Supporting Information

Chemical Composition and Antimicrobial Activity of Essential Oils from the Aerial Parts of *Pinus eldarica* Grown in Northwestern Iran

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1) Gas chromatogram from the GC/MS analysis of the pollen EOs

GCMS Chromatogram
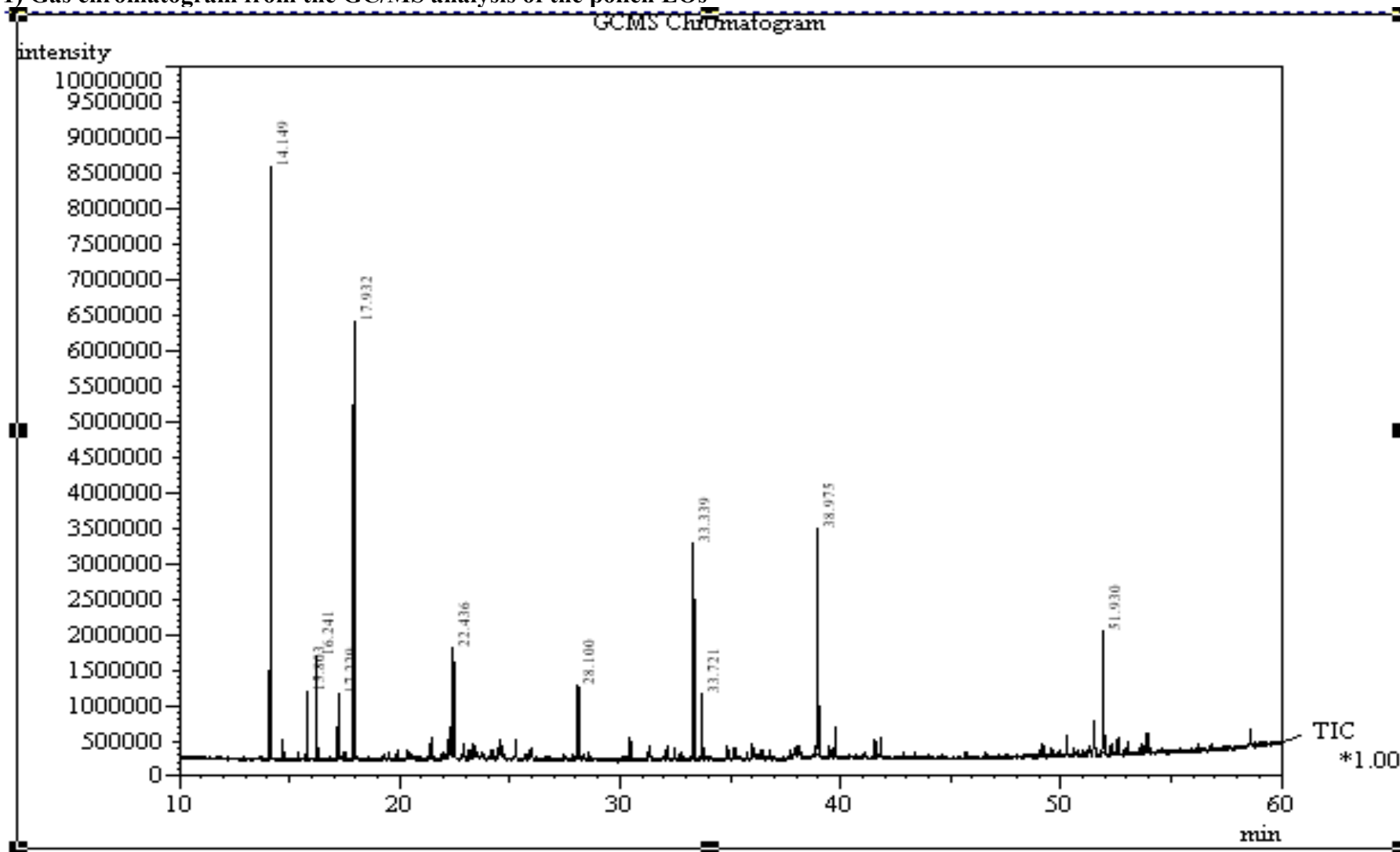
1-1) Condition and method

```
[GC-17A Ver.3]
Inj. Initial Temp.        :270.00 °C
Interface Temp.          :300.00 °C
Control Mode             :Split
Column Inlet Pressure    :150.0 kPa
Column Flow              :1.3 mL/min
Linear Velocity          :29.6 cm/sec
Split Ratio              :8
Total Flow               :17.4 mL/min
Ready Check[COL(Oven)]                    :ON
Ready Check[INJ]         :ON
Ready Check[DET(Interface)]               :ON
Ready Check[AUX1]       :OFF
Ready Check[AUX2]       :OFF
Ready Check[AUX3]       :OFF
Ready Check[AUX4]       :OFF
Ready Check[AUX5]       :OFF
Ready Check[Carrier Gas Flow(SPL)]        :ON
Ready Check[Wait]       :OFF
Equilibrium Time        :1.00 min
Oven Temp. Program       :
Rate                Temperature(°C)        Keep Time(min)
-                   50.0                   2.00
4.0                 300.0                  6.00


Pressure Program         :
Rate                Pressure(kPa)          Keep Time(min)
-                   150.0                  0.00


AUX1 Program             :
Rate                Temperature(°C)        Keep Time(min)
-                   0.0                    0.00



[GC Program]

[GCMS-QP5050]
Acquisition Mode    :Scan
Interface Temp.     :300.00 °C
Solvent Cut Time    :2.00 min
Detector Gain Mode  :Relative
Detector Gain       :0.00 kV
Threshold           :1000
Sampling Rate       :0.50 sec

[Scan Group]
No.        Start Time(min)    End Time(min)    Start m/z    End m/z    Scan Speed
 1         5.00               70.00            30.00        600.00     2000

Sample Inlet Unit    :GC

[MS Program]
Use MS Program       :OFF
```
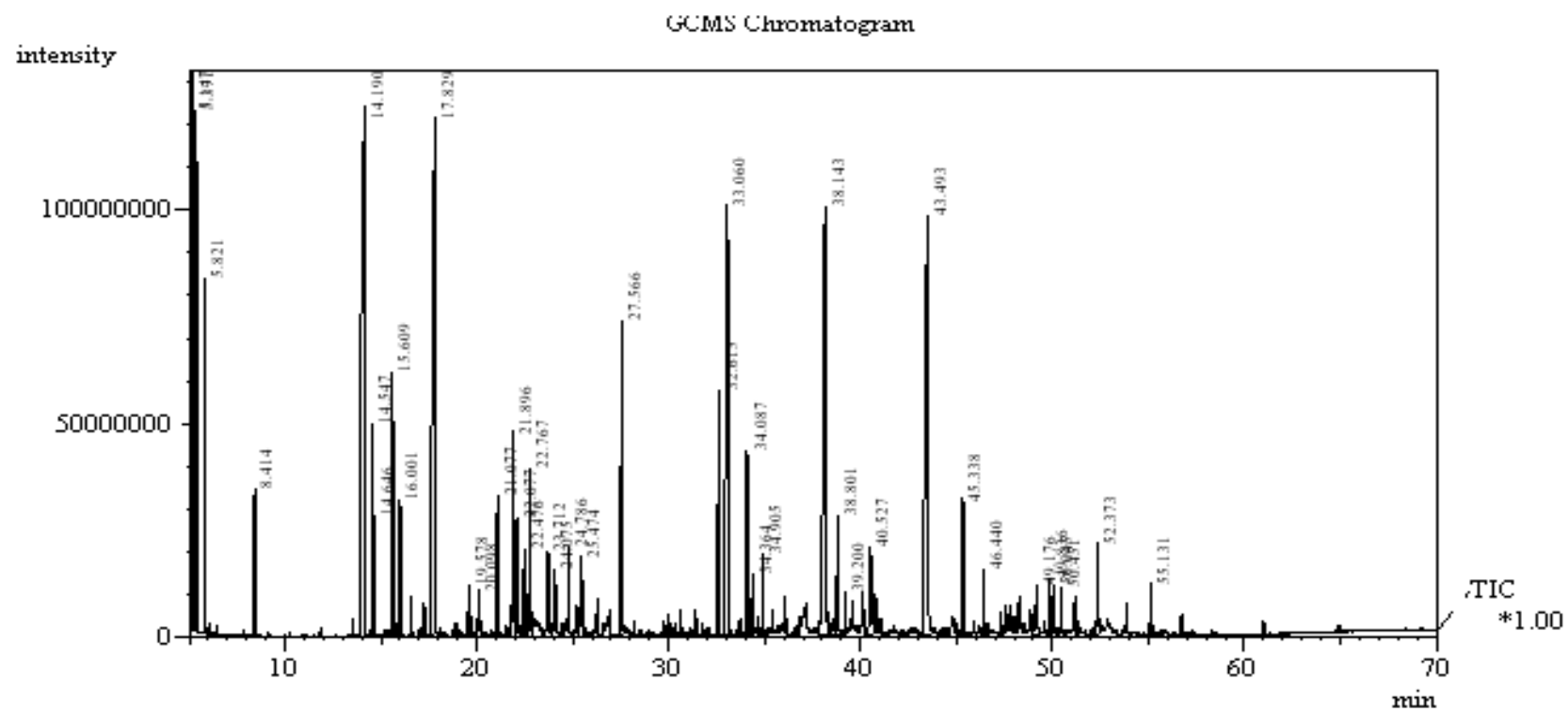
2) Gas chromatogram from the GC/MS analysis of the bark EOs

GCMS Chromatogram

2-1) Condition and method

GCMS Method

```
[Comment]

[GC-17A Ver.3]
Inj. Initial Temp.          :270.00 °C
Interface Temp.             :300.00 °C
Control Mode                :Split
Column Inlet Pressure       :150.0 kPa
Column Flow                 :1.3 mL/min
Linear Velocity             :29.6 cm/sec
Split Ratio                 :8
Total Flow                  :17.4 mL/min
Ready Check[COL(Oven)]                      :ON
Ready Check[INJ]            :ON
Ready Check[DET(Interface)]                 :ON
Ready Check[AUX1]          :OFF
Ready Check[AUX2]          :OFF
Ready Check[AUX3]          :OFF
Ready Check[AUX4]          :OFF
Ready Check[AUX5]          :OFF
Ready Check[Carrier Gas Flow(SPL)]          :ON
Ready Check[Wait]          :OFF
Equilibrium Time           :1.00 min
Oven Temp. Program         :
Rate              Temperature(°C)      Keep Time(min)
-                 50.0                 2.00
4.0               300.0                6.00

Pressure Program           :
Rate              Pressure(kPa)        Keep Time(min)
-                 150.0                0.00

AUX1 Program               :
Rate              Temperature(°C)      Keep Time(min)
-                 0.0                  0.00


[GC Program]

[GCMS-QP5050]
Acquisition Mode           :Scan
Interface Temp.            :300.00 °C
Solvent Cut Time           :2.00 min
Detector Gain Mode         :Relative
Detector Gain              :0.00 kV
Threshold                  :1000
Sampling Rate              :0.50 sec

[Scan Group]
No.       Start Time(min)   End Time(min)   Start m/z   End m/z    Scan Speed
 1        5.00              70.00           30.00       600.00     2000

Sample Inlet Unit          :GC

[MS Program]
Use MS Program             :OFF
```
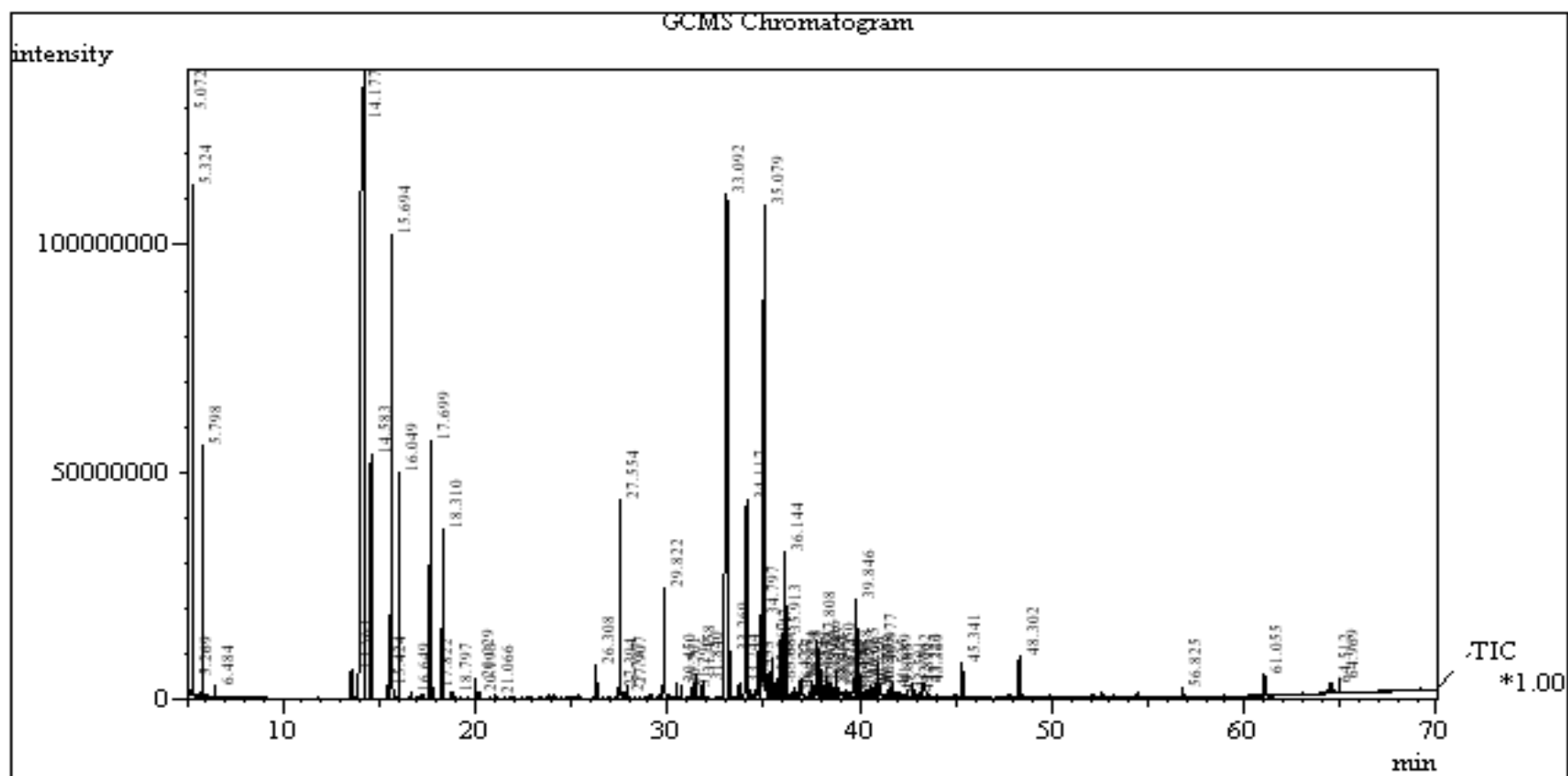
3) Gas chromatogram from the GC/MS analysis of the needle EOs

GCMS Chromatogram

3-1) Condition and method

GCMS Method

[Comment]

[GC-17A Ver.3]
Inj. Initial Temp.   :270.00 °C
Interface Temp.   :300.00 °C
Control Mode   :Split
Column Inlet Pressure   :150.0 kPa
Column Flow   :1.3 mL/min
Linear Velocity   :29.6 cm/sec
Split Ratio   :8
Total Flow   :17.4 mL/min
Ready Check[COL(Oven)]   :ON
Ready Check[INJ]   :ON
Ready Check[DET(Interface)]   :ON
Ready Check[AUX1]   :OFF
Ready Check[AUX2]   :OFF
Ready Check[AUX3]   :OFF
Ready Check[AUX4]   :OFF
Ready Check[AUX5]   :OFF
Ready Check[Carrier Gas Flow(SPL)]   :ON
Ready Check[Wait]   :OFF
Equilibrium Time   :1.00 min
Oven Temp. Program   :

Rate	Temperature(°C)	Keep Time(min)
-	50.0	2.00
4.0	300.0	6.00

Pressure Program   :

Rate	Pressure(kPa)	Keep Time(min)
-	150.0	0.00

AUX1 Program   :

Rate	Temperature(°C)	Keep Time(min)
-	0.0	0.00

[GC Program]

[GCMS-QP5050]
Acquisition Mode   :Scan
Interface Temp.   :300.00 °C
Solvent Cut Time   :2.00 min
Detector Gain Mode   :Relative
Detector Gain   :0.00 kV
Threshold   :1000
Sampling Rate   :0.50 sec

[Scan Group]

No.	Start Time(min)	End Time(min)	Start m/z	End m/z	Scan Speed
1	5.00	70.00	30.00	600.00	2000

Sample Inlet Unit   :GC

[MS Program]
Use MS Program   :OFF