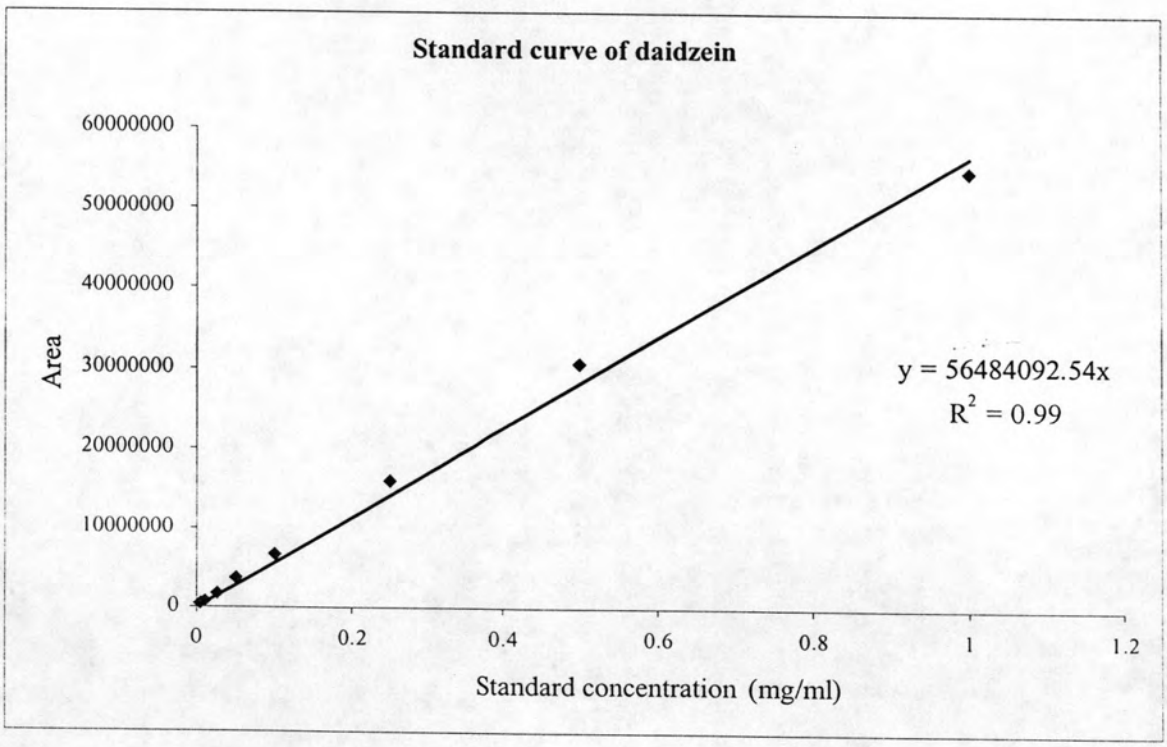
R2 = 0.98


Standard curve of daidzein
Area
60000000
50000000
40000000
30000000
20000000
10000000
0
0
0.2
0.4
0.6
0.8
1
1.2
Standard concentration (mg/ml)
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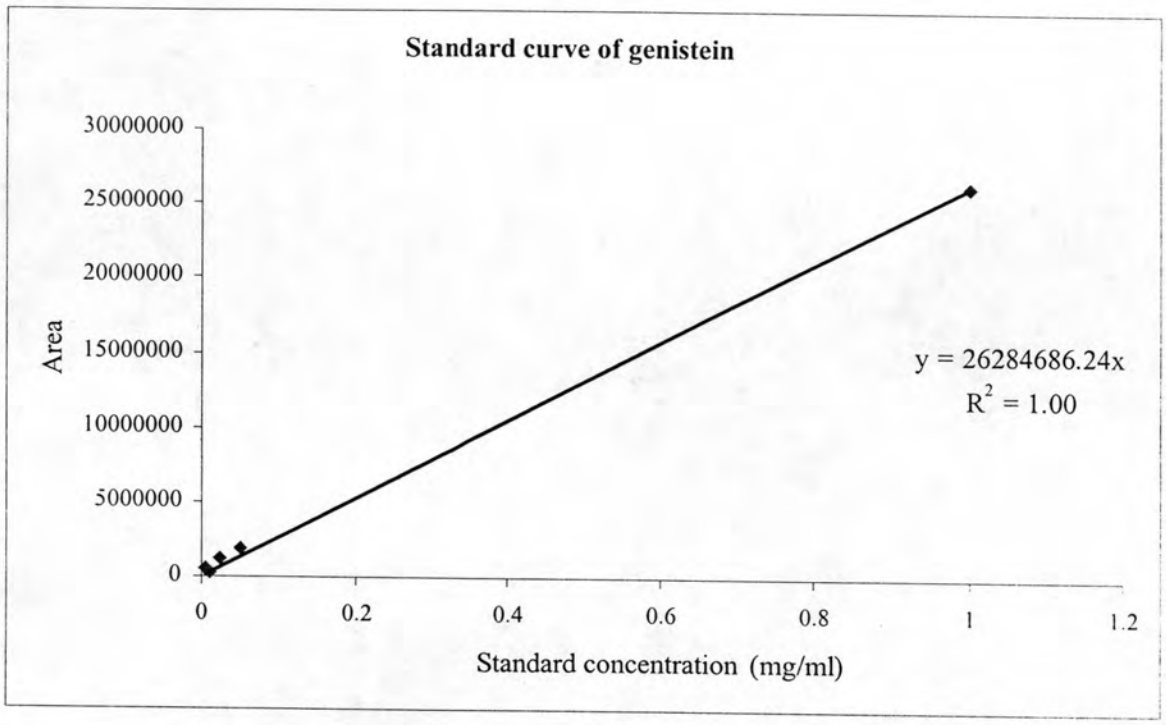
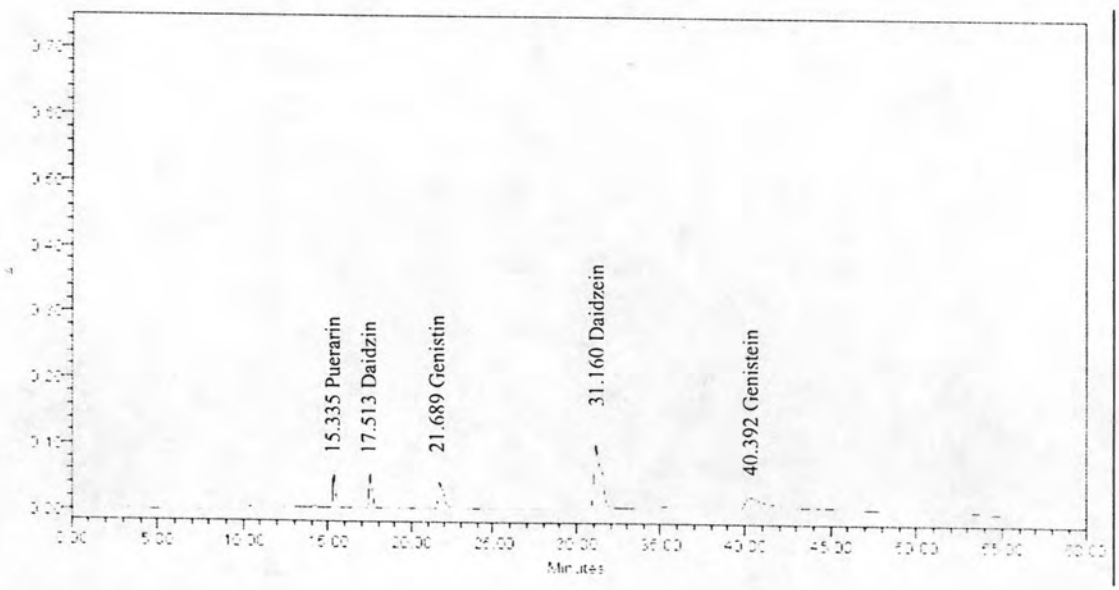
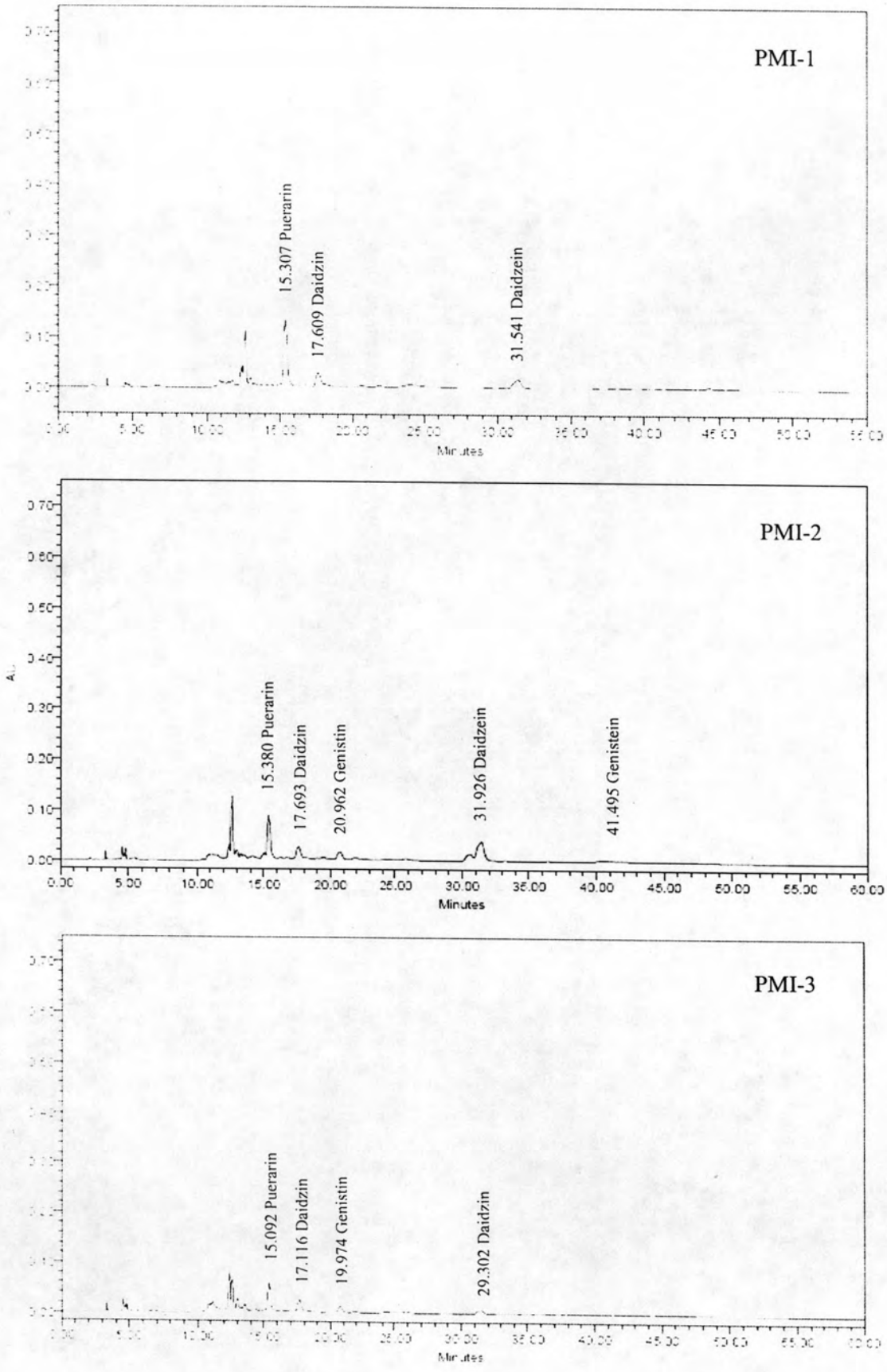
R2 = 0.99



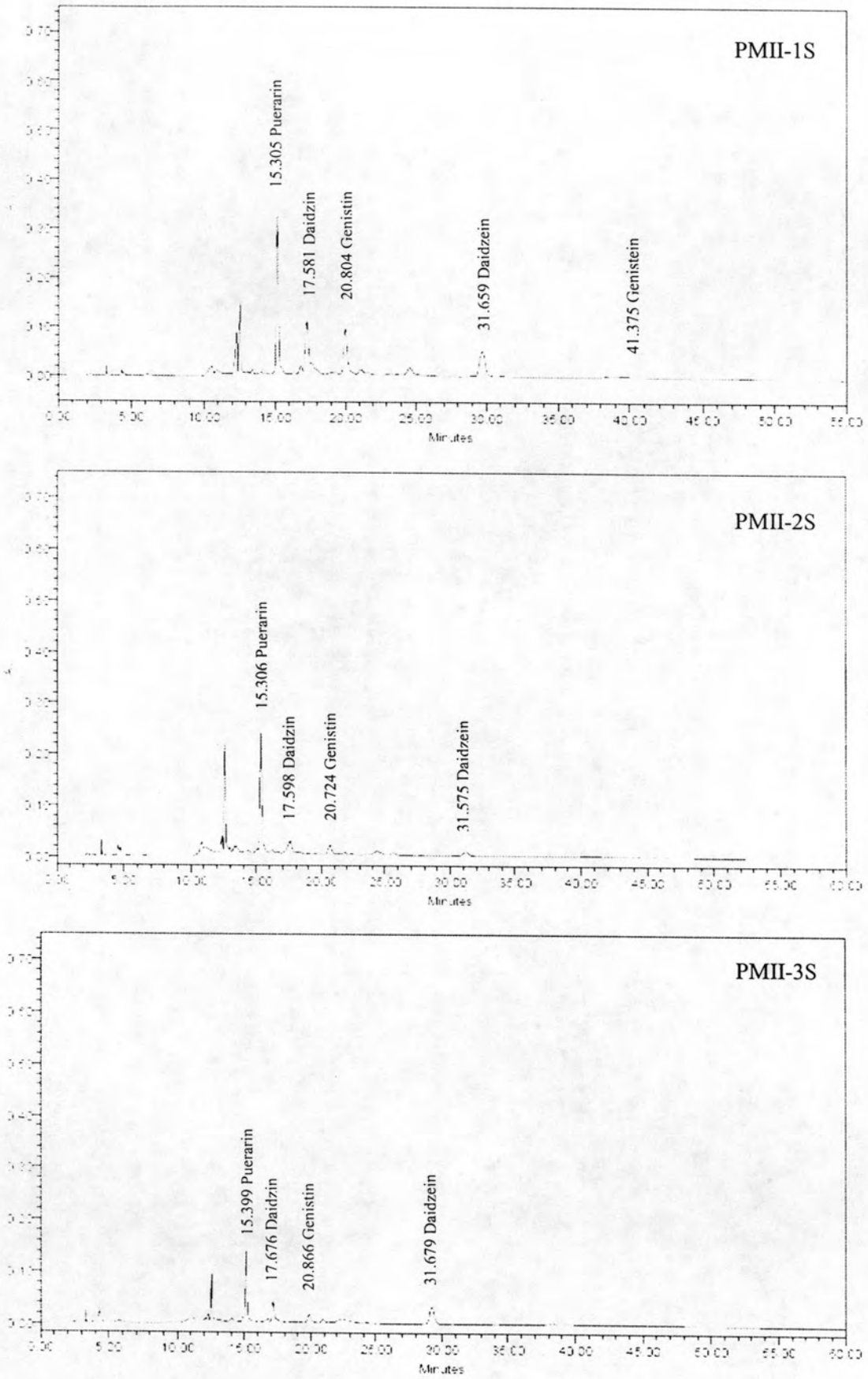
Isoflavonoid contents were calculated from equations of standard curve of individual isoflavonoids by input y value (area) then calculated x value (isoflavonoid contents).



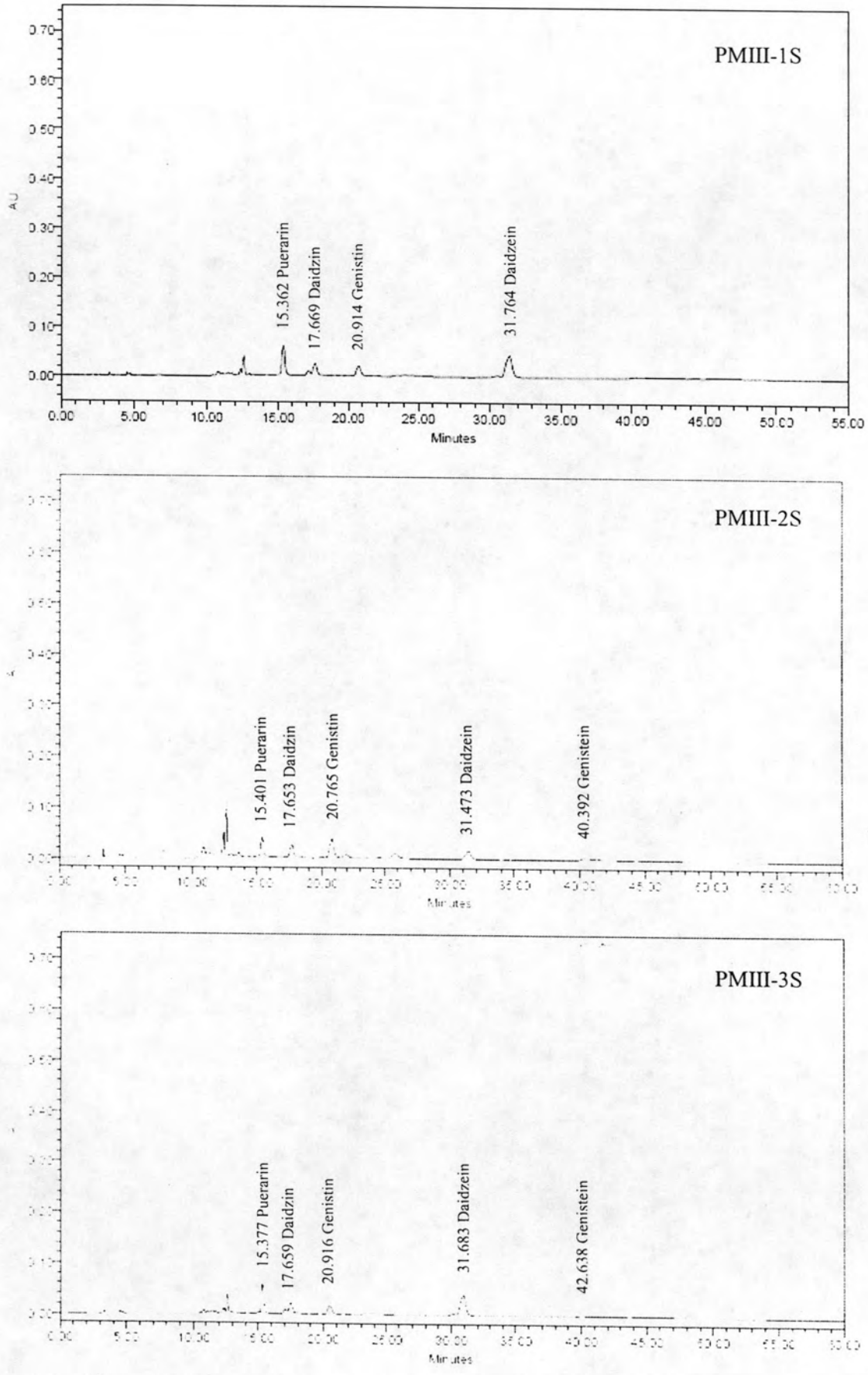
The retention time of individual isoflavonoid including, puerarin, daidzin, genistin, daidzein and ginistein



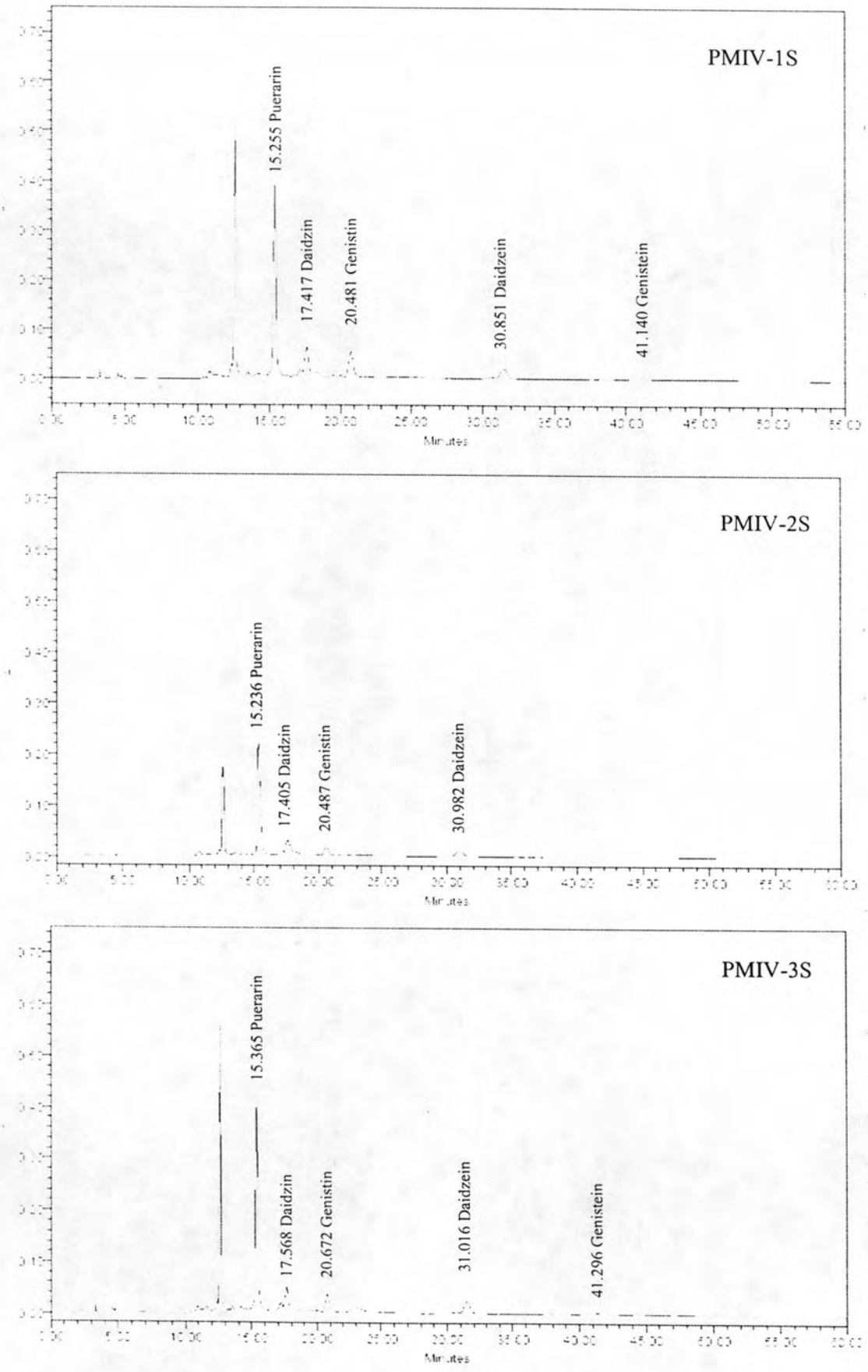
HPLC analysis of PM-I from 3 plants collected in summer (April, 2005)



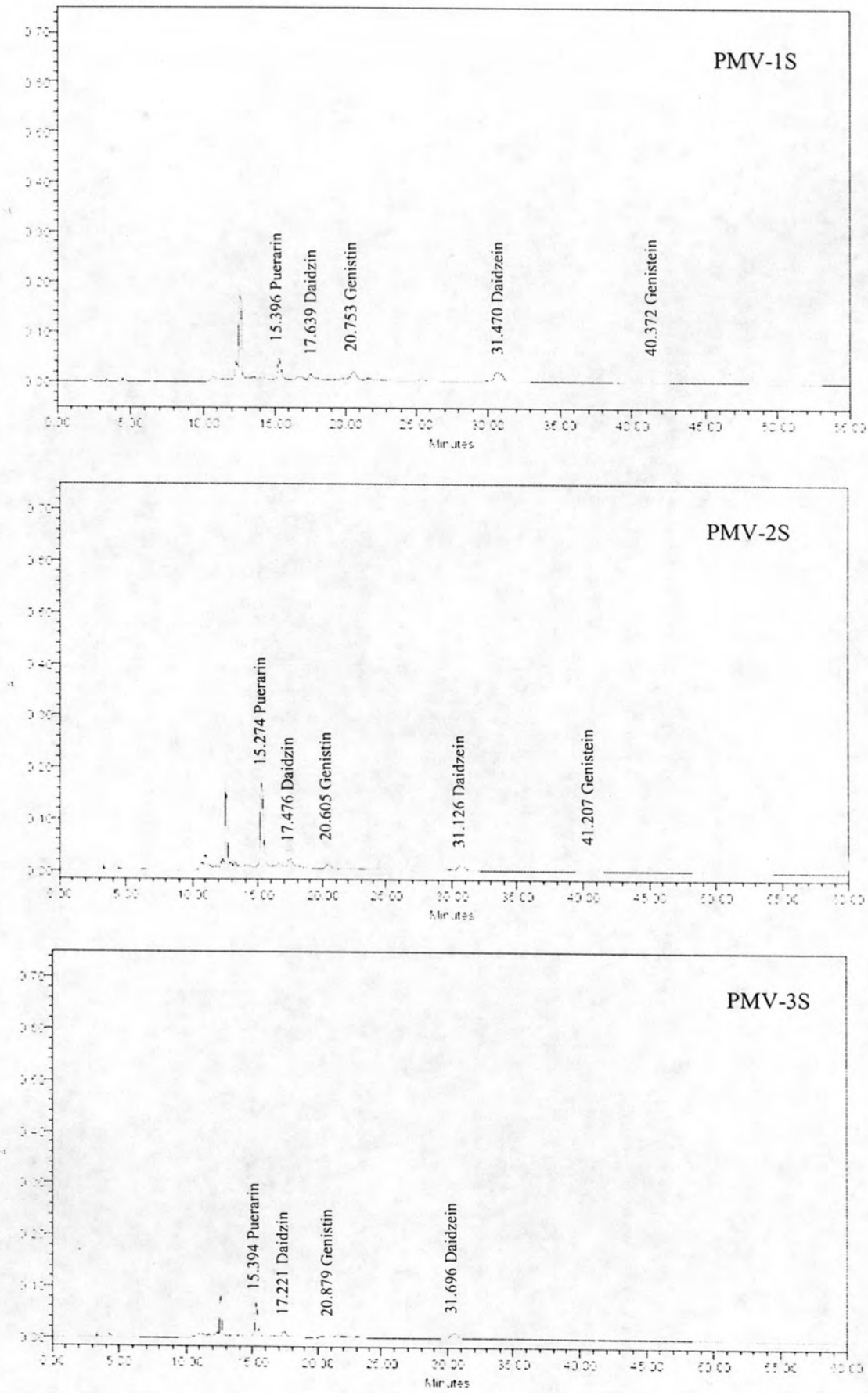
HPLC analysis of PM-II from 3 plants collected in summer (April, 2005)



HPLC analysis of PM-III from 3 plants collected in summer (April, 2005)



HPLC analysis of PM-IV from 3 plants collected in summer (April, 2005)



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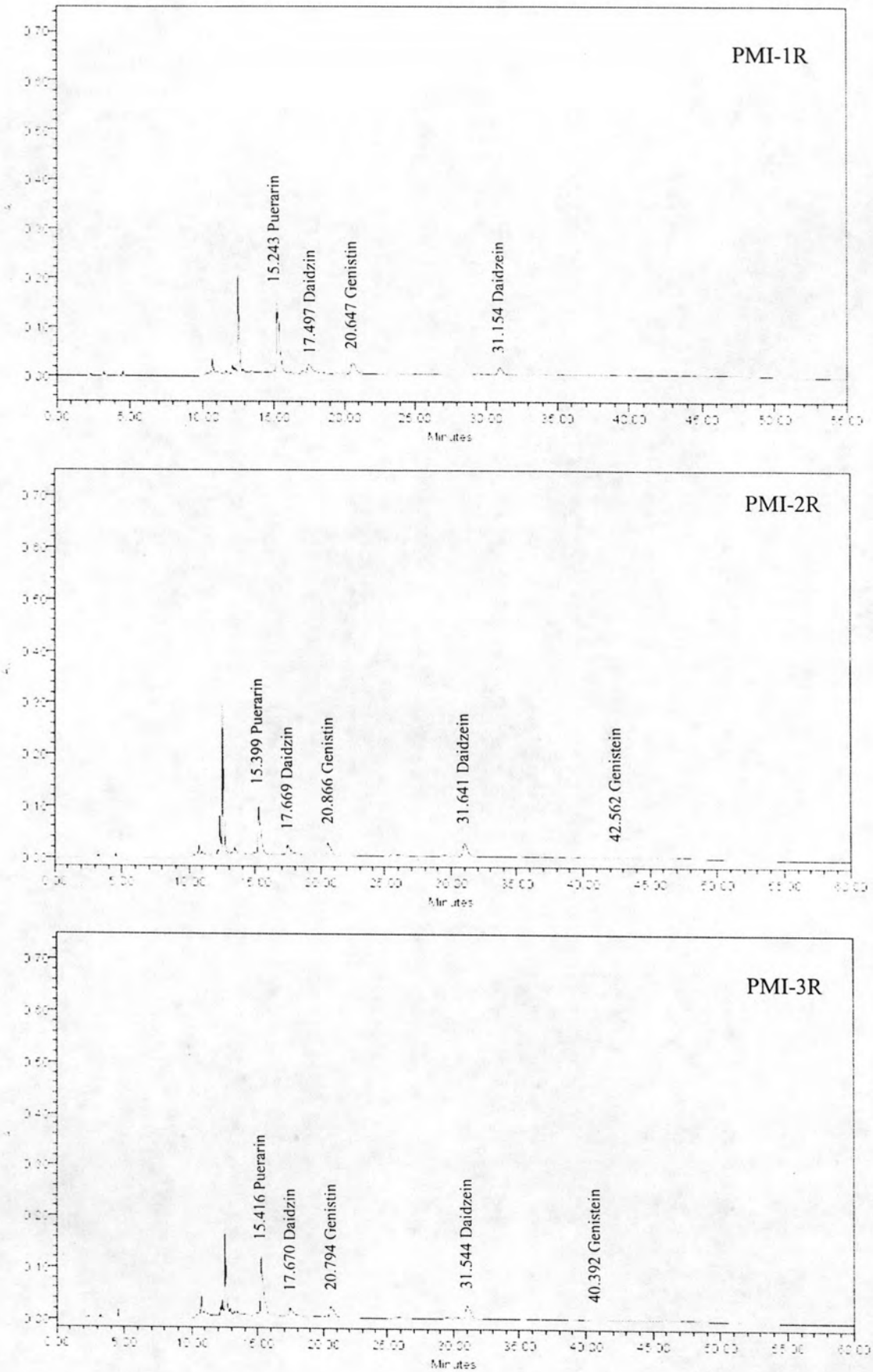
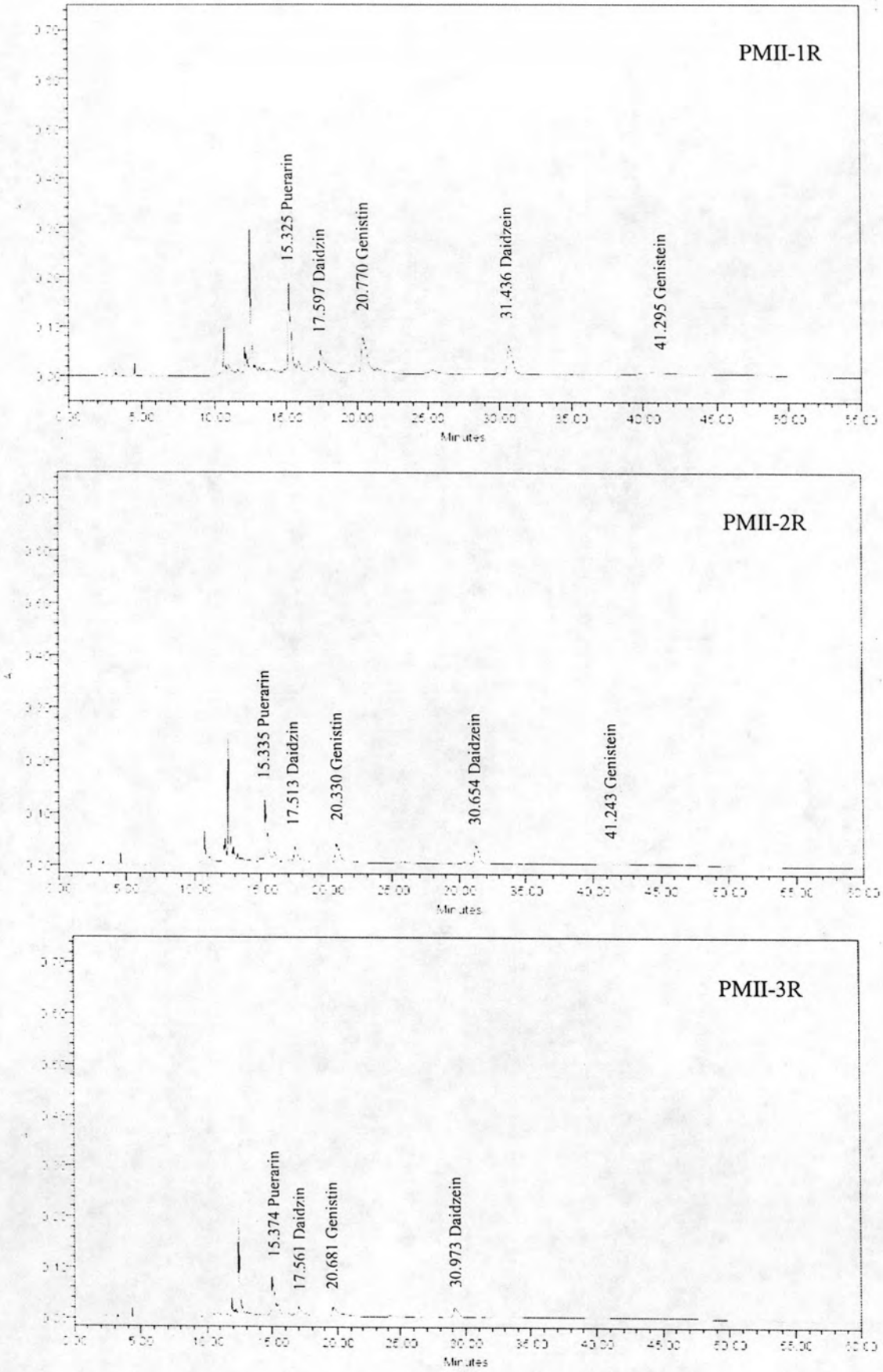


HPLC analysis of PM-I from 3 plants collected in rainy season (August, 2005)



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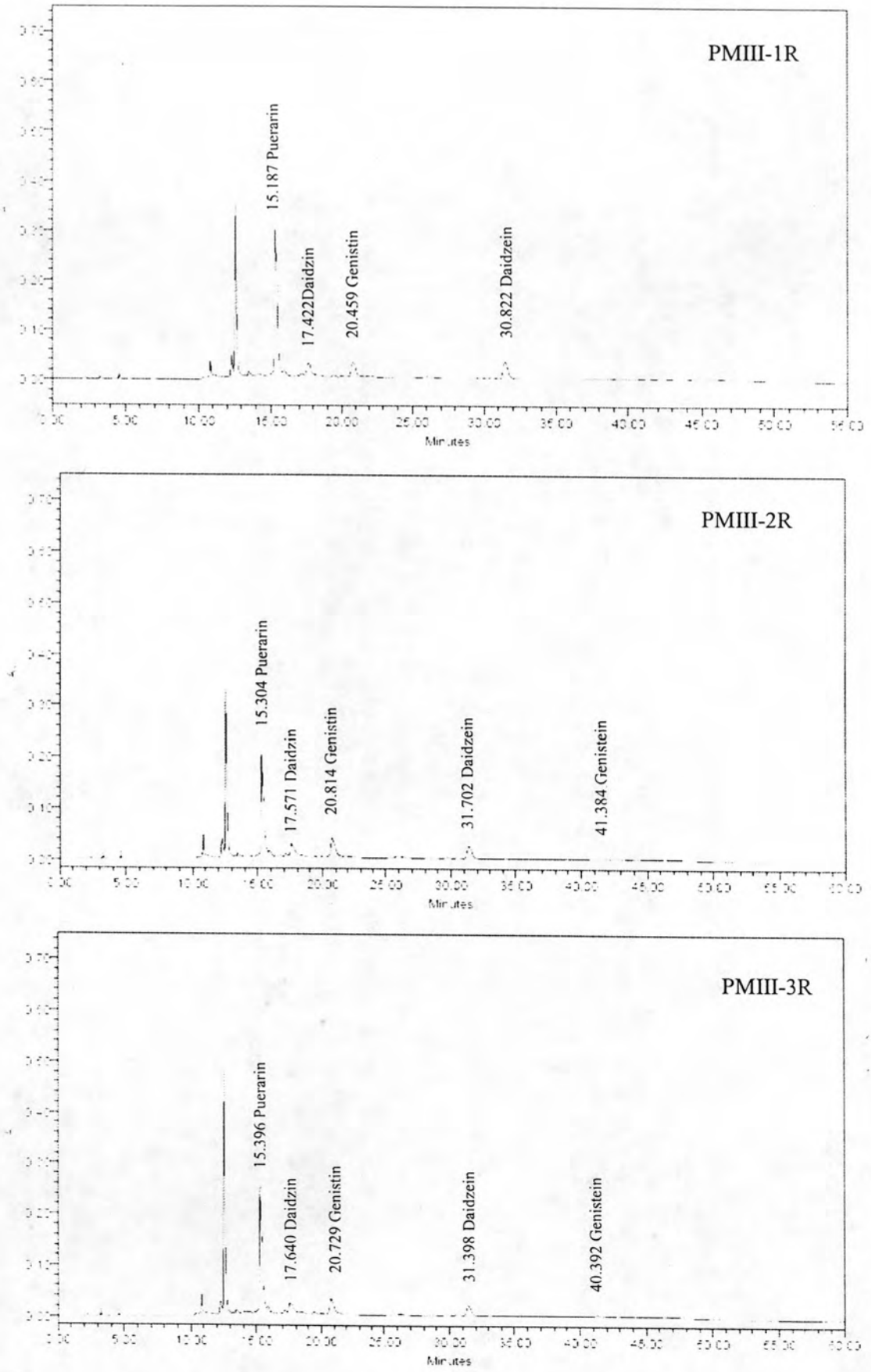

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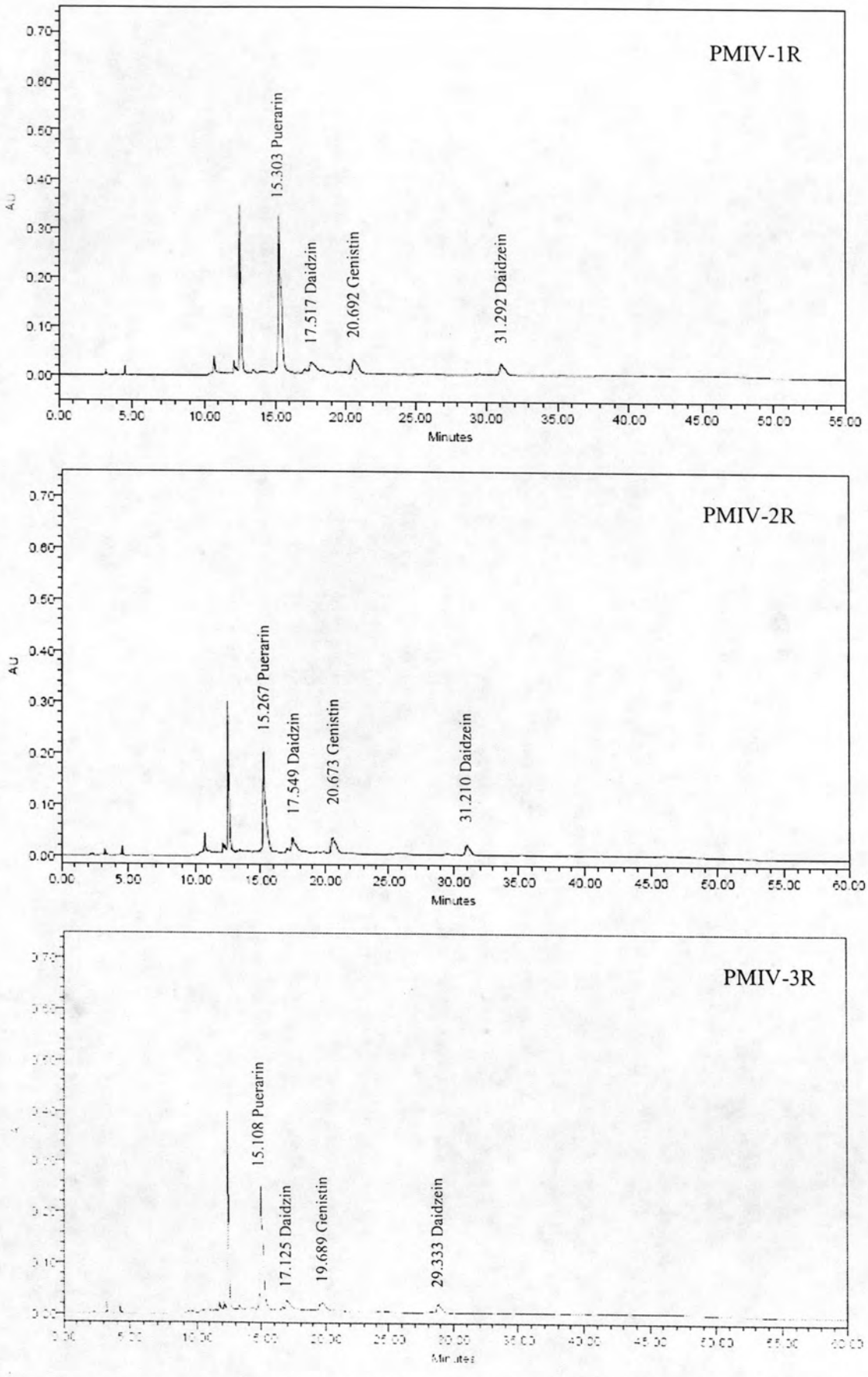

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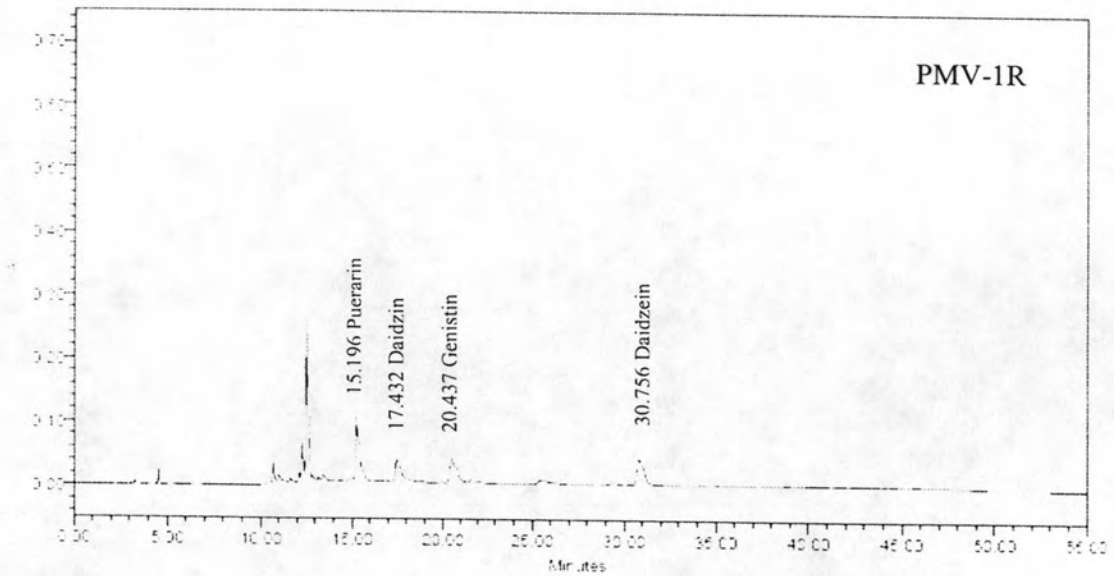
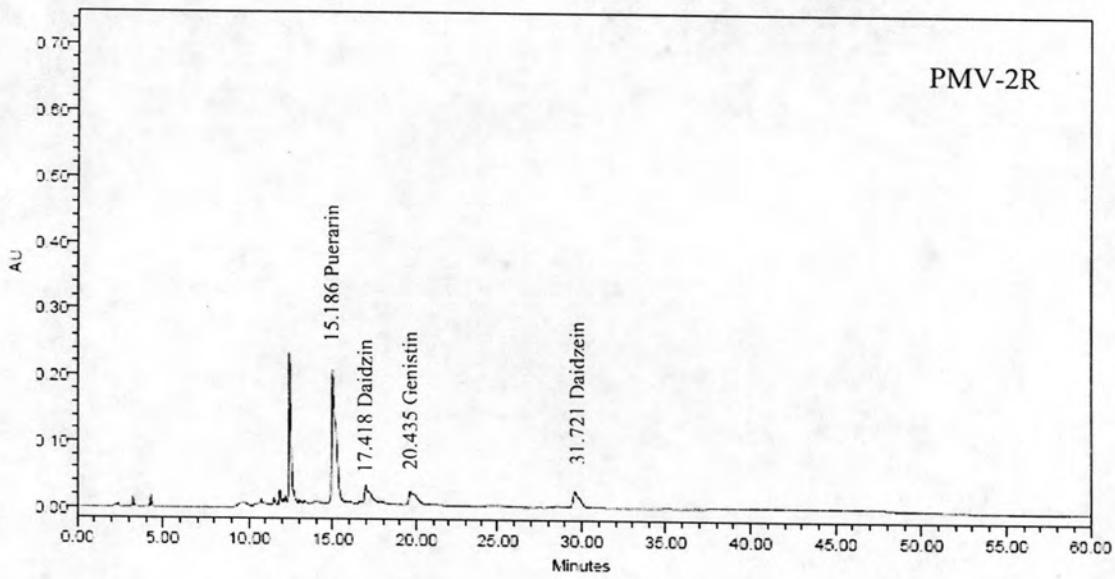
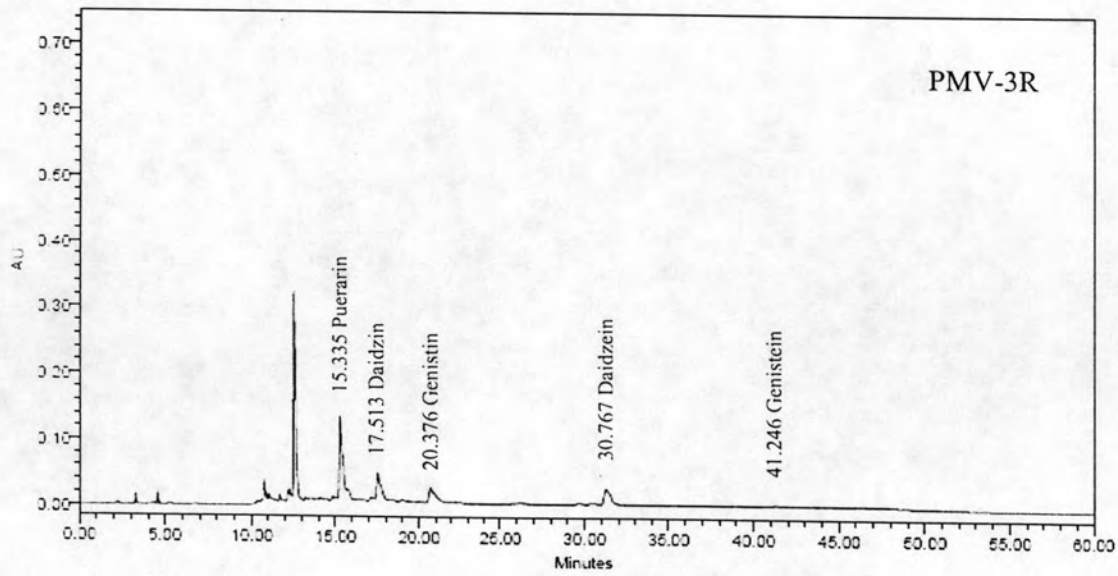
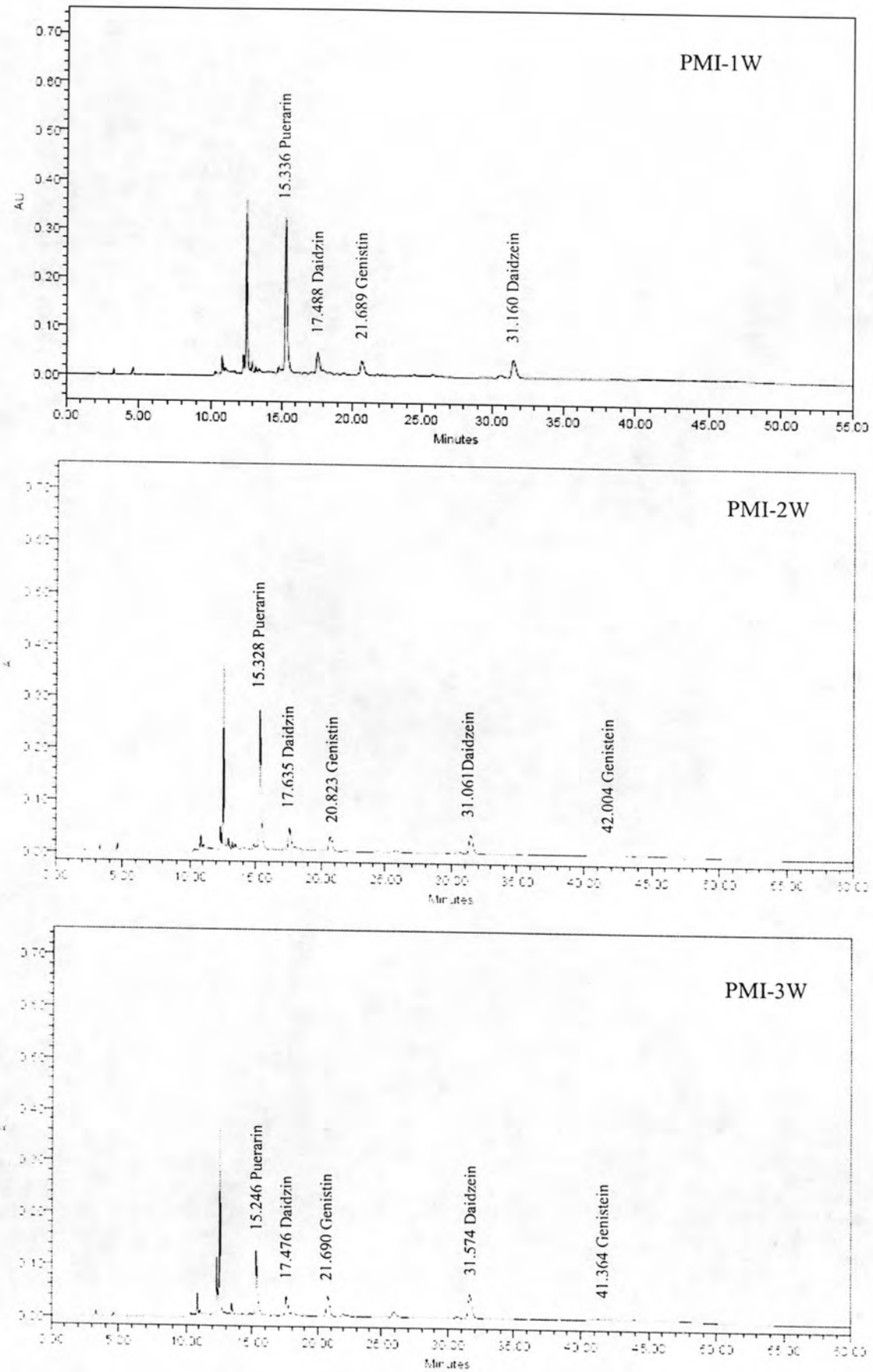


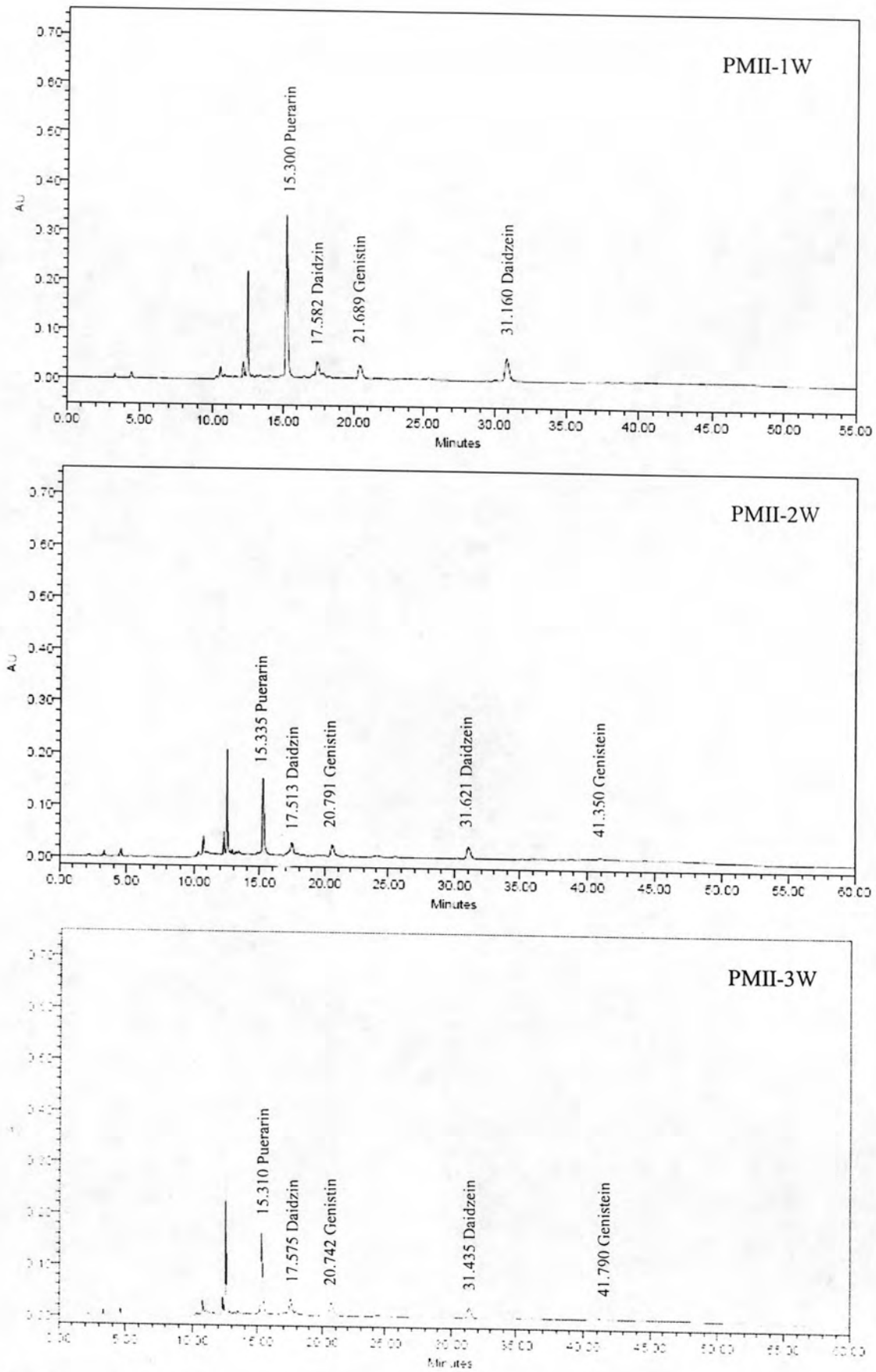




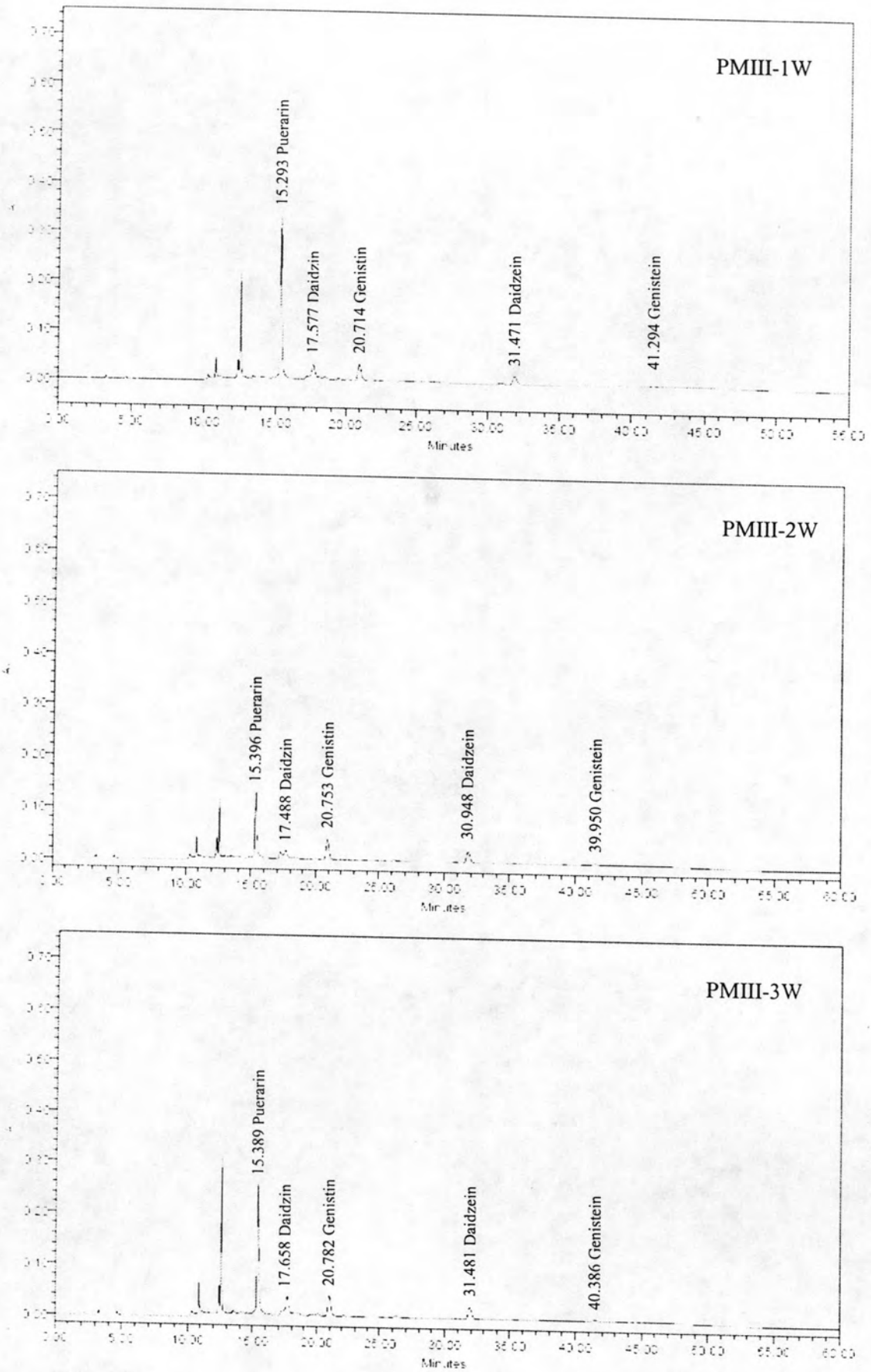
HPLC analysis of PM-V from 3 plants collected in rainy season (August, 2005)



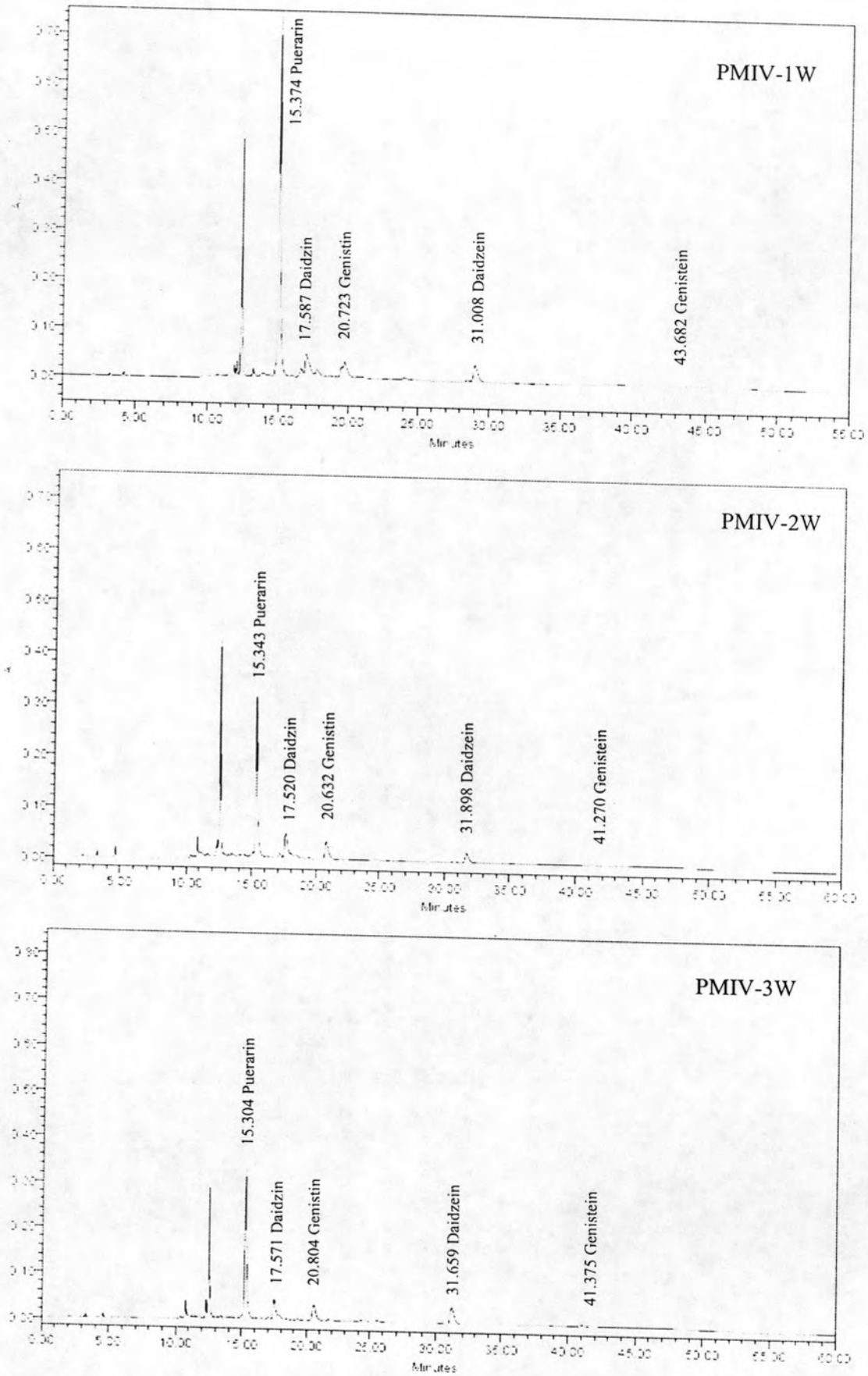
HPLC analysis of PM-I from 3 plants collected in winter (December, 2005)



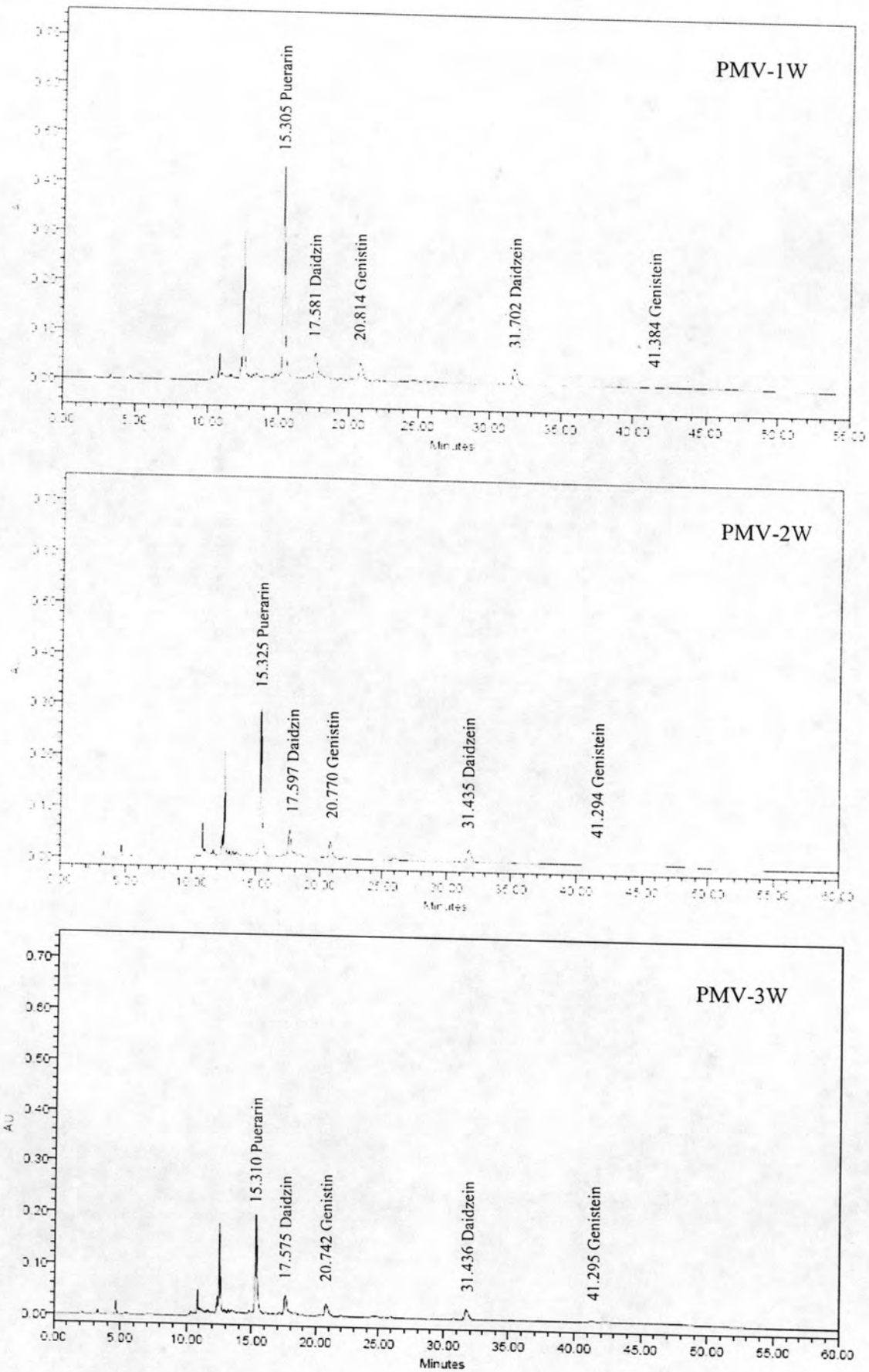
HPLC analysis of PM-II from 3 plants collected in winter (December, 2005)



HPLC analysis of PM-III from 3 plants collected in winter (December, 2005)



HPLC analysis of PM-IV from 3 plants collected in winter (December, 2005)



HPLC analysis of PM-V from 3 plants collected in winter (December, 2005)

APPENDIX B

CYTOTOXICITY STUDY

EMEM Medium

EMEM powder medium (Biowitaker)	19.15 g
HEPES	3g
NaHCO3	2g
Penicillin G (stock solution)	10,000 units
Streptomycin (stock solution)	10,000 units
Sterile water	2 L

Weight and mix all ingredients in sterile water. Adjust pH to 7.0.Filtrate with 0.22 μm membrane (Whatman). Dispense the filtrate into bottles. All bottled mediums are stored in 37 °C incubator for 24 hr. for sterility test.

0.25 Trypsin (in HEPES-Buffer Saline)

HEPES-buffer saline

NaCl	8 g
KCl	0.4 g
Na_2HPO_4	0.1 g
Dextrose	1.0 g
HEPES	2.38 g
Distilled water	1 L

All ingredients were mixed in 1lt volumetric flask and stirred with magnetic stirrer until all ingredients were completely dissolved. Then 2.5g of Trypsin powder (Gibco) was added. The solution was stirred until Trypsin was completely dissolved. Then adjust pH to 7.0 (by add 7.5% $NaHCO_3$ and/or 1% HCl). The solution was filtrated (through 0.22 μm membrane) and dispensed into bottles.

The bottled trypsin was stored in 37°C incubator for 24 hr. for sterility test.

0.4% Trypan Blue Dye

Trypan Blue	1.6 g
NaCl	3.24 g
KH2PO4	0.24 g
Distilled water	400 ml

All ingredients were mixed altogether, heat and stirred with magnetic stirrer until completely dissolved. Adjust pH to 7.2-7.3 (by add 7.5% $NaHCO_3$ and/or 1% HCl). Then dispensed into light protecting bottles.

Phosphate buffer solution

NaCl	8 g
KCl	0.2 g
Na_2HPO_4	1.15 g
KH_2PO_4	0.2 g
Distill water	1 L

All ingredients were mixed and dispensed into bottles. All bottles were autoclaved for 15 minute.

Sorensen' s glycine buffer

0.1 M Glycine	100 ml
0.1 M NaCl	100 ml

All ingredients were mixed. Adjusted to pH 10.5 with 1 M NaOH

MTT solution

MTT: 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (Sigma)	0.5 mg
DMEM	1 ml

Add MTT 0.5 mg into DMEM 1 ml. All ingredients were mixed and sterilized by filter. Then dispensed into light protecting bottles and freshly prepared for every experiment.

APPENDIX C

HISTOLOGICAL STUDY

1. Chemicals

- Ethyl alcohol
- n-butyl alcohol
- Xylene
- Canada balsam
- Haematoxylin
- Eosin
- Paraffin
- Ammonia alum
- Glacial acetic acid
- 40% Formaldehyde
- Picric acid

2. Equipments

- Slide
- Cover glass
- Microtome
- Microtome blade
- Hot air oven
- Tissue floating bath
- Light microscope
- pH meter
- Hot plate
- Water bath

3. Procedures and methods

This study used the standard histological techniques (Humanson, 1979) using haematoxylin and eosin staining to study the structural feathers of the sections of the liver, ovary, uterus and mammary tumor. The processes were examined 5 steps as follows.

3.1 Fixation: All above tissues were fixed in 10% buffer formalin at least 24 hours after sacrification. The tissues were transferred to newly 10% buffer formalin replacing the turbid one.

3.2 Dehydation: All tissues were cut into small pieces and transferred into ethyl alcohol as follows.

Step 1	90% ethanol	1 time	1 hour/time
Step 2	95% ethanol	2 time	6 hours/time
Step 3	N-butyl alcohol	1 time	1 hour/time
Step 4	Xylene	1 time	1 hour/time

3.3 Embedding: Then the tissue was impregnated in the hot air oven (58 °C). The tissue was placed in the embedding compound. Once the tissue had been infiltrated; it is placed into a mold and surrounded by wax and allowed to solidify into a block. The step wises were following.

Step 1	Xylene+molten wax (1:1)	1 time	½ hour/time
Step 2	Wax I	1 time	½ hour/time
Step 3	Wax II	1 time	1 hour/time
Step 4	Embedded and orientated in filtered wax.		

3.4 Sectioning: The blocks containing tissue were mounted onto a microtome. All tissue blocks were sectioned at 5 μm. Paraffin sections were mounted onto glass microscopic slides by egg albumin for further processing.

3.5 Hydration and staining: The glass microscopic slides containing paraffin sections were deparaffined and staining as follows.

1) 2 x 5 minutes	xylene
2) 1 x 3 minutes	n-butyl alcohol
3) 1 x 3 minutes	95% ethyl alcohol
4) 1 x 3 minutes	70% ethyl alcohol
5) 1 x 3 minutes	tap water
6) 10-12 minutes	Hematoxylin solution
7) 5-10 seconds	Acid alcohol
8) 10 minutes	running tap water
9) 1 x 3 minutes	70% ethyl alcohol
10) 1 x 3 minutes	90% ethyl alcohol
11) 3-5 minutes	Eosin staining solution
12) 15-30 seconds	95% ethyl alcohol

13) 1 x 5 minutes n-butyl alcohol

14) 1 x 5 minutes xylene

Then sides were mounted with cover slip by Canada balsam and laid slides flat while drying.

4. Preparation of histological reagents

1. 10% buffer formalin

- Formalin (40%)	100	ml
- DI-distilled water	900	ml
- Natrium dihydrogen phosphate-monohydrated ($NaH_2PO_4.H_2O$)	4	g
- Disodium hydrogen phosphate anhydrous (Na_2HPO_4)	6.5	g

These chemical substances were mixed together in the dark bottle, the solution was shaked until it was completely dissolved. This solution was stored at room temperature.

2. Ehrlich's acid haematoxylin and eosin

- Haematoxylin	8	ml
- Absolute ethanol	400	ml
- Ammonium alum	8	g
- Di-distilled water	400	ml
- Glycerine	400	ml
- Glacial acetic acid	40	ml

Haematoxylin was dissolved in absolute ethanol in water bath at 40-50°C. When the solution was cool, it was filtered with filtered paper. Then ammonium alum was dissolved in warm di-distilled water. These two solutions were mixed together, then glycerine and glacial acetic acid were added and stirred until these substances were completely dissolved. The solution need to expose to daylight to ripen for at least 6 weeks.

3. Eosin

- Eosin Y	0.5	g
- 95% Ethanol	100	ml

Eosin was dissolved in ethanol until the solution was completely dissolved and stored at room temperature.

4. Giemsa dye

- Giemsa powder	1	g
- Absolute Methanol	66	ml
- Glycerol	66	ml

Grind giemsa into fine powder then dissolved in glycerol and put in 60 °C water bath for 2 hrs. Added absolute MeOH after keep its at room temperature for 7 days filtered with filter paper.

APPENDIX D

STATISTIC ANALYSIS

Correlation between % scavenging and isoflavonoid content in Summer

Correlations

			pue	dz	gt	dze	gte	total	aglycosi de	aglyco ne_gly cone	DPPH.3	DPPH. 75	DPPH1 .5	DPPH3	DPPH6
Spearman's rho	pue	Correlation Coefficient	1.000	.600	.200	-.700	-.700	.900(*)	.700	.462	.100	.500	.200	.200	.200
		Sig. (2-tailed)	.	.285	.747	.188	.188	.037	.188	.434	.873	.391	.747	.747	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.600	1.000	.900(*)	-.100	-.100	.800	.100	.051	-.700	-.300	-.500	-.600	-.600
		Sig. (2-tailed)	.285	.	.037	.873	.873	.104	.873	.935	.188	.624	.391	.285	.285
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	genistin	Correlation Coefficient	.200	.900(*)	1.000	.300	.300	.500	-.200	-.103	-.900(*)	-.600	-.700	-.800	-.800
		Sig. (2-tailed)	.747	.037	.	.624	.624	.391	.747	.870	.037	.285	.188	.104	.104
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.700	-.100	.300	1.000	1.000(**)	-.400	-.300	-.051	-.500	-.400	-.200	-.300	-.300
		Sig. (2-tailed)	.188	.873	.624	.	.	.505	.624	.935	.391	.505	.747	.624	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.700	-.100	.300	1.000(**)	1.000	-.400	-.300	-.051	-.500	-.400	-.200	-.300	-.300
		Sig. (2-tailed)	.188	.873	.624	.	.	.505	.624	.935	.391	.505	.747	.624	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.900(*)	.800	.500	-.400	-.400	1.000	.600	.308	-.300	.300	.100	-.100	-.100
		Sig. (2-tailed)	.037	.104	.391	.505	.505	.	.285	.614	.624	.624	.873	.873	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycosi de	Correlation Coefficient	.700	.100	-.200	-.300	-.300	.600	1.000	.821	.400	.900(*)	.700	.700	.700
		Sig. (2-tailed)	.188	.873	.747	.624	.624	.285	.	.089	.505	.037	.188	.188	.188
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycone	Correlation Coefficient	.462	.051	-.103	-.051	-.051	.308	.821	1.000	.410	.667	.359	.667	.667

_glyco	Sig. (2-tailed)	.434	.935	.870	.935	.935	.614	.089	.	.493	.219	.553	.219	.219
ne	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH.3	Correlation Coefficient	.100	-.700	-.900(*)	-.500	-.500	-.300	.400	.410	1.000	.700	.600	.900(*)	.900(*)
	Sig. (2-tailed)	.873	.188	.037	.391	.391	.624	.505	.493	.	.188	.285	.037	.037
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH.7	Correlation Coefficient	.500	-.300	-.600	-.400	-.400	.300	.900(*)	.667	.700	1.000	.900(*)	.900(*)	.900(*)
5	Sig. (2-tailed)	.391	.624	.285	.505	.505	.624	.037	.219	.188	.	.037	.037	.037
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH	Correlation Coefficient	.200	-.500	-.700	-.200	-.200	.100	.700	.359	.600	.900(*)	1.000	.800	.800
1.5	Sig. (2-tailed)	.747	.391	.188	.747	.747	.873	.188	.553	.285	.037	.	.104	.104
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH3	Correlation Coefficient	.200	-.600	-.800	-.300	-.300	-.100	.700	.667	.900(*)	.900(*)	.800	1.000	1.000(**)
	Sig. (2-tailed)	.747	.285	.104	.624	.624	.873	.188	.219	.037	.037	.104	.	.
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH6	Correlation Coefficient	.200	-.600	-.800	-.300	-.300	-.100	.700	.667	.900(*)	.900(*)	.800	1.000(**)	1.000
	Sig. (2-tailed)	.747	.285	.104	.624	.624	.873	.188	.219	.037	.037	.104	.	.
	N	5	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Correlation between % scavenging and isoflavonoid contents in Rainy season

Correlations

			pue	dz	gt	dze	gte	total	aglyco side	aglyco ne_gly cone	DPPH0. 3	DPPH0. 7	DPPH1. 5	DPPH3	DPPH6
Spearman's	pue	Correlation Coefficient	1.000	-.700	-.400	-.300	-.100	.900(*)	.300	.359	.700	.700	.667	-.667	-.700
rho		Sig. (2-tailed)	.	.188	.505	.624	.873	.037	.624	.553	.188	.188	.219	.219	.188
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	-.700	1.000	-.100	-.200	-.100	-.900(*)	-.300	-.051	-.300	-.300	-.410	.205	.300
		Sig. (2-tailed)	.188	.	.873	.747	.873	.037	.624	.935	.624	.624	.493	.741	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	genistin	Correlation Coefficient	-.400	-.100	1.000	.900(*)	.800	.000	.100	-.462	-.100	-.100	.103	.872	.100
		Sig. (2-tailed)	.505	.873	.	.037	.104	1.000	.873	.434	.873	.873	.870	.054	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.300	-.200	.900(*)	1.000	.900(*)	.100	.500	-.051	-.300	-.300	-.103	.616	.300
		Sig. (2-tailed)	.624	.747	.037	.	.037	.873	.391	.935	.624	.624	.870	.269	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.100	-.100	.800	.900(*)	1.000	.200	.600	.103	.000	.000	.154	.462	.000
		Sig. (2-tailed)	.873	.873	.104	.037	.	.747	.285	.870	1.000	1.000	.805	.434	1.000
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.900(*)	-.900(*)	.000	.100	.200	1.000	.400	.205	.600	.600	.667	-.359	-.600
		Sig. (2-tailed)	.037	.037	1.000	.873	.747	.	.505	.741	.285	.285	.219	.553	.285
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycosid	Correlation Coefficient	.300	-.300	.100	.500	.600	.400	1.000	.821	-.200	-.200	-.154	-.359	.200
	e	Sig. (2-tailed)	.624	.624	.873	.391	.285	.505	.	.089	.747	.747	.805	.553	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycone	Correlation Coefficient	.359	-.051	-.462	-.051	.103	.205	.821	1.000	-.205	-.205	-.289	-.763	.205
	_glycone	Sig. (2-tailed)	.553	.935	.434	.935	.870	.741	.089	.	.741	.741	.637	.133	.741
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	DPPH0.3	Correlation Coefficient	.700	-.300	-.100	-.300	.000	.600	-.200	-.205	1.000	1.000(**)	.975(**)	-.154	-1.000(**)
		Sig. (2-tailed)	.188	.624	.873	.624	1.000	.285	.747	.741	.	.	.005	.805	.000
		N	5	5	5	5	5	5	5	5	5	5	5	5	5

DPPH0.7	Correlation Coefficient	.700	-.300	-.100	-.300	.000	.600	-.200	-.205	1.000(**)	1.000	.975(**)	-.154	-1.000(**)
	Sig. (2-tailed)	.188	.624	.873	.624	1.000	.285	.747	.741	.	.	.005	.805	.000
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH1.5	Correlation Coefficient	.667	-.410	.103	-.103	.154	.667	-.154	-.289	.975(**)	.975(**)	1.000	.000	-.975(**)
	Sig. (2-tailed)	.219	.493	.870	.870	.805	.219	.805	.637	.005	.005	.	1.000	.005
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH3	Correlation Coefficient	-.667	.205	.872	.616	.462	-.359	-.359	-.763	-.154	-.154	.000	1.000	.154
	Sig. (2-tailed)	.219	.741	.054	.269	.434	.553	.553	.133	.805	.805	1.000	.	.805
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH6	Correlation Coefficient	-.700	.300	.100	.300	.000	-.600	.200	.205	-1.000(**)	-1.000(**)	-.975(**)	.154	1.000
	Sig. (2-tailed)	.188	.624	.873	.624	1.000	.285	.747	.741	.000	.000	.005	.805	.
	N	5	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Correlation between % scavenging and isoflavonoid content in Winter

Correlations

			pue	dz	gt	dze	gte	total	aglycoside	aglycone_glycone	DPPH0.3	DPPH0.7	DPPH1.5	DPPH3	DPPH6
Spearman's rho	pue	Correlation Coefficient	1.000	.900(*)	.700	.300	.600	1.000(**)	-.600	-.600	.200	.300	.300	.300	-.200
		Sig. (2-tailed)	.	.037	.188	.624	.285	.	.285	.285	.747	.624	.624	.624	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.900(*)	1.000	.900(*)	-.100	.800	.900(*)	-.800	-.800	.100	.100	.100	.100	-.500
		Sig. (2-tailed)	.037	.	.037	.873	.104	.037	.104	.104	.873	.873	.873	.873	.391
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	genistin	Correlation Coefficient	.700	.900(*)	1.000	-.200	.600	.700	-.600	-.600	.300	.000	.000	.000	-.700
		Sig. (2-tailed)	.188	.037	.	.747	.285	.188	.285	.285	.624	1.000	1.000	1.000	.188
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	.300	-.100	-.200	1.000	-.500	.300	.500	.500	.300	.200	.200	.200	.300
		Sig. (2-tailed)	.624	.873	.747	.	.391	.624	.391	.391	.624	.747	.747	.747	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	.600	.800	.600	-.500	1.000	.600	-1.000(**)	-1.000(**)	-.400	-.100	-.100	-.100	-.400
		Sig. (2-tailed)	.285	.104	.285	.391	.	.285	.000	.000	.505	.873	.873	.873	.505
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	1.000(**)	.900(*)	.700	.300	.600	1.000	-.600	-.600	.200	.300	.300	.300	-.200
		Sig. (2-tailed)	.	.037	.188	.624	.285	.	.285	.285	.747	.624	.624	.624	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000	1.000(**)	.400	.100	.100	.100	.400
		Sig. (2-tailed)	.285	.104	.285	.391	.000	.285	.	.	.505	.873	.873	.873	.505
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycone_glycone	Correlation Coefficient	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000(**)	1.000	.400	.100	.100	.100	.400
		Sig. (2-tailed)	.285	.104	.285	.391	.000	.285	.	.	.505	.873	.873	.873	.505
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	DPPH0.3	Correlation Coefficient	.200	.100	.300	.300	-.400	.200	.400	.400	1.000	.700	.700	.700	.200
		Sig. (2-tailed)	.747	.873	.624	.624	.505	.747	.505	.505	.	.188	.188	.188	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	DPPH0.7	Correlation Coefficient	.300	.100	.000	.200	-.100	.300	.100	.100	.700	1.000	1.000(**)	1.000(**)	.700
		Sig. (2-tailed)	.624	.873	1.000	.747	.873	.624	.873	.873	.188	.	.	.	.188

	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH1.5	Correlation Coefficient	.300	.100	.000	.200	-.100	.300	.100	.100	.700	1.000(**)	1.000	1.000(**)	.700
	Sig. (2-tailed)	.624	.873	1.000	.747	.873	.624	.873	.873	.188	.	.	.	.188
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH3	Correlation Coefficient	.300	.100	.000	.200	-.100	.300	.100	.100	.700	1.000(**)	1.000(**)	1.000	.700
	Sig. (2-tailed)	.624	.873	1.000	.747	.873	.624	.873	.873	.188	.	.	.	.188
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
DPPH6	Correlation Coefficient	-.200	-.500	-.700	.300	-.400	-.200	.400	.400	.200	.700	.700	.700	1.000
	Sig. (2-tailed)	.747	.391	.188	.624	.505	.747	.505	.505	.747	.188	.188	.188	.
	N	5	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Correlation between temperature&rainfall amount and isoflavonoid contents in Summer

Correlations

			temp	rain	pue	dz	gt	dze	gte	total	aglyco ne	glycon e	aglyco ne_gly cone	glycon e_agly cone	aglygly_pue
Spearman's rho	temp	Correlation Coefficient	1.000	-.684	-.205	.103	.205	-.154	-.154	-.359	-.667	-.154	-.289	.051	-.263
		Sig. (2-tailed)	.	.203	.741	.870	.741	.805	.805	.553	.219	.805	.637	.935	.669
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	rain	Correlation Coefficient	-.684	1.000	.205	.205	.103	-.051	-.051	.462	.154	.564	-.395	.667	-.105
		Sig. (2-tailed)	.203	.	.741	.741	.870	.935	.935	.434	.805	.322	.511	.219	.866
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	pue	Correlation Coefficient	-.205	.205	1.000	.600	.200	-.700	-.700	.900(*)	.700	.100	.462	.100	-.616
		Sig. (2-tailed)	.741	.741	.	.285	.747	.188	.188	.037	.188	.873	.434	.873	.269
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.103	.205	.600	1.000	.900(*)	-.100	-.100	.800	.100	-.300	.051	.200	-.154
		Sig. (2-tailed)	.870	.741	.285	.	.037	.873	.873	.104	.873	.624	.935	.747	.805
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	.205	.103	.200	.900(*)	1.000	.300	.300	.500	-.200	-.500	-.103	.100	.205
		Sig. (2-tailed)	.741	.870	.747	.037	.	.624	.624	.391	.747	.391	.870	.873	.741
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.154	-.051	-.700	-.100	.300	1.000	1.000(**)	-.400	-.300	-.600	-.051	-.400	.975(**)
		Sig. (2-tailed)	.805	.935	.188	.873	.624	.	.	.505	.624	.285	.935	.505	.005
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.154	-.051	-.700	-.100	.300	1.000(**)	1.000	-.400	-.300	-.600	-.051	-.400	.975(**)
		Sig. (2-tailed)	.805	.935	.188	.873	.624	.	.	.505	.624	.285	.935	.505	.005
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	-.359	.462	.900(*)	.800	.500	-.400	-.400	1.000	.600	.000	.308	.200	-.359
		Sig. (2-tailed)	.553	.434	.037	.104	.391	.505	.505	.	.285	1.000	.614	.747	.553
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglyco ne	Correlation Coefficient	-.667	.154	.700	.100	-.200	-.300	-.300	.600	1.000	-.100	.821	-.400	-.103
		Sig. (2-tailed)	.219	.805	.188	.873	.747	.624	.624	.285	.	.873	.089	.505	.870
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	glycon	Correlation Coefficient	-.154	.564	.100	-.300	-.500	-.600	-.600	.000	-.100	1.000	-.564	.800	-.667

e	Sig. (2-tailed)	.805	.322	.873	.624	.391	.285	.285	1.000	.873	.	.322	.104	.219
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
aglyco	Correlation Coefficient	-.289	-.395	.462	.051	-.103	-.051	-.051	.308	.821	-.564	1.000	-.821	.158
ne_gly	Sig. (2-tailed)	.637	.511	.434	.935	.870	.935	.935	.614	.089	.322	.	.089	.800
cone	N	5	5	5	5	5	5	5	5	5	5	5	5	5
glycon	Correlation Coefficient	.051	.667	.100	.200	.100	-.400	-.400	.200	-.400	.800	-.821	1.000	-.564
e_agly	Sig. (2-tailed)	.935	.219	.873	.747	.873	.505	.505	.747	.505	.104	.089	.	.322
cone	N	5	5	5	5	5	5	5	5	5	5	5	5	5
aglygly	Correlation Coefficient	-.263	-.105	-.616	-.154	.205	.975(**)	.975(**)	-.359	-.103	-.667	.158	-.564	1.000
_pue	Sig. (2-tailed)	.669	.866	.269	.805	.741	.005	.005	.553	.870	.219	.800	.322	.
	N	5	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Correlation between temperature&rainfall amount and isoflavonoid contents in Rainy season

Correlations

			temp	rain	pue	dz	gt	dze	gte	total	aglycone	glycone	aglycone_glycone	glycone_aglycone	aglygly_pue
Spearman's rho	temp	Correlation Coefficient	1.000	-.684	.051	.410	-.154	.103	.410	-.103	.667	-.718	.763	-.667	.667
		Sig. (2-tailed)	.	.203	.935	.493	.805	.870	.493	.870	.219	.172	.133	.219	.219
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	rain	Correlation Coefficient	-.684	1.000	-.154	-.205	.643**	.308	.205	.103	-.564	.718	-.921(*)	.975(**)	-.564
		Sig. (2-tailed)	.203	.	.805	.741	.010	.614	.741	.870	.322	.172	.026	.005	.322
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	pue	Correlation Coefficient	.051	-.154	1.000	-.700	-.400	-.300	-.100	.900(*)	.300	-.100	.359	-.300	.300
		Sig. (2-tailed)	.935	.805	.	.188	.505	.624	.873	.037	.624	.873	.553	.624	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.410	-.205	-.700	1.000	-.100	-.200	-.100	-.900(*)	-.300	-.600	-.051	.000	-.300
		Sig. (2-tailed)	.493	.741	.188	.	.873	.747	.873	.037	.624	.285	.935	1.000	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	-.154	.667	-.400	-.100	1.000	.900(*)	.800	.000	.100	.700	-.462	.600	.100
		Sig. (2-tailed)	.805	.219	.505	.873	.	.037	.104	1.000	.873	.188	.434	.285	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	.103	.308	-.300	-.200	.900(*)	1.000	.900(*)	.100	.500	.600	-.051	.200	.500
		Sig. (2-tailed)	.870	.614	.624	.747	.037	.	.037	.873	.391	.285	.935	.747	.391
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	.410	.205	-.100	-.100	.800	.900(*)	1.000	.200	.600	.300	.103	.100	.600
		Sig. (2-tailed)	.493	.741	.873	.873	.104	.037	.	.747	.285	.624	.870	.873	.285
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	-.103	.103	.900(*)	-.900(*)	.000	.100	.200	1.000	.400	.300	.205	-.100	.400
		Sig. (2-tailed)	.870	.870	.037	.037	1.000	.873	.747	.	.505	.624	.741	.873	.505
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglyco	Correlation Coefficient	.667	-.564	.300	-.300	.100	.500	.600	.400	1.000	-.100	.821	-.700	1.000(**)
	ne	Sig. (2-tailed)	.219	.322	.624	.624	.873	.391	.285	.505	.	.873	.089	.188	.
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	glycon	Correlation Coefficient	-.718	.718	-.100	-.600	.700	.600	.300	.300	-.100	1.000	-.564	.600	-.100

e	Sig. (2-tailed)	.172	.172	.873	.285	.188	.285	.624	.624	.873	.	.322	.285	.873
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
aglyco	Correlation Coefficient	.763	-.921(*)	.359	-.051	-.462	-.051	.103	.205	.821	-.564	1.000	-.975(**)	.821
ne_gly	Sig. (2-tailed)	.133	.026	.553	.935	.434	.935	.870	.741	.089	.322	.	.005	.089
cone	N	5	5	5	5	5	5	5	5	5	5	5	5	5
glycon	Correlation Coefficient	-.667	.975(**)	-.300	.000	.600	.200	.100	-.100	-.700	.600	-.975(**)	1.000	-.700
e_agly	Sig. (2-tailed)	.219	.005	.624	1.000	.285	.747	.873	.873	.188	.285	.005	.	.188
cone	N	5	5	5	5	5	5	5	5	5	5	5	5	5
aglygly	Correlation Coefficient	.667	-.564	.300	-.300	.100	.500	.600	.400	1.000(**)	-.100	.821	-.700	1.000
_pue	Sig. (2-tailed)	.219	.322	.624	.624	.873	.391	.285	.505	.	.873	.089	.188	.
	N	5	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Correlation between temperature&rainfall amount and isoflavonoid contents in Winter

Correlations

			temp	rain	pue	dz	genistin	dze	gte	total	aglycone	glycone	aglycone_glycone	glycone_aglycone	aglygly_pue
Spearman's rho	temp	Correlation Coefficient	1.000	-.895(*)	.564	.462	.616	.564	-.154	.564	.154	-.667	.154	-.154	-.872
		Sig. (2-tailed)	.	.040	.322	.434	.269	.322	.805	.322	.805	.219	.805	.805	.054
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	rain	Correlation Coefficient	-.895(*)	1.000	-.462	-.564	-.821	-.154	-.051	-.462	.051	.872	.051	-.051	.975(**)
		Sig. (2-tailed)	.040	.	.434	.322	.089	.805	.935	.434	.935	.054	.935	.935	.005
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	pue	Correlation Coefficient	.564	-.462	1.000	.900(*)	.700	.300	.600	1.000(**)	-.600	-.300	-.600	.600	-.600
		Sig. (2-tailed)	.322	.434	.	.037	.188	.624	.285	.	.285	.624	.285	.285	.285
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.462	-.564	.900(*)	1.000	.900(*)	-.100	.800	.900(*)	-.800	-.500	-.800	.800	-.700
		Sig. (2-tailed)	.434	.322	.037	.	.037	.873	.104	.037	.104	.391	.104	.104	.188
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	.616	-.821	.700	.900(*)	1.000	-.200	.600	.700	-.600	-.800	-.600	.600	-.900(*)
		Sig. (2-tailed)	.269	.089	.188	.037	.	.747	.285	.188	.285	.104	.285	.285	.037
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	.564	-.154	.300	-.100	-.200	1.000	-.500	.300	.500	.200	.500	-.500	-.100
		Sig. (2-tailed)	.322	.805	.624	.873	.747	.	.391	.624	.391	.747	.391	.391	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.154	-.051	.600	.800	.600	-.500	1.000	.600	-1.000(**)	-.100	-1.000(**)	1.000(**)	-.200
		Sig. (2-tailed)	.805	.935	.285	.104	.285	.391	.	.285	.000	.873	.000	.	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.564	-.462	1.000(**)	.900(*)	.700	.300	.600	1.000	-.600	-.300	-.600	.600	-.600
		Sig. (2-tailed)	.322	.434	.	.037	.188	.624	.285	.	.285	.624	.285	.285	.285
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycone	Correlation Coefficient	.154	.051	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000	.100	1.000(**)	-1.000(**)	.200
		Sig. (2-tailed)	.805	.935	.285	.104	.285	.391	.000	.285	.	.873	.	.000	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5
	glycone	Correlation Coefficient	-.667	.872	-.300	-.500	-.800	.200	-.100	-.300	.100	1.000	.100	-.100	.900(*)

e	Sig. (2-tailed)	.219	.054	.624	.391	.104	.747	.873	.624	.873	.	.873	.873	.037
	N	5	5	5	5	5	5	5	5	5	5	5	5	5
aglyco	Correlation Coefficient	.154	.051	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000(**)	.100	1.000	-1.000(**)	.200
ne_gly	Sig. (2-tailed)	.805	.935	.285	.104	.285	.391	.000	.285	.	.873	.	.000	.747
cone	N	5	5	5	5	5	5	5	5	5	5	5	5	5
glycon	Correlation Coefficient	-.154	-.051	.600	.800	.600	-.500	1.000(**)	.600	-1.000(**)	-.100	-1.000(**)	1.000	-.200
e_agly	Sig. (2-tailed)	.805	.935	.285	.104	.285	.391	.	.285	.000	.873	.000	.	.747
cone	N	5	5	5	5	5	5	5	5	5	5	5	5	5
aglygly	Correlation Coefficient	-.872	.975(**)	-.600	-.700	-.900(*)	-.100	-.200	-.600	.200	.900(*)	.200	-.200	1.000
_pue	Sig. (2-tailed)	.054	.005	.285	.188	.037	.873	.747	.285	.747	.037	.747	.747	.
	N	5	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Correlation between % cell growth and isoflavonoid content in summer

			pue	dz	gt	dze	gte	total	aglycoside	aglycone_glycone	s0.1	s1	s10	s100	s1000	s0.1s9	s1s9	s10s9	s100s9	s1000s9
Spearman's rho	pue	Correlation Coefficient	1.000	.600	.200	-.700	-.700	.900(*)	.700	.462	-.300	-.600	-.300	.300	-.600	.700	.300	.600	.100	-.200
		Sig. (2-tailed)	.	.285	.747	.188	.188	.037	.188	.434	.624	.285	.624	.624	.285	.188	.624	.285	.873	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.600	1.000	.900(*)	-.100	-.100	.800	.100	.051	.500	.200	.100	.100	-.700	.100	.100	.200	-.500	.500
		Sig. (2-tailed)	.285	.	.037	.873	.873	.104	.873	.935	.391	.747	.873	.873	.188	.873	.873	.747	.391	.391
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	.200	.900(*)	1.000	.300	.300	.500	-.200	-.103	.800	.600	.300	.000	-.500	-.200	.000	.000	-.600	.700
		Sig. (2-tailed)	.747	.037	.	.624	.624	.391	.747	.870	.104	.285	.624	1.000	.391	.747	1.000	1.000	.285	.188
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.700	-.100	.300	1.000	1.000(**)	-.400	-.300	-.051	.800	.900(*)	.200	.200	.600	-.300	.200	-.100	-.100	.200
		Sig. (2-tailed)	.188	.873	.624	.	.	.505	.624	.935	.104	.037	.747	.747	.285	.624	.747	.873	.873	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.700	-.100	.300	1.000(**)	1.000	-.400	-.300	-.051	.800	.900(*)	.200	.200	.600	-.300	.200	-.100	-.100	.200
		Sig. (2-tailed)	.188	.873	.624	.	.	.505	.624	.935	.104	.037	.747	.747	.285	.624	.747	.873	.873	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.900(*)	.800	.500	-.400	-.400	1.000	.600	.308	.100	-.300	-.400	.500	-.500	.600	.500	.500	-.200	-.100
		Sig. (2-tailed)	.037	.104	.391	.505	.505	.	.285	.614	.873	.624	.505	.391	.391	.285	.391	.391	.747	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	.700	.100	-.200	-.300	-.300	.600	1.000	.821	-.300	-.500	-.500	.700	.100	1.000(**)	.700	.900(*)	.600	-.700
		Sig. (2-tailed)	.188	.873	.747	.624	.624	.285	.	.089	.624	.391	.391	.188	.873	.	.188	.037	.285	.188
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycone_glycone	Correlation Coefficient	.462	.051	-.103	-.051	-.051	.308	.821	1.000	-.154	-.154	.051	.359	.051	.821	.359	.975(**)	.821	-.359
		Sig. (2-tailed)	.434	.935	.870	.935	.935	.614	.089	.	.805	.805	.935	.553	.935	.089	.553	.005	.089	.553
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	s0.1	Correlation Coefficient	-.300	.500	.800	.800	.800	.100	-.300	-.154	1.000	.900(*)	.200	.200	.100	-.300	.200	-.100	-.500	.500
		Sig. (2-tailed)	.624	.391	.104	.104	.104	.873	.624	.805	.	.037	.747	.747	.873	.624	.747	.873	.391	.391

	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1	Correlation Coefficient	-.600	.200	.600	.900 (*)	.900 (*)	.300	-.500	-.154	.900(*)	1.000	.500	-.100	.200	-.500	-.100	-.200	-.300	.600
	Sig. (2-tailed)	.285	.747	.285	.037	.037	.624	.391	.805	.037	.	.391	.873	.747	.391	.873	.747	.624	.285
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s10	Correlation Coefficient	-.300	.100	.300	.200	.200	-.400	-.500	.051	.200	.500	1.000	-.800	-.400	-.500	-.800	-.100	.100	.800
	Sig. (2-tailed)	.624	.873	.624	.747	.747	.505	.391	.935	.747	.391	.	.104	.505	.391	.104	.873	.873	.104
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s100	Correlation Coefficient	.300	.100	.000	.200	.200	.500	.700	.359	.200	-.100	-.800	1.000	.500	.700	1.000(**)	.500	.100	-.700
	Sig. (2-tailed)	.624	.873	1.000	.747	.747	.391	.188	.553	.747	.873	.104	.	.391	.188	.	.391	.873	.188
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1000	Correlation Coefficient	-.600	-.700	-.500	.600	.600	-.500	.100	.051	.100	.200	-.400	.500	1.000	.100	.500	.000	.300	-.600
	Sig. (2-tailed)	.285	.188	.391	.285	.285	.391	.873	.935	.873	.747	.505	.391	.	.873	.391	1.000	.624	.285
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s0.1s9	Correlation Coefficient	.700	.100	-.200	-.300	-.300	.600	1.000(**)	.821	-.300	-.500	-.500	.700	.100	1.000	.700	.900 (*)	.600	-.700
	Sig. (2-tailed)	.188	.873	.747	.624	.624	.285	.	.089	.624	.391	.391	.188	.873	.	.188	.037	.285	.188
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1s9	Correlation Coefficient	.300	.100	.000	.200	.200	.500	.700	.359	.200	-.100	-.800	1.000(**)	.500	.700	1.000	.500	.100	-.700
	Sig. (2-tailed)	.624	.873	1.000	.747	.747	.391	.188	.553	.747	.873	.104	.	.391	.188	.	.391	.873	.188
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s10s9	Correlation Coefficient	.600	.200	.000	-.100	-.100	.500	.900 (*)	.975(**)	-.100	-.200	-.100	.500	.000	.900 (*)	.500	1.000	.700	-.400
	Sig. (2-tailed)	.285	.747	1.000	.873	.873	.391	.037	.005	.873	.747	.873	.391	1.000	.037	.391	.	.188	.505
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s100s9	Correlation Coefficient	.100	-.500	-.600	-.100	-.100	-.200	.600	.821	-.500	-.300	.100	.100	.300	.600	.100	.700	1.000	-.500
	Sig. (2-tailed)	.873	.391	.285	.873	.873	.747	.285	.089	.391	.624	.873	.873	.624	.285	.873	.188	.	.391
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1000s9	Correlation Coefficient	-.200	.500	.700	.200	.200	-.100	-.700	-.359	.500	.600	.800	-.700	-.600	-.700	-.700	-.400	-.500	1.000
	Sig. (2-tailed)	.747	.391	.188	.747	.747	.873	.188	.553	.391	.285	.104	.188	.285	.188	.188	.505	.391	.
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed). /** Correlation is significant at the 0.01 level (2-tailed).

Correlation between % cell growth and isoflavonoid content in rainy season

			pue	dz	gt	dze	gte	total	aglycoside	aglycone_glycone	s0.1	s1	s10	s100	s1000	s0.1s9	s1s9	s10s9	s100s9	s1000s9
Spearmans rho	pue	Correlation Coefficient	1.000	-.700	-.400	-.300	-.100	.900(*)	.300	.359	.200	-.100	.300	-.100	.100	-.200	-.100	-.100	-.600	.200
		Sig. (2-tailed)	.	.188	.505	.624	.873	.037	.624	.553	.747	.873	.624	.873	.873	.747	.873	.873	.285	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	-.700	1.000	-.100	-.200	-.100	-.900(*)	-.300	-.051	-.700	-.100	-.300	-.500	-.500	.000	.500	.100	.100	-.300
		Sig. (2-tailed)	.188	.	.873	.747	.873	.037	.624	.935	.188	.873	.624	.391	.391	1.000	.391	.873	.873	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	-.400	-.100	1.000	.900(*)	.800	.000	.100	-.462	.500	.800	.100	.700	-.200	.900(*)	.200	.500	.800	-.600
		Sig. (2-tailed)	.505	.873	.	.037	.104	1.000	.873	.434	.391	.104	.873	.188	.747	.037	.747	.391	.104	.285
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.300	-.200	.900(*)	1.000	.900(*)	.100	.500	-.051	.300	.900(*)	.500	.900(*)	.100	.800	-.100	.100	.500	-.300
		Sig. (2-tailed)	.624	.747	.037	.	.037	.873	.391	.935	.624	.037	.391	.037	.873	.104	.873	.873	.391	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.100	-.100	.800	.900(*)	1.000	.200	.600	.103	.100	1.000(**)	.600	.700	-.200	.900(*)	.200	.200	.300	-.500
		Sig. (2-tailed)	.873	.873	.104	.037	.	.747	.285	.870	.873	.	.285	.188	.747	.037	.747	.747	.624	.391
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.900(*)	-.900(*)	.000	.100	.200	1.000	.400	.205	.500	.200	.400	.300	.200	.100	-.200	.000	-.300	.100
		Sig. (2-tailed)	.037	.037	1.000	.873	.747	.	.505	.741	.391	.747	.505	.624	.747	.873	.747	1.000	.624	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	.300	-.300	.100	.500	.600	.400	1.000	.821	-.300	.600	1.000(**)	.600	.400	.200	-.400	-.600	-.500	.300
		Sig. (2-tailed)	.624	.624	.873	.391	.285	.505	.	.089	.624	.285	.	.285	.505	.747	.505	.285	.391	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglycone_glycone	Correlation Coefficient	.359	-.051	-.462	-.051	.103	.205	.821	1.000	-.667	.103	.821	.103	.410	-.308	-.410	-.821	-.872	.564
		Sig. (2-tailed)	.553	.935	.434	.935	.870	.741	.089	.	.219	.870	.089	.870	.493	.614	.493	.089	.054	.322
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	s0.1	Correlation Coefficient	.200	-.700	.500	.300	.100	.500	-.300	-.667	1.000	.100	-.300	.400	.100	.300	-.100	.500	.600	-.200
		Sig. (2-tailed)	.747	.188	.391	.624	.873	.391	.624	.219	.	.873	.624	.505	.873	.624	.873	.391	.285	.747

	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1	Correlation Coefficient	-.100	-.100	.800	.900(*)	1.000(**)	.200	.600	.103	.100	1.000	.600	.700	-.200	.900(*)	.200	.200	.300	-.500	
	Sig. (2-tailed)	.873	.873	.104	.037		.747	.285	.870	.873	.	.285	.188	.747	.037	.747	.747	.624	.391	
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s10	Correlation Coefficient	.300	-.300	.100	.500	.600	.400	1.000(**)	.821	-.300	.600	1.000	.600	.400	.200	-.400	-.600	-.500	.300	
	Sig. (2-tailed)	.624	.624	.873	.391	.285	.505	.	.089	.624	.285	.	.285	.505	.747	.505	.285	.391	.624	
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s100	Correlation Coefficient	-.100	-.500	.700	.900(*)	.700	.300	.600	.103	.400	.700	.600	1.000	.500	.500	-.500	-.200	.300	.100	
	Sig. (2-tailed)	.873	.391	.188	.037	.188	.624	.285	.870	.505	.188	.285	.	.391	.391	.391	.747	.624	.873	
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1000	Correlation Coefficient	.100	-.500	-.200	.100	-.200	.200	.400	.410	.100	-.200	.400	.500	1.000	-.500	-1.000(**)	-.800	-.300	.900(*)	
	Sig. (2-tailed)	.873	.391	.747	.873	.747	.747	.505	.493	.873	.747	.505	.391	.	.391	.000	.104	.624	.037	
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s0.1s9	Correlation Coefficient	-.200	.000	.900(*)	.800	.900(*)	.100	.200	-.308	.300	.900(*)	.200	.500	-.500	1.000	.500	.600	.600	-.800	
	Sig. (2-tailed)	.747	1.000	.037	.104	.037	.873	.747	.614	.624	.037	.747	.391	.391	.	.391	.285	.285	.104	
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1s9	Correlation Coefficient	-.100	.500	.200	-.100	.200	-.200	-.400	-.410	-.100	.200	-.400	-.500	-1.000(**)	.500	1.000	.800	.300	-.900(*)	
	Sig. (2-tailed)	.873	.391	.747	.873	.747	.747	.505	.493	.873	.747	.505	.391	.000	.391	.	.104	.624	.037	
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s10s9	Correlation Coefficient	-.100	.100	.500	.100	.200	.000	-.600	-.821	.500	.200	-.600	-.200	-.800	.600	.800	1.000	.700	-.900(*)	
	Sig. (2-tailed)	.873	.873	.391	.873	.747	1.000	.285	.089	.391	.747	.285	.747	.104	.285	.104	.	.188	.037	
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s100s9	Correlation Coefficient	-.600	.100	.800	.500	.300	-.300	-.500	-.872	.600	.300	-.500	.300	-.300	.600	.300	.700	1.000	-.600	
	Sig. (2-tailed)	.285	.873	.104	.391	.624	.624	.391	.054	.285	.624	.391	.624	.624	.285	.624	.188	.	.285	
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1000s9	Correlation Coefficient	.200	-.300	-.600	-.300	-.500	.100	.300	.564	-.200	-.500	.300	.100	.900(*)	-.800	-.900(*)	-.900(*)	-.600	1.000	
	Sig. (2-tailed)	.747	.624	.285	.624	.391	.873	.624	.322	.747	.391	.624	.873	.037	.104	.037	.037	.285	.	
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed). /** Correlation is significant at the 0.01 level (2-tailed).

Correlation between % cell growth and isoflavonoid content in winter

			pue	dz	gt	dze	gte	total	aglyco side	aglyco ne_gly cone	s0.1	s1	s10	s100	s100 0	s0.1 s9	s1s9	s10s9	s100 s9	s100 0s9
Spearman's rho	pue	Correlation Coefficient	1.000	.900(*)	.700	.300	.600	1.000(**)	-.600	-.600	.051	-.800	.300	.300	.100	.500	.500	.700	.200	-.100
		Sig. (2-tailed)	.	.037	.188	.624	.285	.	.285	.285	.935	.104	.624	.624	.873	.391	.391	.188	.747	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.900(*)	1.000	.900(*)	-.100	.800	.900(*)	-.800	-.800	.154	-.600	.400	.500	.200	.300	.300	.400	.100	.300
		Sig. (2-tailed)	.037	.	.037	.873	.104	.037	.104	.104	.805	.285	.505	.391	.747	.624	.624	.505	.873	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	.700	.900(*)	1.000	-.200	.600	.700	-.600	-.600	.410	-.200	.700	.800	.500	.400	.400	.300	.300	.600
		Sig. (2-tailed)	.188	.037	.	.747	.285	.188	.285	.285	.493	.747	.188	.104	.391	.505	.505	.624	.624	.285
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	.300	-.100	-.200	1.000	-.500	.300	.500	.500	-.205	-.300	.200	-.200	-.100	.600	.600	.700	.300	-.600
		Sig. (2-tailed)	.624	.873	.747	.	.391	.624	.391	.391	.741	.624	.747	.747	.873	.285	.285	.188	.624	.285
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	.600	.800	.600	-.500	1.000	.600	-1.000(**)	-1.000(**)	-.154	-.600	-.100	.100	-.200	-.300	-.300	-.100	-.400	.300
		Sig. (2-tailed)	.285	.104	.285	.391	.	.285	.000	.000	.805	.285	.873	.873	.747	.624	.624	.873	.505	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	1.000(**)	.900(*)	.700	.300	.600	1.000	-.600	-.600	.051	-.800	.300	.300	.100	.500	.500	.700	.200	-.100
		Sig. (2-tailed)	.	.037	.188	.624	.285	.	.285	.285	.935	.104	.624	.624	.873	.391	.391	.188	.747	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglyco side	Correlation Coefficient	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000	1.000(**)	.154	.600	.100	-.100	.200	.300	.300	.100	.400	-.300
		Sig. (2-tailed)	.285	.104	.285	.391	.000	.285	.	.	.805	.285	.873	.873	.747	.624	.624	.873	.505	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	aglyco ne_gly cone	Correlation Coefficient	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000(**)	1.000	.154	.600	.100	-.100	.200	.300	.300	.100	.400	-.300
		Sig. (2-tailed)	.285	.104	.285	.391	.000	.285	.	.	.805	.285	.873	.873	.747	.624	.624	.873	.505	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	s0.1	Correlation Coefficient	.051	.154	.410	-.205	-.154	.051	.154	.154	1.000	.359	.410	.821	.975(**)	.616	.616	.359	.872	.205

	Sig. (2-tailed)	.935	.805	.493	.741	.805	.935	.805	.805	.	.553	.493	.089	.005	.269	.269	.553	.054	.741
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1	Correlation Coefficient	-.800	-.600	-.200	-.300	-.600	-.800	.600	.600	.359	1.000	.300	.300	.400	-.100	-.100	-.500	.200	.500
	Sig. (2-tailed)	.104	.285	.747	.624	.285	.104	.285	.285	.553	.	.624	.624	.505	.873	.873	.391	.747	.391
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s10	Correlation Coefficient	.300	.400	.700	.200	-.100	.300	.100	.100	.410	.300	1.000	.800	.600	.600	.600	.300	.500	.600
	Sig. (2-tailed)	.624	.505	.188	.747	.873	.624	.873	.873	.493	.624	.	.104	.285	.285	.285	.624	.391	.285
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s100	Correlation Coefficient	.300	.500	.800	-.200	.100	.300	-.100	-.100	.821	.300	.800	1.000	.900(*)	.600	.600	.300	.700	.600
	Sig. (2-tailed)	.624	.391	.104	.747	.873	.624	.873	.873	.089	.624	.104	.	.037	.285	.285	.624	.188	.285
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1000	Correlation Coefficient	.100	.200	.500	-.100	-.200	.100	.200	.200	.975(**)	.400	.600	.900(*)	1.000	.700	.700	.400	.900(*)	.300
	Sig. (2-tailed)	.873	.747	.391	.873	.747	.873	.747	.747	.005	.505	.285	.037	.	.188	.188	.505	.037	.624
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s0.1s9	Correlation Coefficient	.500	.300	.400	.600	-.300	.500	.300	.300	.616	-.100	.600	.600	.700	1.000	1.000(**)	.900(*)	.900(*)	-.200
	Sig. (2-tailed)	.391	.624	.505	.285	.624	.391	.624	.624	.269	.873	.285	.285	.188	.	.	.037	.037	.747
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1s9	Correlation Coefficient	.500	.300	.400	.600	-.300	.500	.300	.300	.616	-.100	.600	.600	.700	1.000(**)	1.000	.900(*)	.900(*)	-.200
	Sig. (2-tailed)	.391	.624	.505	.285	.624	.391	.624	.624	.269	.873	.285	.285	.188	.	.	.037	.037	.747
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s10s9	Correlation Coefficient	.700	.400	.300	.700	-.100	.700	.100	.100	.359	-.500	.300	.300	.400	.900(*)	.900(*)	1.000	.700	-.500
	Sig. (2-tailed)	.188	.505	.624	.188	.873	.188	.873	.873	.553	.391	.624	.624	.505	.037	.037	.	.188	.391
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s100s9	Correlation Coefficient	.200	.100	.300	.300	-.400	.200	.400	.400	.872	.200	.500	.700	.900(*)	.900(*)	.900(*)	.700	1.000	-.100
	Sig. (2-tailed)	.747	.873	.624	.624	.505	.747	.505	.505	.054	.747	.391	.188	.037	.037	.037	.188	.	.873
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
s1000s9	Correlation Coefficient	-.100	.300	.600	-.600	.300	-.100	-.300	-.300	.205	.500	.600	.600	.300	-.200	-.200	-.500	-.100	1.000
	Sig. (2-tailed)	.873	.624	.285	.285	.624	.873	.624	.624	.741	.391	.285	.285	.624	.747	.747	.391	.873	.
	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

Correlation between uterus weight and isoflavonoid content in summer

Correlations

			pue	dz	gt	dze	gte	total	aglyco side	aglycone _glycone	T1000	P1000	P100
Spearman's rho	pue	Correlation Coefficient	1.000	.600	.200	-.700	-.700	.900(*)	.700	.462	-.600	-.200	-.700
		Sig. (2-tailed)	.	.285	.747	.188	.188	.037	.188	.434	.285	.747	.188
		N	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.600	1.000	.900(*)	-.100	-.100	.800	.100	.051	-.200	.600	-.500
		Sig. (2-tailed)	.285	.	.037	.873	.873	.104	.873	.935	.747	.285	.391
		N	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	.200	.900(*)	1.000	.300	.300	.500	-.200	-.103	.000	.800	-.300
		Sig. (2-tailed)	.747	.037	.	.624	.624	.391	.747	.870	1.000	.104	.624
		N	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.700	-.100	.300	1.000	1.000(**)	-.400	-.300	-.051	.100	.300	.200
		Sig. (2-tailed)	.188	.873	.624	.	.	.505	.624	.935	.873	.624	.747
		N	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.700	-.100	.300	1.000(**)	1.000	-.400	-.300	-.051	.100	.300	.200
		Sig. (2-tailed)	.188	.873	.624	.	.	.505	.624	.935	.873	.624	.747
		N	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.900(*)	.800	.500	-.400	-.400	1.000	.600	.308	-.500	.100	-.600
		Sig. (2-tailed)	.037	.104	.391	.505	.505	.	.285	.614	.391	.873	.285
		N	5	5	5	5	5	5	5	5	5	5	5
	aglycosid e	Correlation Coefficient	.700	.100	-.200	-.300	-.300	.600	1.000	.821	-.900(*)	-.700	-.700
		Sig. (2-tailed)	.188	.873	.747	.624	.624	.285	.	.089	.037	.188	.188
		N	5	5	5	5	5	5	5	5	5	5	5
	aglycone _glycone	Correlation Coefficient	.462	.051	-.103	-.051	-.051	.308	.821	1.000	-.975(**)	-.667	-.872
		Sig. (2-tailed)	.434	.935	.870	.935	.935	.614	.089	.	.005	.219	.054
		N	5	5	5	5	5	5	5	5	5	5	5
	T1000	Correlation Coefficient	-.600	-.200	.000	.100	.100	-.500	-.900(*)	-.975(**)	1.000	.600	.900(*)
		Sig. (2-tailed)	.285	.747	1.000	.873	.873	.391	.037	.005	.	.285	.037
		N	5	5	5	5	5	5	5	5	5	5	5
	P1000	Correlation Coefficient	-.200	.600	.800	.300	.300	.100	-.700	-.667	.600	1.000	.300

		Sig. (2-tailed)	.747	.285	.104	.624	.624	.873	.188	.219	.285	.	.624
		N	5	5	5	5	5	5	5	5	5	5	5
	P100	Correlation Coefficient	-.700	-.500	-.300	.200	.200	-.600	-.700	-.872	.900(*)	.300	1.000
		Sig. (2-tailed)	.188	.391	.624	.747	.747	.285	.188	.054	.037	.624	.
		N	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Correlation between uterus weight and isoflavonoid contents in rainy season

Correlations

			pue	dz	gt	dze	gte	total	aglycoside	aglycone _glycone	T1000	P1000	T100
Spearman's rho	pue	Correlation Coefficient	1.000	-.700	-.400	-.300	-.100	.900(*)	.300	.359	.200	-.700	-.400
		Sig. (2-tailed)	.	.188	.505	.624	.873	.037	.624	.553	.747	.188	.505
		N	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	-.700	1.000	-.100	-.200	-.100	-.900(*)	-.300	-.051	-.300	.200	-.100
		Sig. (2-tailed)	.188	.	.873	.747	.873	.037	.624	.935	.624	.747	.873
		N	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	-.400	-.100	1.000	.900(*)	.800	.000	.100	-.462	-.600	.100	.200
		Sig. (2-tailed)	.505	.873	.	.037	.104	1.000	.873	.434	.285	.873	.747
		N	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.300	-.200	.900(*)	1.000	.900(*)	.100	.500	-.051	-.300	.000	.500
		Sig. (2-tailed)	.624	.747	.037	.	.037	.873	.391	.935	.624	1.000	.391
		N	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.100	-.100	.800	.900(*)	1.000	.200	.600	.103	-.500	-.400	.200
		Sig. (2-tailed)	.873	.873	.104	.037	.	.747	.285	.870	.391	.505	.747
		N	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.900(*)	-.900(*)	.000	.100	.200	1.000	.400	.205	.100	-.600	-.200
		Sig. (2-tailed)	.037	.037	1.000	.873	.747	.	.505	.741	.873	.285	.747
		N	5	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	.300	-.300	.100	.500	.600	.400	1.000	.821	.300	-.500	.500
		Sig. (2-tailed)	.624	.624	.873	.391	.285	.505	.	.089	.624	.391	.391
		N	5	5	5	5	5	5	5	5	5	5	5
	aglycone _glycone	Correlation Coefficient	.359	-.051	-.462	-.051	.103	.205	.821	1.000	.564	-.462	.359
		Sig. (2-tailed)	.553	.935	.434	.935	.870	.741	.089	.	.322	.434	.553
		N	5	5	5	5	5	5	5	5	5	5	5
	T1000	Correlation Coefficient	.200	-.300	-.600	-.300	-.500	.100	.300	.564	1.000	.300	.600
		Sig. (2-tailed)	.747	.624	.285	.624	.391	.873	.624	.322	.	.624	.285
		N	5	5	5	5	5	5	5	5	5	5	5
	P1000	Correlation Coefficient	-.700	.200	.100	.000	-.400	-.600	-.500	-.462	.300	1.000	.500
		Sig. (2-tailed)	.188	.747	.873	1.000	.505	.285	.391	.434	.624	.	.391

	N	5	5	5	5	5	5	5	5	5	5	5
T100	Correlation Coefficient	-.400	-.100	.200	.500	.200	-.200	.500	.359	.600	.500	1.000
	Sig. (2-tailed)	.505	.873	.747	.391	.747	.747	.391	.553	.285	.391	.
	N	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).

Correlation between uterus weight and isoflavonoid contents in winter

Correlations

			pue	dz	gt	dze	gte	total	aglycoside	aglycone_glycone	T1000	P1000	P100
Spearman's rho	pue	Correlation Coefficient	1.000	.900(*)	.700	.300	.600	1.000(**)	-.600	-.600	.100	-.200	-.700
		Sig. (2-tailed)	.	.037	.188	.624	.285	.	.285	.285	.873	.747	.188
		N	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.900(*)	1.000	.900(*)	-.100	.800	.900(*)	-.800	-.800	.200	.000	-.900(*)
		Sig. (2-tailed)	.037	.	.037	.873	.104	.037	.104	.104	.747	1.000	.037
		N	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	.700	.900(*)	1.000	-.200	.600	.700	-.600	-.600	-.100	-.200	-1.000(**)
		Sig. (2-tailed)	.188	.037	.	.747	.285	.188	.285	.285	.873	.747	.000
		N	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	.300	-.100	-.200	1.000	-.500	.300	.500	.500	-.400	-.700	.200
		Sig. (2-tailed)	.624	.873	.747	.	.391	.624	.391	.391	.505	.188	.747
		N	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	.600	.800	.600	-.500	1.000	.600	-1.000(**)	-1.000(**)	.700	.600	-.600
		Sig. (2-tailed)	.285	.104	.285	.391	.	.285	.000	.000	.188	.285	.285
		N	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	1.000(**)	.900(*)	.700	.300	.600	1.000	-.600	-.600	.100	-.200	-.700
		Sig. (2-tailed)	.	.037	.188	.624	.285	.	.285	.285	.873	.747	.188
		N	5	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000	1.000(**)	-.700	-.600	.600
		Sig. (2-tailed)	.285	.104	.285	.391	.000	.285	.	.	.188	.285	.285
		N	5	5	5	5	5	5	5	5	5	5	5
	aglycone_glycone	Correlation Coefficient	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000(**)	1.000	-.700	-.600	.600
		Sig. (2-tailed)	.285	.104	.285	.391	.000	.285	.	.	.188	.285	.285
		N	5	5	5	5	5	5	5	5	5	5	5
	T1000	Correlation Coefficient	.100	.200	-.100	-.400	.700	.100	-.700	-.700	1.000	.900(*)	.100
		Sig. (2-tailed)	.873	.747	.873	.505	.188	.873	.188	.188	.	.037	.873
		N	5	5	5	5	5	5	5	5	5	5	5
	P1000	Correlation Coefficient	-.200	.000	-.200	-.700	.600	-.200	-.600	-.600	.900(*)	1.000	.200
		Sig. (2-tailed)	.747	1.000	.747	.188	.285	.747	.285	.285	.037	.	.747

	N	5	5	5	5	5	5	5	5	5	5	5
P100	Correlation Coefficient	-.700	-.900(*)	-1.000(**)	.200	-.600	-.700	.600	.600	.100	.200	1.000
	Sig. (2-tailed)	.188	.037	.000	.747	.285	.188	.285	.285	.873	.747	.
	N	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Correlation between cross section area of uterus tissue and gland number with isoflavonoid contents in summer

Correlations

			pue	dz	gt	dze	gte	total	aglyco side	aglycone _glycone	myo	endo	lumen	gland
Spearman's rho	pue	Correlation Coefficient	1.000	.600	.200	-.700	-.700	.900(*)	.700	.462	.200	-.308	-.900(*)	.100
		Sig. (2-tailed)	.	.285	.747	.188	.188	.037	.188	.434	.747	.614	.037	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.600	1.000	.900(*)	-.100	-.100	.800	.100	.051	-.500	-.872	-.300	-.300
		Sig. (2-tailed)	.285	.	.037	.873	.873	.104	.873	.935	.391	.054	.624	.624
		N	5	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	.200	.900(*)	1.000	.300	.300	.500	-.200	-.103	-.700	-.872	.100	-.400
		Sig. (2-tailed)	.747	.037	.	.624	.624	.391	.747	.870	.188	.054	.873	.505
		N	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.700	-.100	.300	1.000	1.000(**)	-.400	-.300	-.051	-.200	.103	.600	.100
		Sig. (2-tailed)	.188	.873	.624	.	.	.505	.624	.935	.747	.870	.285	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.700	-.100	.300	1.000(**)	1.000	-.400	-.300	-.051	-.200	.103	.600	.100
		Sig. (2-tailed)	.188	.873	.624	.	.	.505	.624	.935	.747	.870	.285	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.900(*)	.800	.500	-.400	-.400	1.000	.600	.308	.100	-.462	-.800	.200
		Sig. (2-tailed)	.037	.104	.391	.505	.505	.	.285	.614	.873	.434	.104	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	.700	.100	-.200	-.300	-.300	.600	1.000	.821	.700	.359	-.900(*)	.600
		Sig. (2-tailed)	.188	.873	.747	.624	.624	.285	.	.089	.188	.553	.037	.285
		N	5	5	5	5	5	5	5	5	5	5	5	5
	aglycone_ glycone	Correlation Coefficient	.462	.051	-.103	-.051	-.051	.308	.821	1.000	.359	.289	-.564	.205
		Sig. (2-tailed)	.434	.935	.870	.935	.935	.614	.089	.	.553	.637	.322	.741
		N	5	5	5	5	5	5	5	5	5	5	5	5
	myo	Correlation Coefficient	.200	-.500	-.700	-.200	-.200	.100	.700	.359	1.000	.821	-.600	.900(*)
		Sig. (2-tailed)	.747	.391	.188	.747	.747	.873	.188	.553	.	.089	.285	.037
		N	5	5	5	5	5	5	5	5	5	5	5	5
	endo	Correlation Coefficient	-.308	-.872	-.872	.103	.103	-.462	.359	.289	.821	1.000	-.103	.667

		Sig. (2-tailed)	.614	.054	.054	.870	.870	.434	.553	.637	.089	.	.870	.219
		N	5	5	5	5	5	5	5	5	5	5	5	5
	lumen	Correlation Coefficient	-.900(*)	-.300	.100	.600	.600	-.800	-.900(*)	-.564	-.600	-.103	1.000	-.500
		Sig. (2-tailed)	.037	.624	.873	.285	.285	.104	.037	.322	.285	.870	.	.391
		N	5	5	5	5	5	5	5	5	5	5	5	5
	gland	Correlation Coefficient	.100	-.300	-.400	.100	.100	.200	.600	.205	.900(*)	.667	-.500	1.000
		Sig. (2-tailed)	.873	.624	.505	.873	.873	.747	.285	.741	.037	.219	.391	.
		N	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Correlation between cross section area of uterus tissue and gland number with isoflavonoid contents in rainy season

Correlations

			pue	dz	gt	dze	gte	total	aglyco side	aglycone _glycone	myo	endo	lumen	gland
Spearman's rho	pue	Correlation Coefficient	1.000	-.700	-.400	-.300	-.100	.900(*)	.300	.359	-.600	-.600	-.600	-.100
		Sig. (2-tailed)	.	.188	.505	.624	.873	.037	.624	.553	.285	.285	.285	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	-.700	1.000	-.100	-.200	-.100	-.900(*)	-.300	-.051	.900(*)	.900(*)	.900(*)	.500
		Sig. (2-tailed)	.188	.	.873	.747	.873	.037	.624	.935	.037	.037	.037	.391
		N	5	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	-.400	-.100	1.000	.900(*)	.800	.000	.100	-.462	.200	.200	.200	.200
		Sig. (2-tailed)	.505	.873	.	.037	.104	1.000	.873	.434	.747	.747	.747	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.300	-.200	.900(*)	1.000	.900(*)	.100	.500	-.051	.100	.100	.100	-.100
		Sig. (2-tailed)	.624	.747	.037	.	.037	.873	.391	.935	.873	.873	.873	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.100	-.100	.800	.900(*)	1.000	.200	.600	.103	.300	.300	.300	.200
		Sig. (2-tailed)	.873	.873	.104	.037	.	.747	.285	.870	.624	.624	.624	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.900(*)	-.900(*)	.000	.100	.200	1.000	.400	.205	-.700	-.700	-.700	-.200
		Sig. (2-tailed)	.037	.037	1.000	.873	.747	.	.505	.741	.188	.188	.188	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	.300	-.300	.100	.500	.600	.400	1.000	.821	-.100	-.100	-.100	-.400
		Sig. (2-tailed)	.624	.624	.873	.391	.285	.505	.	.089	.873	.873	.873	.505
		N	5	5	5	5	5	5	5	5	5	5	5	5
	aglycone_ glycone	Correlation Coefficient	.359	-.051	-.462	-.051	.103	.205	.821	1.000	-.051	-.051	-.051	-.410
		Sig. (2-tailed)	.553	.935	.434	.935	.870	.741	.089	.	.935	.935	.935	.493
		N	5	5	5	5	5	5	5	5	5	5	5	5
	myo	Correlation Coefficient	-.600	.900(*)	.200	.100	.300	-.700	-.100	-.051	1.000	1.000(**)	1.000(**)	.829(*)
		Sig. (2-tailed)	.285	.037	.747	.873	.624	.188	.873	.935	.	.	.	.042
		N	5	5	5	5	5	5	5	5	6	6	6	6
	endo	Correlation Coefficient	-.600	.900(*)	.200	.100	.300	-.700	-.100	-.051	1.000(**)	1.000	1.000(**)	.829(*)
		Sig. (2-tailed)	.285	.037	.747	.873	.624	.188	.873	.935	.	.	.	.042

	N	5	5	5	5	5	5	5	5	6	6	6	6
lumen	Correlation Coefficient	-.600	.900(*)	.200	.100	.300	-.700	-.100	-.051	1.000(**)	1.000(**)	1.000	.829(*)
	Sig. (2-tailed)	.285	.037	.747	.873	.624	.188	.873	.935	.	.	.	.042
	N	5	5	5	5	5	5	5	5	6	6	6	6
gland	Correlation Coefficient	-.100	.500	.200	-.100	.200	-.200	-.400	-.410	.829(*)	.829(*)	.829(*)	1.000
	Sig. (2-tailed)	.873	.391	.747	.873	.747	.747	.505	.493	.042	.042	.042	.
	N	5	5	5	5	5	5	5	5	6	6	6	6

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Correlation between cross section area of uterus tissue and gland number with isoflavonoid contents in winter

Correlations

			pue	dz	gt	dze	gte	total	aglycoside	aglycone_glycone	myo	endo	lumen	gland
Spearman's rho	pue	Correlation Coefficient	1.000	.900(*)	.700	.300	.600	1.000(**)	-.600	-.600	.300	-.100	.600	.000
		Sig. (2-tailed)	.	.037	.188	.624	.285	.	.285	.285	.624	.873	.285	1.000
		N	5	5	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.900(*)	1.000	.900(*)	-.100	.800	.900(*)	-.800	-.800	-.100	-.200	.700	.200
		Sig. (2-tailed)	.037	.	.037	.873	.104	.037	.104	.104	.873	.747	.188	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	.700	.900(*)	1.000	-.200	.600	.700	-.600	-.600	-.200	-.500	.500	.600
		Sig. (2-tailed)	.188	.037	.	.747	.285	.188	.285	.285	.747	.391	.391	.285
		N	5	5	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	.300	-.100	-.200	1.000	-.500	.300	.500	.500	1.000(**)	.100	-.100	-.100
		Sig. (2-tailed)	.624	.873	.747	.	.391	.624	.391	.391	.	.873	.873	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	.600	.800	.600	-.500	1.000	.600	-1.000(**)	-1.000(**)	-.500	.200	.800	-.200
		Sig. (2-tailed)	.285	.104	.285	.391	.	.285	.000	.000	.391	.747	.104	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	1.000(**)	.900(*)	.700	.300	.600	1.000	-.600	-.600	.300	-.100	.600	.000
		Sig. (2-tailed)	.	.037	.188	.624	.285	.	.285	.285	.624	.873	.285	1.000
		N	5	5	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000	1.000(**)	.500	-.200	-.800	.200
		Sig. (2-tailed)	.285	.104	.285	.391	.000	.285	.	.	.391	.747	.104	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5
	aglycone_glycone	Correlation Coefficient	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000(**)	1.000	.500	-.200	-.800	.200
		Sig. (2-tailed)	.285	.104	.285	.391	.000	.285	.	.	.391	.747	.104	.747
		N	5	5	5	5	5	5	5	5	5	5	5	5
	myo	Correlation Coefficient	.300	-.100	-.200	1.000(**)	-.500	.300	.500	.500	1.000	.100	-.100	-.100
		Sig. (2-tailed)	.624	.873	.747	.	.391	.624	.391	.391	.	.873	.873	.873
		N	5	5	5	5	5	5	5	5	5	5	5	5
	endo	Correlation Coefficient	-.100	-.200	-.500	.100	.200	-.100	-.200	-.200	.100	1.000	.500	-.800
		Sig. (2-tailed)	.873	.747	.391	.873	.747	.873	.747	.747	.873	.	.391	.104

	N	5	5	5	5	5	5	5	5	5	5	5	5
lumen	Correlation Coefficient	.600	.700	.500	-.100	.800	.600	-.800	-.800	-.100	.500	1.000	-.200
	Sig. (2-tailed)	.285	.188	.391	.873	.104	.285	.104	.104	.873	.391	.	.747
	N	5	5	5	5	5	5	5	5	5	5	5	5
gland	Correlation Coefficient	.000	.200	.600	-.100	-.200	.000	.200	.200	-.100	-.800	-.200	1.000
	Sig. (2-tailed)	1.000	.747	.285	.873	.747	1.000	.747	.747	.873	.104	.747	.
	N	5	5	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Correlation between the length of cornified day and isoflavonoid content in summer

			pue	dz	gt	dze	gte	total	aglycoside	aglycone_ glycone	conc100	conc1000
Spearman's rho	pue	Correlation Coefficient	1.000	.600	.200	-.700	-.700	.900(*)	.700	.462	.289	-.527
		Sig. (2-tailed)	.	.285	.747	.188	.188	.037	.188	.434	.638	.361
		N	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.600	1.000	.900(*)	-.100	-.100	.800	.100	.051	-.289	-.211
		Sig. (2-tailed)	.285	.	.037	.873	.873	.104	.873	.935	.638	.734
		N	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	.200	.900(*)	1.000	.300	.300	.500	-.200	-.103	-.577	-.053
		Sig. (2-tailed)	.747	.037	.	.624	.624	.391	.747	.870	.308	.933
		N	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.700	-.100	.300	1.000	1.000(**)	-.400	-.300	-.051	-.866	.105
		Sig. (2-tailed)	.188	.873	.624	.	.	.505	.624	.935	.058	.866
		N	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.700	-.100	.300	1.000(**)	1.000	-.400	-.300	-.051	-.866	.105
		Sig. (2-tailed)	.188	.873	.624	.	.	.505	.624	.935	.058	.866
		N	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.900(*)	.800	.500	-.400	-.400	1.000	.600	.308	.000	-.369
		Sig. (2-tailed)	.037	.104	.391	.505	.505	.	.285	.614	1.000	.541
		N	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	.700	.100	-.200	-.300	-.300	.600	1.000	.821	.000	-.738
		Sig. (2-tailed)	.188	.873	.747	.624	.624	.285	.	.089	1.000	.155
		N	5	5	5	5	5	5	5	5	5	5
	aglycone_ glycone	Correlation Coefficient	.462	.051	-.103	-.051	-.051	.308	.821	1.000	-.296	-.973(**)
		Sig. (2-tailed)	.434	.935	.870	.935	.935	.614	.089	.	.628	.005
		N	5	5	5	5	5	5	5	5	5	5
	conc100	Correlation Coefficient	.289	-.289	-.577	-.866	-.866	.000	.000	-.296	1.000	.304
		Sig. (2-tailed)	.638	.638	.308	.058	.058	1.000	1.000	.628	.	.619
		N	5	5	5	5	5	5	5	5	5	5
	conc1000	Correlation Coefficient	-.527	-.211	-.053	.105	.105	-.369	-.738	-.973(**)	.304	1.000
		Sig. (2-tailed)	.361	.734	.933	.866	.866	.541	.155	.005	.619	.
		N	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed). /** Correlation is significant at the 0.01 level (2-tailed).

Correlation between the length of cornified day and isoflavonoid content in rainy season

			pue	dz	gt	dze	gte	total	aglycoside	aglycone_glycone	conc100	conc1000
Spearman's rho	pue	Correlation Coefficient	1.000	-.700	-.400	-.300	-.100	.900(*)	.300	.359	-.224	.447
		Sig. (2-tailed)	.	.188	.505	.624	.873	.037	.624	.553	.718	.450
		N	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	-.700	1.000	-.100	-.200	-.100	-.900(*)	-.300	-.051	.224	-.671
		Sig. (2-tailed)	.188	.	.873	.747	.873	.037	.624	.935	.718	.215
		N	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	-.400	-.100	1.000	.900(*)	.800	.000	.100	-.462	.224	-.447
		Sig. (2-tailed)	.505	.873	.	.037	.104	1.000	.873	.434	.718	.450
		N	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	-.300	-.200	.900(*)	1.000	.900(*)	.100	.500	-.051	-.224	-.224
		Sig. (2-tailed)	.624	.747	.037	.	.037	.873	.391	.935	.718	.718
		N	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	-.100	-.100	.800	.900(*)	1.000	.200	.600	.103	-.224	-.447
		Sig. (2-tailed)	.873	.873	.104	.037	.	.747	.285	.870	.718	.450
		N	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	.900(*)	-.900(*)	.000	.100	.200	1.000	.400	.205	-.224	.447
		Sig. (2-tailed)	.037	.037	1.000	.873	.747	.	.505	.741	.718	.450
		N	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	.300	-.300	.100	.500	.600	.400	1.000	.821	-.894(*)	.224
		Sig. (2-tailed)	.624	.624	.873	.391	.285	.505	.	.089	.041	.718
		N	5	5	5	5	5	5	5	5	5	5
	aglycone_ glycone	Correlation Coefficient	.359	-.051	-.462	-.051	.103	.205	.821	1.000	-.918(*)	.344
		Sig. (2-tailed)	.553	.935	.434	.935	.870	.741	.089	.	.028	.571
		N	5	5	5	5	5	5	5	5	5	5
	conc100	Correlation Coefficient	-.224	.224	.224	-.224	-.224	-.224	-.894(*)	-.918(*)	1.000	-.500
		Sig. (2-tailed)	.718	.718	.718	.718	.718	.718	.041	.028	.	.391
		N	5	5	5	5	5	5	5	5	5	5
	conc1000	Correlation Coefficient	.447	-.671	-.447	-.224	-.447	.447	.224	.344	-.500	1.000
		Sig. (2-tailed)	.450	.215	.450	.718	.450	.450	.718	.571	.391	.
		N	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed).

Correlation between the length of cornified day and isoflavonoid content in winter

			pue	dz	gt	dze	gte	total	aglycoside	aglycone_glycone	conc100	conc1000
Spearman's rho	pue	Correlation Coefficient	1.000	.900(*)	.700	.300	.600	1.000(**)	-.600	-.600	-.354	.
		Sig. (2-tailed)	.	.037	.188	.624	.285	.	.285	.285	.559	.
		N	5	5	5	5	5	5	5	5	5	5
	dz	Correlation Coefficient	.900(*)	1.000	.900(*)	-.100	.800	.900(*)	-.800	-.800	.000	.
		Sig. (2-tailed)	.037	.	.037	.873	.104	.037	.104	.104	1.000	.
		N	5	5	5	5	5	5	5	5	5	5
	gt	Correlation Coefficient	.700	.900(*)	1.000	-.200	.600	.700	-.600	-.600	.354	.
		Sig. (2-tailed)	.188	.037	.	.747	.285	.188	.285	.285	.559	.
		N	5	5	5	5	5	5	5	5	5	5
	dze	Correlation Coefficient	.300	-.100	-.200	1.000	-.500	.300	.500	.500	-.707	.
		Sig. (2-tailed)	.624	.873	.747	.	.391	.624	.391	.391	.182	.
		N	5	5	5	5	5	5	5	5	5	5
	gte	Correlation Coefficient	.600	.800	.600	-.500	1.000	.600	-1.000(**)	-1.000(**)	.000	.
		Sig. (2-tailed)	.285	.104	.285	.391	.	.285	.000	.000	1.000	.
		N	5	5	5	5	5	5	5	5	5	5
	total	Correlation Coefficient	1.000(**)	.900(*)	.700	.300	.600	1.000	-.600	-.600	-.354	.
		Sig. (2-tailed)	.	.037	.188	.624	.285	.	.285	.285	.559	.
		N	5	5	5	5	5	5	5	5	5	5
	aglycoside	Correlation Coefficient	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000	1.000(**)	.000	.
		Sig. (2-tailed)	.285	.104	.285	.391	.000	.285	.	.	1.000	.
		N	5	5	5	5	5	5	5	5	5	5
	aglycone_ glycone	Correlation Coefficient	-.600	-.800	-.600	.500	-1.000(**)	-.600	1.000(**)	1.000	.000	.
		Sig. (2-tailed)	.285	.104	.285	.391	.000	.285	.	.	1.000	.
		N	5	5	5	5	5	5	5	5	5	5
	conc100	Correlation Coefficient	-.354	.000	.354	-.707	.000	-.354	.000	.000	1.000	.
		Sig. (2-tailed)	.559	1.000	.559	.182	1.000	.559	1.000	1.000	.	.
		N	5	5	5	5	5	5	5	5	5	5
	conc1000	Correlation Coefficient	.	.	.	.	.	.	.	.	.	.
		Sig. (2-tailed)	.	.	.	.	.	.	.	.	.	.
		N	5	5	5	5	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

BIOGRAPHY

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