

Table S1. The concentration ($\mu\text{g/g}$ DW) of volatile compounds in *Taraxacum* leaves(A) and roots(B)

[illegible]

	A (in leaves)							B (in roots)						
	'TK-H'	'TK-Y'	'TK-A'	'A17'	'A44'	'PZ'	'YS'	'TK-H'	'TK-Y'	'TK-A'	'A17'	'A44'	'PZ'	'YS'
Ethyl nonanoate	ND	0.43±0.10 ^a	0.25±0.10 ^a	0.27±0.16 ^a	0.35±0.03 ^a	0.28±0.09 ^a	0.41±0.01 ^a	1.77±0.28 ^b	2.10±0.53 ^b	0.67±0.04 ^c	ND	4.03±0.31 ^a	ND	0.36±0.01 ^{cd}
Dibutyl phthalate	5.44±0.37 ^b	14.61±4.15 ^a	1.56±0.09 ^b	ND	2.38±0.40 ^b	1.93±0.41 ^b	2.71±0.28 ^b	39.63±2.43 ^a	11.13±1.49 ^b	ND	1.06±0.22 ^d	5.13±1.27 ^c	0.93±0.14 ^d	ND
Dimethyl phthalate	11.39±1.21 ^a	ND	ND	ND	0.66±0.02 ^b	0.28±0.04 ^b	ND	6.42±1.79 ^a	ND	ND	ND	1.02±0.03 ^b	ND	ND
Methyl salicylate	1.56±0.16 ^b	ND	0.37±0.06 ^c	2.28±0.30 ^a	ND	0.48±0.05 ^c	0.29±0.03 ^c	ND	0.35±0.03 ^c	0.56±0.06 ^b	ND	0.71±0.06 ^a	0.62±0.04 ^{ab}	0.37±0.01 ^c
Dihydroactinidiolide	36.84±2.88 ^a	11.40±3.93 ^b	1.57±0.08 ^c	1.07±0.03 ^c	3.32±0.40 ^c	1.26±0.23 ^c	2.31±0.50 ^c	1.24±0.17 ^a	0.91±0.03 ^b	ND	ND	0.33±0.11 ^c	ND	0.09±0.01 ^d
Ethyl tetradecanoate	1.27±0.14 ^{bc}	2.09±0.49 ^a	0.81±0.05 ^{cd}	0.51±0.19 ^d	1.59±0.18 ^{ab}	1.09±0.25 ^{bcd}	0.60±0.04 ^d	2.93±1.07 ^{bc}	4.10±1.11 ^b	2.81±0.22 ^{bc}	0.41±0.11 ^d	6.15±0.89 ^a	0.42±0.07 ^d	1.41±0.02 ^{cd}
Hexyl acetate	ND	ND	0.15±0.01 ^c	0.37±0.01 ^a	0.27±0.02 ^b	0.32±0.06 ^{ab}	0.32±0.04 ^{ab}	ND	ND	0.28±0.04 ^c	0.47±0.08 ^b	0.36±0.02 ^c	0.12±0.01 ^d	0.58±0.03 ^a
Ethyl acetate	0.74±0.03 ^a	ND	ND	0.46±0.15 ^b	ND	0.45±0.12 ^b	0.66±0.14 ^{ab}	1.28±0.14 ^{bc}	1.51±0.29 ^b	0.89±0.10 ^{cd}	0.34±0.10 ^c	3.79±0.40 ^a	0.44±0.13 ^{de}	1.39±0.11 ^{bc}
Ethyl caprylate	0.43±0.10 ^c	1.85±0.07 ^b	0.63±0.05 ^c	0.48±0.13 ^c	4.61±0.64 ^a	0.39±0.06 ^c	0.77±0.09 ^c	1.61±0.17 ^b	1.31±0.24 ^c	0.59±0.03 ^d	0.08±0.00 ^c	2.36±0.08 ^a	0.17±0.03 ^c	ND
Ethyl linolenate	5.76±0.87 ^a	4.38±1.60 ^a	0.81±0.05 ^b	0.66±0.19 ^b	0.70±0.11 ^b	0.94±0.16 ^b	0.84±0.19 ^b	2.31±0.46 ^{ab}	2.16±0.38 ^{ab}	1.63±0.22 ^b	0.17±0.03 ^c	2.86±0.48 ^a	0.28±0.01 ^c	0.27±0.05 ^c
Ethyl linoleate	2.06±0.45 ^a	2.36±0.76 ^a	0.7±0.01 ^b	0.33±0.10 ^b	0.65±0.13 ^b	0.44±0.20 ^b	0.42±0.06 ^b	7.88±1.20 ^b	7.62±1.62 ^b	5.69±0.69 ^b	0.48±0.07 ^c	10.41±1.63 ^a	0.72±0.04 ^c	1.08±0.21 ^c
Methyl palmitate	3.17±0.12 ^a	0.62±0.26 ^b	ND	ND	0.20±0.04 ^c	ND	ND	1.65±0.31 ^a	ND	0.61±0.04 ^c	0.56±0.12 ^{cd}	1.11±0.20 ^b	0.20±0.01 ^{de}	0.30±0.07 ^{cde}
Ethyl palmitate	17.99±1.97 ^a	14.83±2.84 ^a	5.26±0.21 ^b	4.18±1.47 ^b	6.47±1.01 ^b	5.28±1.85 ^b	3.61±0.23 ^b	29.38±5.76 ^{bc}	38.29±5.26 ^b	25.59±2.75 ^c	3.57±0.07 ^d	55.04±5.47 ^a	4.33±0.17 ^d	9.79±2.00 ^d
Ethyl stearate	ND	0.40±0.13 ^a	0.12±0.01 ^b	ND	ND	ND	ND	ND	0.59±0.14 ^a	0.26±0.01 ^b	ND	0.60±0.16 ^a	ND	ND
Diisobutyl phthalate	6.18±0.49 ^{bcd}	19.52±1.96 ^a	4.12±0.29 ^{cd}	3.78±0.15 ^d	6.46±1.07 ^{bc}	5.97±1.14 ^{bcd}	7.29±0.16 ^b	9.68±2.03 ^b	21.64±2.20 ^a	3.54±0.47 ^c	1.99±0.44 ^c	11.27±0.44 ^b	2.36±0.33 ^c	4.13±1.21 ^c
Ethyl oleate	ND	ND	0.09±0.02 ^{ab}	0.05±0.01 ^c	0.11±0.00 ^a	0.07±0.03 ^{bc}	ND	0.73±0.15 ^b	1.52±0.53 ^a	0.52±0.08 ^{bc}	0.07±0.01 ^c	1.38±0.28 ^a	0.08±0.01 ^c	0.26±0.03 ^{bc}
Ethyl laurate	0.75±0.09 ^d	4.16±0.85 ^a	2.01±0.12 ^{bc}	0.66±0.26 ^d	2.40±0.06 ^b	0.83±0.29 ^d	1.50±0.13 ^{cd}	1.52±0.47 ^b	1.47±0.44 ^b	0.69±0.14 ^c	ND	2.34±0.38 ^a	0.28±0.08 ^c	0.57±0.17 ^c
Ethyl hexadec-9-enoate	0.34±0.07 ^a	ND	ND	ND	ND	ND	ND	0.54±0.01 ^b	1.84±0.44 ^a	0.17±0.03 ^{bc}	ND	ND	ND	ND
Hexyl 2-methylbutanoate	0.54±0.02 ^b	0.85±0.06 ^a	0.25±0.01 ^c	0.26±0.09 ^c	0.20±0.05 ^c	0.25±0.04 ^c	ND	ND	1.27±0.11 ^a	ND	1.24±0.21 ^a	0.44±0.02 ^b	ND	0.33±0.00 ^b
Ethyl benzoate	ND	ND	ND	0.14±0.03 ^b	ND	0.44±0.02 ^a	0.44±0.06 ^a	ND	ND	ND	ND	ND	ND	ND
Octyl formate	ND	ND	0.65±0.03 ^a	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl pentadecanoate	ND	ND	ND	ND	ND	ND	ND	3.15±0.57 ^a	2.00±0.58 ^b	0.94±0.10 ^c	ND	1.91±0.23 ^b	0.18±0.01 ^{cd}	0.30±0.04 ^{cd}
Ethyl cinnamate	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25±0.04 ^b	ND	0.66±0.21 ^a	ND	0.12±0.04 ^{bc}
Diethyl Phthalate	ND	ND	ND	ND	ND	ND	ND	6.85±1.25 ^a	ND	ND	ND	ND	ND	ND

	A (in leaves)							B (in roots)						
	'TK-H'	'TK-Y'	'TK-A'	'A17'	'A44'	'PZ'	'YS'	'TK-H'	'TK-Y'	'TK-A'	'A17'	'A44'	'PZ'	'YS'
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	ND	ND	ND	ND	ND	ND	ND	17.04±1.72 ^a	ND	ND	ND	4.87±1.29 ^b	ND	ND
Ethyl salicylate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.40±0.05 ^a
Ketones														
2(5H)-Furanone	0.53±0.04 ^b	ND	ND	0.47±0.02 ^c	0.34±0.03 ^d	0.71±0.03 ^a	ND	ND	ND	0.44±0.06 ^b	0.78±0.08 ^a	0.42±0.06 ^b	0.78±0.19 ^a	ND
β-Ionone	24.66±0.78 ^a	16.17±4.38 ^b	2.89±0.01 ^c	3.19±0.11 ^c	7.30±0.36 ^c	4.09±0.57 ^c	7.25±2.24 ^c	ND	1.78±0.12 ^a	ND	ND	ND	ND	ND
3,5-Octadien-2-one	6.62±0.14 ^a	6.21±0.85 ^a	1.40±0.03 ^d	0.97±0.18 ^d	3.72±0.09 ^b	1.31±0.00 ^d	2.51±0.07 ^c	1.58±0.18 ^b	3.35±0.31 ^a	1.17±0.07 ^{bc}	0.52±0.07 ^d	2.83±0.26 ^a	0.65±0.09 ^d	0.80±0.10 ^{cd}
Perhydrofarnesyl acetone	4.87±0.31 ^a	1.15±0.39 ^b	0.14±0.03 ^c	0.19±0.01 ^c	0.61±0.15 ^c	0.31±0.09 ^c	ND	ND	ND	ND	ND	0.48±0.02 ^a	ND	0.21±0.07 ^b
Geranyl acetone	1.56±0.88 ^b	2.36±0.59 ^a	0.47±0.02 ^c	0.52±0.01 ^c	0.84±0.07 ^c	0.54±0.04 ^c	0.82±0.14 ^c	4.00±0.68 ^a	1.88±0.23 ^b	0.40±0.01 ^c	0.36±0.01 ^c	1.71±0.01 ^b	0.36±0.00 ^c	0.47±0.12 ^c
6-Methylhept-5-en-2-one	ND	0.34±0.01 ^a	0.15±0.05 ^c	0.14±0.03 ^c	0.25±0.05 ^b	0.13±0.03 ^c	0.19±0.02 ^{bc}	0.87±0.19 ^a	0.33±0.03 ^b	ND	ND	0.47±0.02 ^b	0.11±0.01 ^c	0.15±0.01 ^c
3-Hydroxy-2,3-dihydromaltol	2.24±0.33 ^a	ND	1.37±0.02 ^b	ND	ND	ND	ND	2.74±0.49 ^a	ND	1.04±0.25 ^b	0.75±0.03 ^b	ND	1.14±0.06 ^b	0.76±0.06 ^b
2-Hydroxy-5-methyl acetophenone	ND	ND	0.16±0.05 ^a	0.07±0.01 ^b	ND	ND	ND	1.70±0.16 ^a	0.47±0.02 ^b	0.67±0.18 ^b	ND	ND	0.10±0.02 ^c	ND
Acetophenone	0.96±0.49 ^a	1.04±0.19 ^a	0.34±0.09 ^b	ND	0.60±0.02 ^{ab}	0.37±0.07 ^b	0.43±0.02 ^b	ND	ND	0.19±0.03 ^a	ND	ND	ND	0.18±0.00 ^a
2-Nonanone	ND	ND	ND	ND	0.67±0.01 ^a	ND	ND	ND	ND	ND	ND	ND	ND	ND
(E,E)-3,5-octadien-2-one	ND	5.30±0.85 ^a	1.00±0.04 ^c	0.61±0.05 ^c	2.43±0.06 ^b	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Pyrrolidinone	1.29±0.54 ^a	1.78±0.32 ^a	0.46±0.05 ^b	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
β-ionone 5,6-epoxide	11.74±0.63 ^a	7.64±1.99 ^b	1.36±0.00 ^c	1.16±0.11 ^c	2.73±0.21 ^c	1.20±0.16 ^c	2.28±0.65 ^c	ND	ND	ND	ND	ND	ND	ND
2,3-Butanedione	ND	0.59±0.04 ^a	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Pentanone	ND	ND	0.28±0.04 ^a	ND	ND	0.25±0.05 ^a	ND	ND	ND	ND	ND	ND	ND	ND
4'-Methylacetophenone	ND	0.30±0.02 ^a	ND	ND	ND	0.10±0.00 ^b	ND	ND	ND	ND	ND	ND	ND	ND
3-Ethyl-4-methylpyrrole-2,5-dione	4.48±0.32 ^a	1.45±0.36 ^b	0.29±0.01 ^c	ND	0.56±0.04 ^c	ND	0.26±0.03 ^c	ND	ND	ND	ND	ND	ND	ND
Acetoin	ND	ND	ND	ND	ND	ND	ND	ND	1.00±0.15 ^a	0.65±0.12 ^b	0.26±0.03 ^{cd}	1.02±0.17 ^a	0.06±0.01 ^{de}	0.38±0.06 ^c
3-Octen-2-one	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.07±0.00 ^c	0.70±0.03 ^a	ND	0.23±0.03 ^b

[illegible]

	A (in leaves)							B (in roots)						
	'TK-H'	'TK-Y'	'TK-A'	'A17'	'A44'	'PZ'	'YS'	'TK-H'	'TK-Y'	'TK-A'	'A17'	'A44'	'PZ'	'YS'
Alkanes														
Pristane	0.96±0.09 ^a	ND	ND	ND	ND	ND	ND	2.05±0.28 ^a	ND	ND	ND	ND	ND	ND
3,5-Dimethylundecane	ND	ND	0.17±0.05 ^b	ND	0.37±0.08 ^b	ND	0.95±0.27 ^a	ND	ND	ND	ND	0.43±0.02 ^a	ND	0.32±0.03 ^b
3-Methyltridecane	0.38±0.01 ^b	0.55±0.09 ^a	0.22±0.00 ^{cd}	0.17±0.01 ^d	0.30±0.03 ^{bc}	0.29±0.03 ^{bc}	0.37±0.05 ^b	ND	0.51±0.03 ^b	0.32±0.06 ^{cd}	0.24±0.03 ^{de}	0.84±0.12 ^a	0.12±0.02 ^{ef}	0.46±0.06 ^{bc}
3-Methylpentadecane	0.80±0.07 ^a	0.67±0.14 ^a	ND	0.13±0.02 ^b	0.15±0.01 ^b	0.18±0.00 ^b	0.22±0.02 ^b	1.32±0.30 ^a	0.62±0.09 ^{bc}	ND	ND	0.65±0.13 ^b	0.09±0.00 ^d	0.32±0.05 ^{cd}
Ethers														
Dimethyl ether	20.02±2.45 ^a	ND	10.17±0.65 ^b	ND	12.08±0.62 ^b	ND	ND	22.30±2.02 ^a	ND	16.86±4.22 ^b	6.69±0.70 ^c	18.88±1.82 ^{ab}	5.56±0.49 ^c	ND
4-n-Propylanisole	ND	0.45±0.12 ^a	ND	ND	ND	0.13±0.01 ^b	ND	ND	ND	ND	ND	ND	ND	ND
Anethole	ND	ND	ND	ND	ND	ND	ND	32.63±1.96 ^a	1.62±0.03 ^b	ND	ND	ND	ND	ND
Estragole	ND	ND	ND	ND	ND	ND	ND	0.59±0.15 ^a	ND	ND	ND	ND	ND	ND
Phenols														
Butylated hydroxytoluene	ND	ND	ND	ND	ND	ND	0.51±0.13 ^a	ND	2.17±0.43 ^a	ND	0.51±0.02 ^b	ND	0.36±0.05 ^b	ND
2-Methoxy-4-vinylphenol	0.74±0.00 ^a	ND	ND	ND	ND	ND	ND	1.78±0.25 ^a	ND	ND	ND	ND	ND	ND
2,4-Di-t-butylphenol	ND	ND	ND	ND	ND	ND	0.38±0.07 ^a	1.22±0.36 ^a	ND	ND	ND	0.58±0.07 ^b	ND	ND
Carvacrol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29±0.00 ^b	ND	ND	0.74±0.23 ^a
p-Cresol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37±0.06 ^a	ND	ND	0.21±0.03 ^b
Eugenol	ND	ND	ND	ND	ND	ND	ND	ND	1.00±0.15 ^a	ND	ND	ND	ND	ND
Furans														
2-Pentylfuran	0.99±0.00 ^d	2.18±0.05 ^a	0.65±0.03 ^c	0.37±0.01 ^f	1.24±0.13 ^c	0.89±0.09 ^d	1.44±0.15 ^b	2.04±0.28 ^b	2.14±0.56 ^b	0.94±0.20 ^{cd}	0.58±0.12 ^d	3.77±0.05 ^a	0.72±0.10 ^d	1.40±0.09 ^c
2,5-Furandicarboxaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21±0.04 ^a	ND	ND	ND
2-Propionylfuran	ND	ND	ND	ND	ND	ND	ND	1.68±0.07 ^a	ND	0.62±0.02 ^b	ND	ND	0.33±0.08 ^c	0.52±0.08 ^b
Pyrazines														
Tetramethylpyrazine	ND	1.58±0.12 ^a	ND	ND	ND	ND	ND	9.72±1.16 ^a	1.37±0.08 ^b	ND	ND	ND	ND	ND
2,3,5-Trimethylpyrazine	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.58±0.18 ^a	ND	ND	ND	ND

	A (in leaves)							B (in roots)						
	'TK-H'	'TK-Y'	'TK-A'	'A17'	'A44'	'PZ'	'YS'	'TK-H'	'TK-Y'	'TK-A'	'A17'	'A44'	'PZ'	'YS'
2,3-Dimethyl-5-ethylpyrazine	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71±0.08 ^a	ND	ND	ND	ND
2,6-Diethylpyrazine	ND	ND	ND	ND	ND	ND	ND	0.7±0.04 ^a	ND	0.61±0.05 ^a	0.10±0.01 ^c	ND	0.13±0.01 ^c	0.42±0.11 ^b
2-Ethyl-5-methylpyrazine	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89±0.16 ^a	0.56±0.00 ^b	ND	ND	ND
Others														
Benzothiazole	1.59±0.13 ^a	ND	0.76±0.03 ^b	ND	0.54±0.03 ^c	ND	ND	3.83±0.39 ^a	1.84±0.12 ^b	ND	ND	ND	ND	0.38±0.07 ^c
2-Acetylpyrrole	3.02±0.05 ^a	ND	2.24±0.02 ^b	0.35±0.12 ^d	ND	0.57±0.07 ^c	0.25±0.05 ^d	9.16±1.70 ^a	ND	0.98±0.33 ^b	0.43±0.13 ^b	ND	0.36±0.05 ^b	0.44±0.18 ^b
Ethanethiol	ND	3.17±0.47 ^a	3.04±0.01 ^a	1.72±0.46 ^b	1.37±0.28 ^b	4.04±0.57 ^a	3.32±1.09 ^a	ND	ND	2.12±0.57 ^a	0.58±0.05 ^c	ND	1.45±0.24 ^b	ND
Dimethyl sulfoxide	1.01±0.30 ^a	ND	0.56±0.06 ^b	0.53±0.01 ^b	0.41±0.15 ^b	0.90±0.01 ^a	ND	4.21±0.75 ^a	ND	0.31±0.06 ^b	ND	ND	ND	ND
o-Tolunitrile	ND	0.67±0.09 ^a	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrazinamide	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25±0.02 ^a	0.21±0.05 ^a	ND	0.15±0.01 ^b	0.13±0.03 ^b
Indole	ND	ND	ND	ND	ND	ND	ND	8.51±2.02 ^a	ND	ND	ND	ND	ND	ND
Dimethyl sulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.74±0.02 ^a	ND	0.51±0.03 ^b

'TK-H', 'TK-Y' and 'TK-A' are *Taraxacum kok-saghyz* Rodin samples from three different habitats; 'A17', 'A44', 'PZ' and 'YS' are *Taraxacum officinale* samples from the same habitats. Values (means±SD) with the same letters in the same row indicate no significant difference ($P < 0.05$, VCs in leaves and roots were analyzed respectively). ND: not detected.