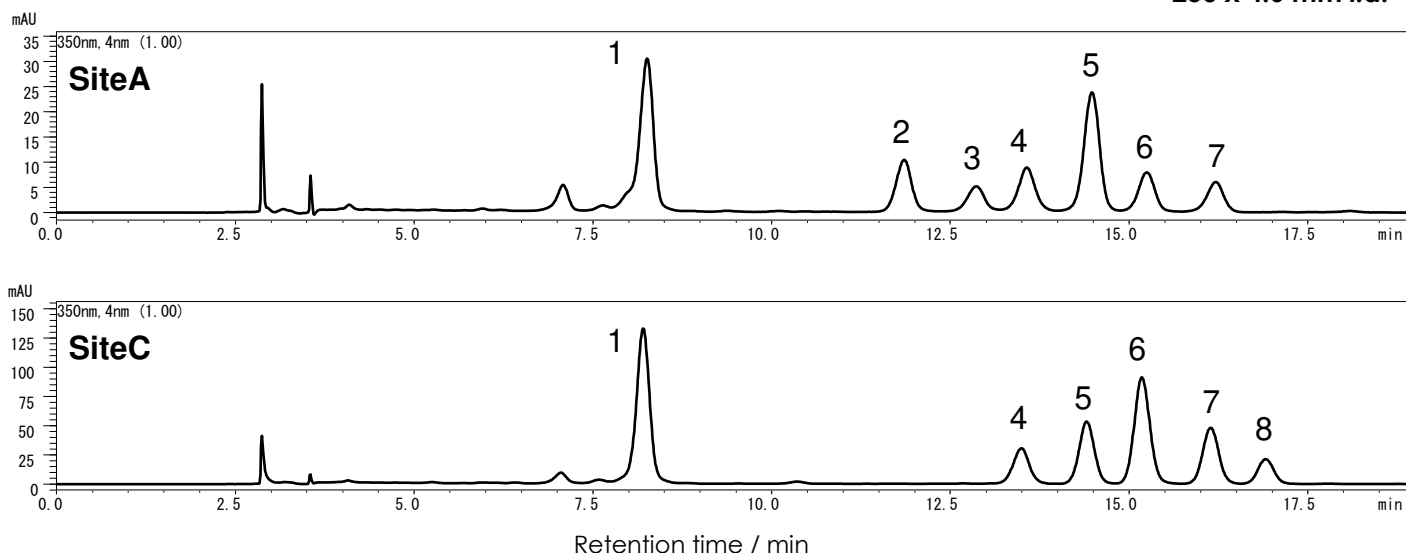


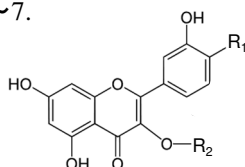
葉抽出物中のフェノール化合物の分離

Phenolic compounds in the leaf extracts

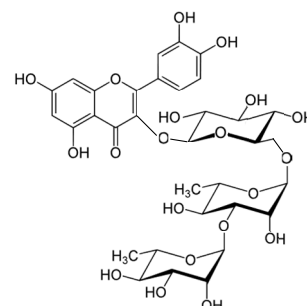
SunBridge C18 5 μ m,
250 x 4.6 mm i.d.



Peak No.
1~3, 5~7.

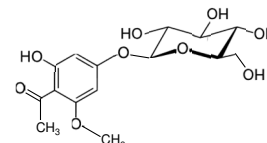


4. Quercetin 3-O-rhamnosyl-(1→3)-
O-rhamnosyl-(1→6)-O-glucoside



No.	R ₁	R ₂
1	glucose	rutinose
2	OH	6''-galloylgalactose
3	OH	galloylglucose
5	OH	rutinose
6	OH	galactose
7	OH	glucose

8. 2,4-Dihydroxy-6-methoxyacetophenone-
4- β -glucopyranoside (Annphenone)



Column: SunBridge C18 5 μ m, 250 x 4.6 mm i.d.
Mobile phase: [A] 1% Formic acid in water,
[B] 1% Formic acid in Acetonitrile

Gradient program: shown right

Temperature: 40 °C, Injection volume: 10 μ L, Flow rate: 1.0 mL/min Detection: PDA@350 nm,

Sample: *Fresh D. lapponica leaves (0.2 g) were extracted with 4 mL MeOH and filtered (0.45 μ m)*

1 = Quercetin 4'-O-glucoside 3-O-rutinoside, 2 = Quercetin 3-O-(6''-galloyl)-galactoside
3 = Quercetin 3-O-galloylglucoside, 4 = Quercetin 3-O-rhamnosyl-(1→3)-O-rhamnosyl-(1→6)-O-glucoside,
5 = Quercetin 3-O-rutinoside (Rutin), 6 = Quercetin 3-O-galactoside (Hyperoside)
7 = Quercetin 3-O-glucoside (Isoquercitrin)
8 = 2,4-Dihydroxy-6-methoxyacetophenone-4- β -glucopyranoside (Annphenone)

Time(min)	0	18	25	26
B Conc.	12	14	35	12

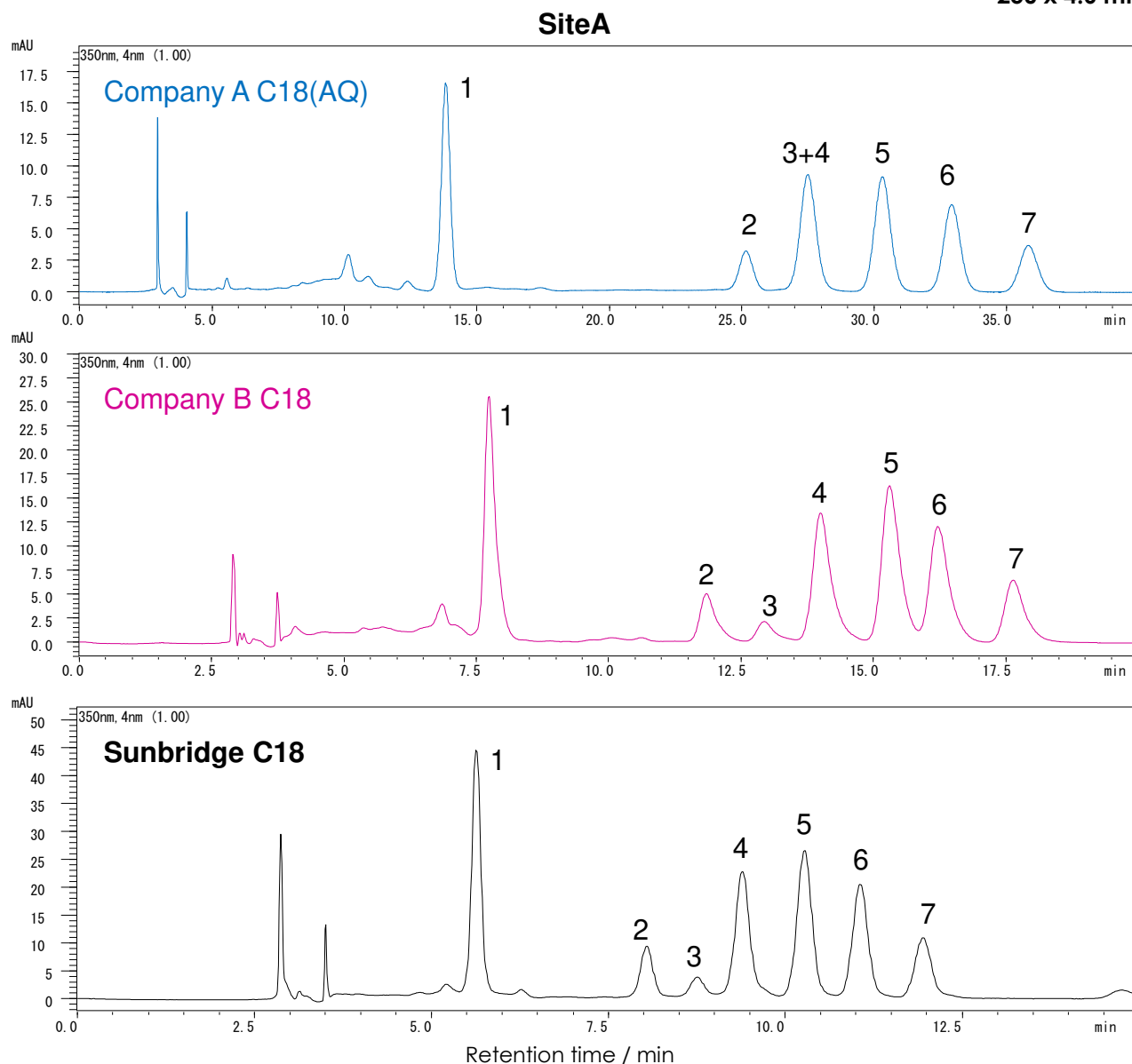
提供: 東京農工大学 平野 日向様

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SunBridge C18 5 μ m,
250 x 4.6 mm i.d.



Column: Company A C18(AQ type) 5 μ m, Company B C18 5 μ m, SunBridge C18

Column dimension: 5 μ m, 250 x 4.6 mm i.d.

Mobile phase: Isocratic elution of 15% acetonitrile containing 1% formic acid

Temperature: 40 $^{\circ}$ C, Injection volume: 10 μ L, Flow rate: 1.0 mL/min Detection: PDA@350 nm,

Sample: *Fresh D. lapponica leaves (0.2 g) were extracted with 4 mL MeOH and filtered (0.45 μ m)*

1 = Quercetin 4'-O-glucoside 3-O-rutinoside, 2 = Quercetin 3-O-(6"-galloyl)-galactoside

3 = Quercetin 3-O-galloylglucoside, 4 = Quercetin 3-O-rhamnosyl-(1 $\rightarrow$ 3)-O-rhamnosyl-(1 $\rightarrow$ 6)-O-glucoside,

5 = Quercetin 3-O-rutinoside (Rutin), 6 = Quercetin 3-O-galactoside (Hyperoside)

7 = Quercetin 3-O-glucoside (Isoquercitrin)

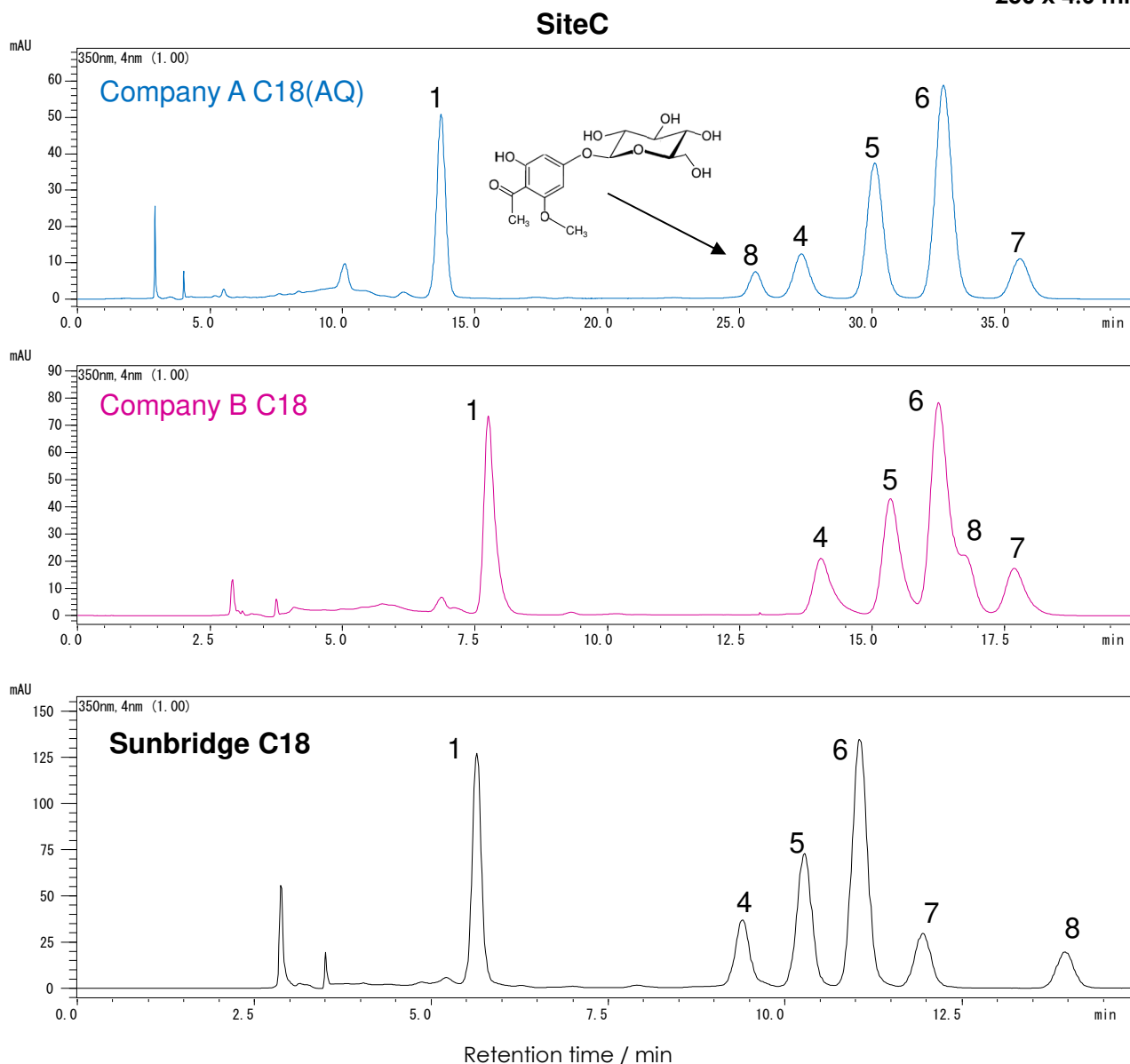
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Phenolic compounds in the leaf extracts

SunBridge C18 5 μ m,
250 x 4.6 mm i.d.



Column: Company A C18(AQ type) 5 μ m, Company B C18 5 μ m, SunBridge C18

Column dimension: 5 μ m, 250 x 4.6 mm i.d.

Mobile phase: Isocratic elution of 15% acetonitrile containing 1% formic acid

Temperature: 40 °C, Injection volume: 10 μ L, Flow rate: 1.0 mL/min Detection: PDA@350 nm,

Sample: Fresh *D. lapponica* leaves (0.2 g) were extracted with 4 mL MeOH and filtered (0.45 μ m)

1 = Quercetin 4'-O-glucoside 3-O-rutinoside, 4 = Quercetin 3-O-rhamnosyl-(1 $\rightarrow$ 3)-O-rhamnosyl-(1 $\rightarrow$ 6)-O-glucoside, 5 = Quercetin 3-O-rutinoside (Rutin), 6 = Quercetin 3-O-galactoside (Hyperoside), 7 = Quercetin 3-O-glucoside (Isoquercitrin), 8 = 2,4-Dihydroxy-6-methoxyacetophenone-4- β -glucopyranoside (Annphenone)

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