

S1 Supporting Information Contents Page

Title: Antioxidant and tyrosinase inhibitory activities of flavonoids from *Trifolium nigrescens* subsp. *petrisavi*

Authors: Ozlem Demirkiran^{a,†}, Temine Sabudak^b, Mehmet Öztürk^c, Gülaçtı Topçu^d

Addresses:

^a*Department of Pharmacognosy, Faculty of Pharmacy, Trakya University, 22030, Edirne, Turkey*

^b*Department of Chemistry, Faculty of Science and Letters, Namik Kemal University, 59860, Tekirdag, Turkey*

^c*Department of Chemistry, Faculty of Science, Mugla Sıtkı Koçman University, 48121, Mugla, Turkey*

^d*Department of Pharmacognosy, Faculty of Pharmacy, Bezmialem Vakıf University, 34093, Istanbul, Turkey*

Corresponding author contact details: Tel. +90-284-2359592-1232. Fax: +90-284-2361544. E-mail: ozlemdemirkiran@yahoo.com, ozlemdemirkiran@trakya.edu.tr

Contents:

S2 ^1H NMR Spectrum of compound **1** in CD_3OD (300 MHz)

S3 HMQC Spectrum of compound **1** in CD_3OD (300 MHz)

S4 HMBC Spectrum of compound **1** in CD_3OD (300 MHz)

S5 COSY Spectrum of compound **1** in CD_3OD (300 MHz)

S6 NOESY Spectrum of compound **1** in CD_3OD (300 MHz)

S2 ^1H NMR Spectrum of compound **1** in CD_3OD (300 MHz)

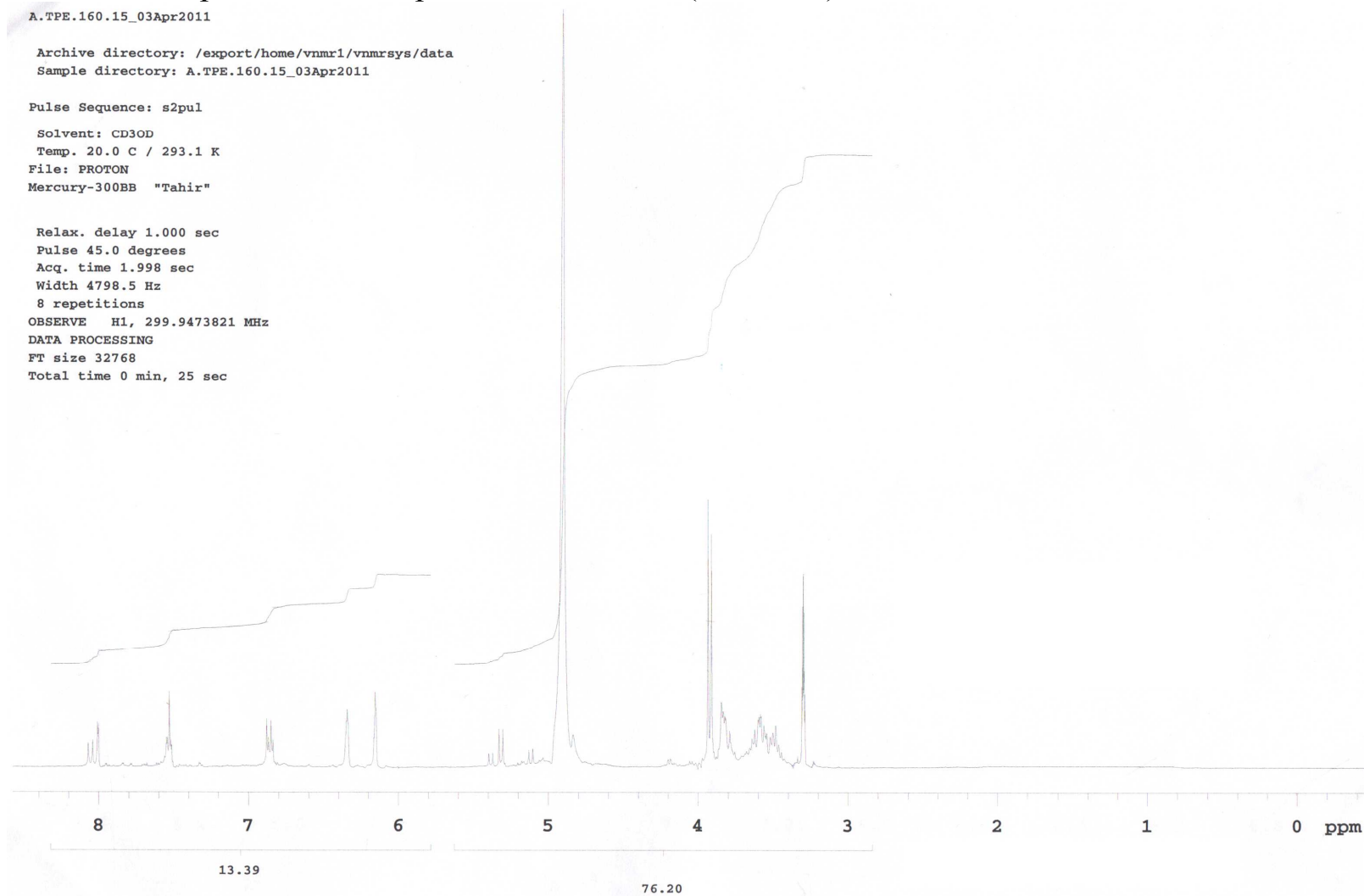
A.TPE.160.15_03Apr2011

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: A.TPE.160.15_03Apr2011

Pulse Sequence: s2pul

Solvent: CD_3OD
Temp. 20.0 C / 293.1 K
File: PROTON
Mercury-300BB "Tahir"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.998 sec
Width 4798.5 Hz
8 repetitions
OBSERVE H1, 299.9473821 MHz
DATA PROCESSING
FT size 32768
Total time 0 min, 25 sec



S3 HMQC Spectrum of compound **1** in CD₃OD (300 MHz)

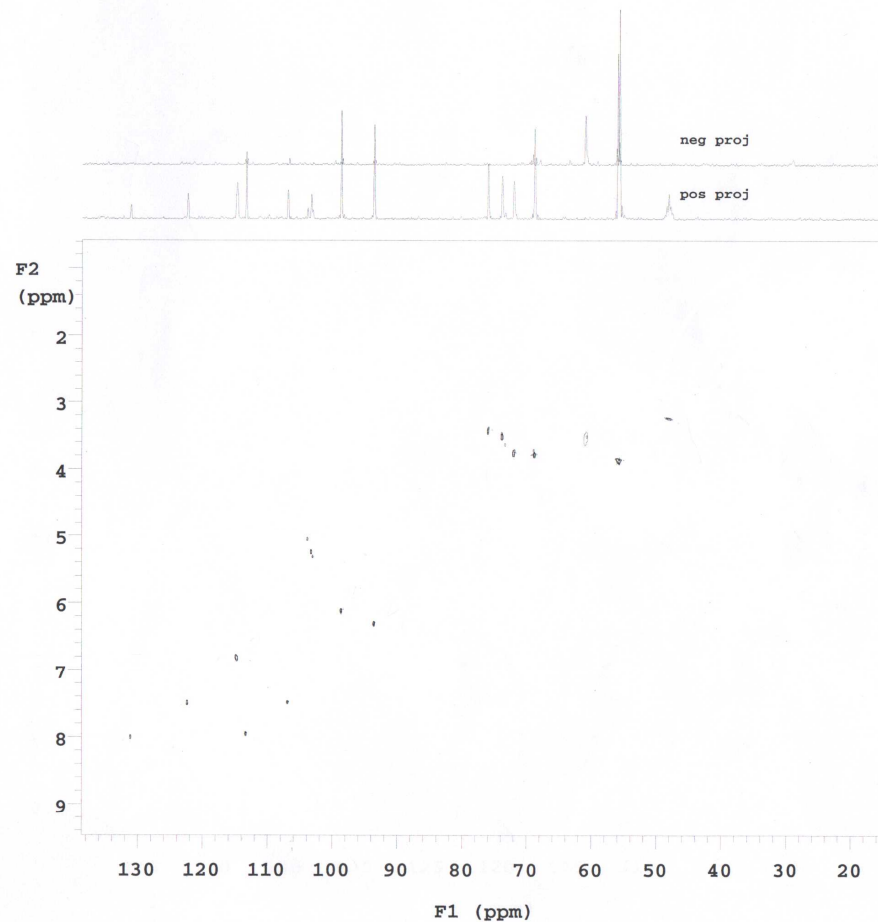
A.TPE.160.15_03Apr2011

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: A.TPE.160.15_03Apr2011

Pulse Sequence: gHSQC

Solvent: CD3OD
Temp. 20.0 C / 293.1 K
File: gHSQC
Mercury-300BB "Tahir"

Relax. delay 1.000 sec
Acq. time 0.213 sec
Width 4798.5 Hz
2D Width 12820.5 Hz
32 repetitions
2 x 512 increments
OBSERVE H1, 299.9473821 MHz
DECOUPLE C13, 75.4274678 MHz
Power 47 dB
on during acquisition
off during delay
GARP-1 modulated
DATA PROCESSING
Gauss apodization 0.099 sec
F1 DATA PROCESSING
Gauss apodization 0.074 sec
FT size 2048 x 8192
Total time 12 hr, 16 min, 11 sec



S4 HMBC Spectrum of compound **1** in CD₃OD (300 MHz)

A.TPE.160.15_03Apr2011

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: A.TPE.160.15_03Apr2011

Pulse Sequence: gHMBC

Solvent: CD3OD

Temp. 20.0 C / 293.1 K

File: gHMBC

Mercury-300BB "Tahir"

Relax. delay 1.000 sec

Acq. time 0.213 sec

Width 4798.5 Hz

2D Width 18115.9 Hz

32 repetitions

512 increments

OBSERVE H1, 299.9473821 MHz

DATA PROCESSING

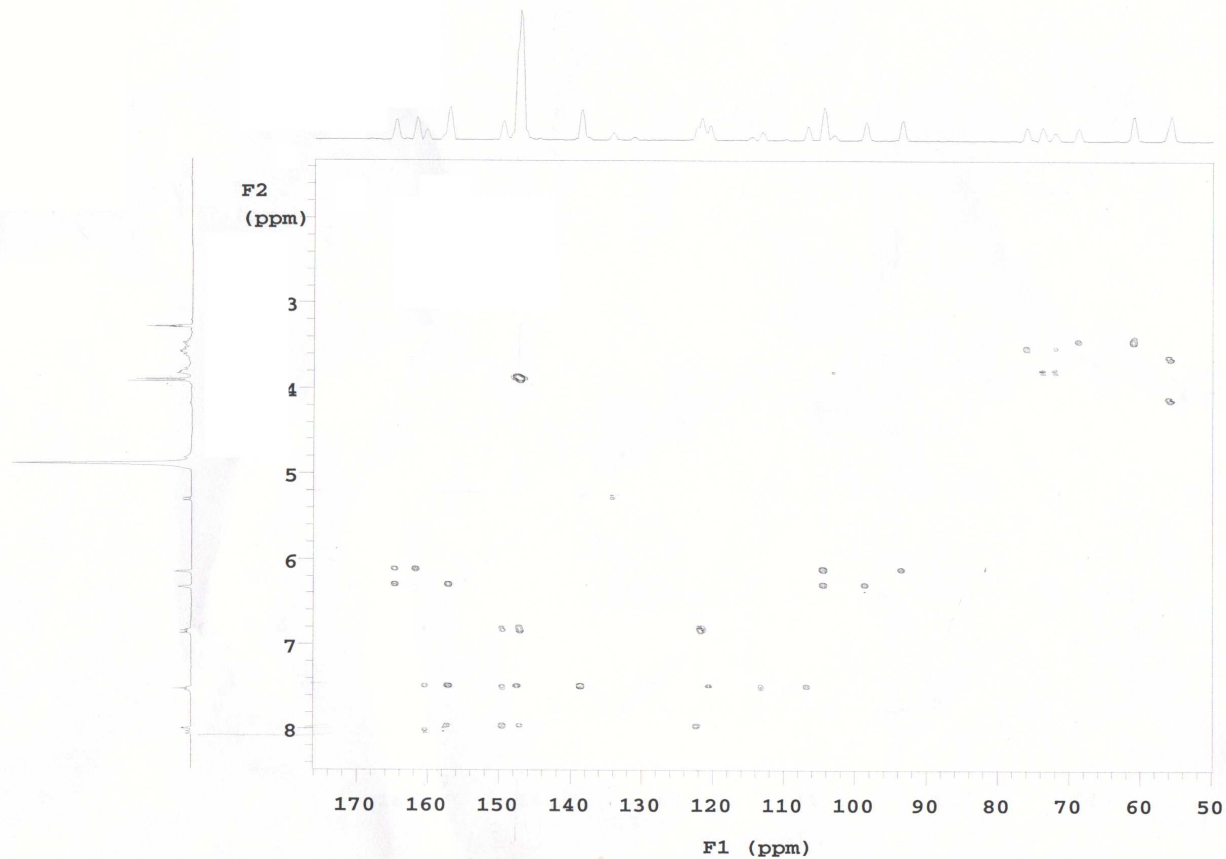
Sine bell 0.107 sec

FL DATA PROCESSING

Sine bell 0.014 sec

FT size 2048 x 2048

Total time 6 hr, 10 min, 34 sec



S5 COSY Spectrum of compound 1 in CD₃OD (300 MHz)

A.TPE.160.15_03Apr2011

```
Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: A.TPE.160.15_03Apr2011
```

Pulse Sequence: gCOSY

Solvent: CD3OD

Temp. 20.0 C / 293.1 K

File: gCOSY

Mercury-300BB "Tahir"

Relax. delay 1.000 sec

Acq. time 0.213 sec

Width 4798.5 Hz

2D Width 4798.5 Hz

2 repetitions

512 increments

OBSERVE H1, 299.9473821 MHz

DATA PROCESSING

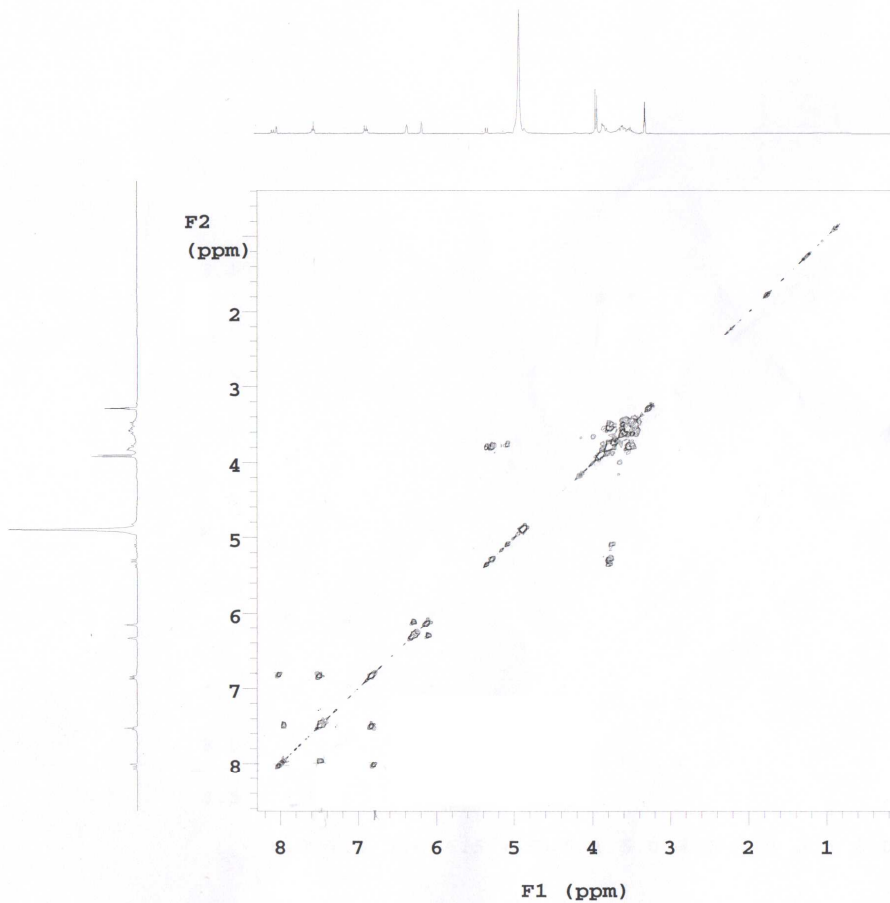
Sq. sine bell 0.107 sec

F1 DATA PROCESSING

Sq. sine bell 0.107 sec

FT size 4096 x 4096

Total time 25 min, 42 sec



S6 NOESY Spectrum of compound **1** in CD₃OD (300 MHz)

A.TPE.160.15_03Apr2011

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: A.TPE.160.15_03Apr2011

Pulse Sequence: NOESY

Solvent: CD3OD
Temp. 20.0 C / 293.1 K
File: NOESY
Mercury-300BB "Tahir"

Relax. delay 1.000 sec
Mixing 0.200 sec
Acq. time 0.213 sec
Width 4798.5 Hz
2D Width 4798.5 Hz
16 repetitions
2 x 256 increments
OBSERVE H1, 299.9473821 MHz
DATA PROCESSING
Gauss apodization 0.099 sec
F1 DATA PROCESSING
Gauss apodization 0.049 sec
FT size 2048 x 2048
Total time 3 hr, 25 min, 31 sec

