

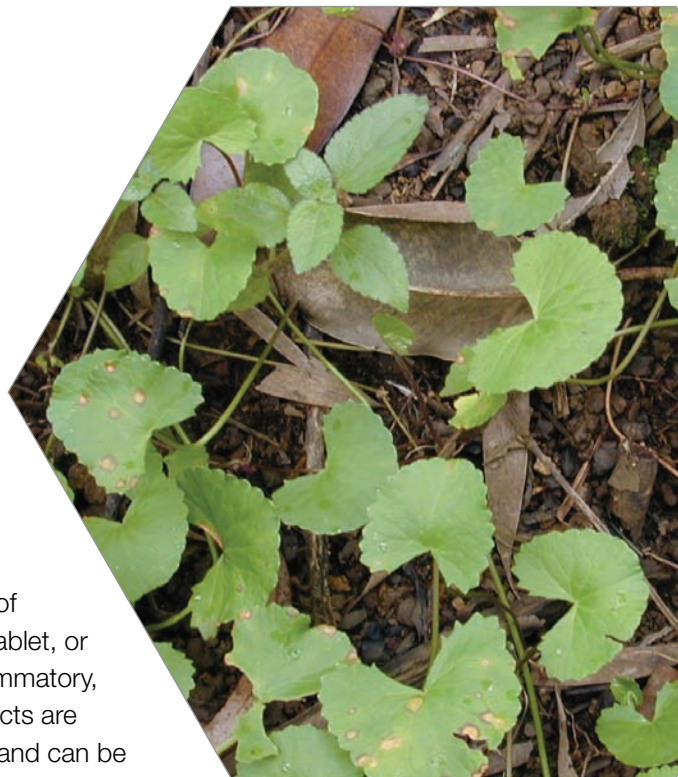
0029 - Gotu Kola for Triterpenes by HPLC

Botanical Name: *Centella asiatica*

Common Names: Gotu Kola

Plant Description:

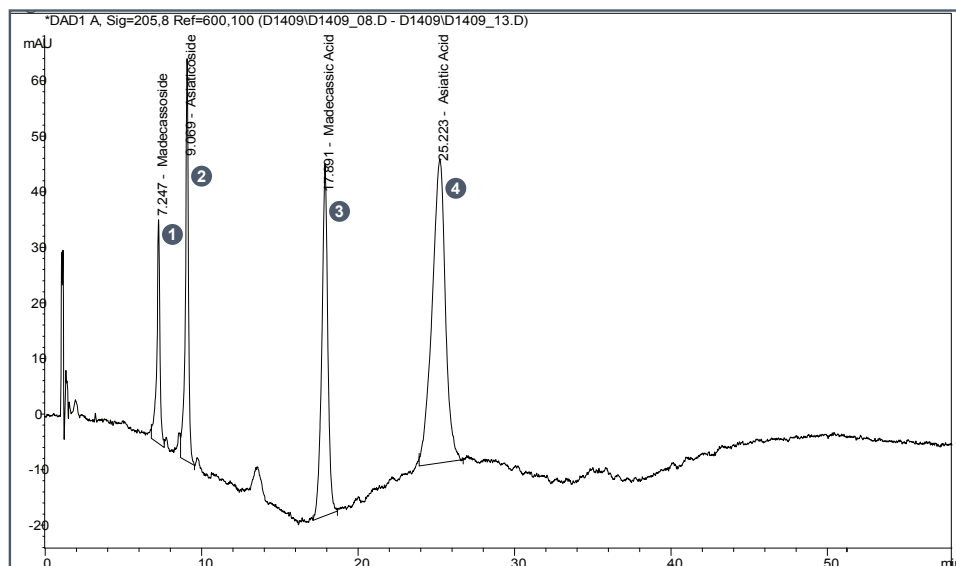
Centella asiatica is a water loving plant native to India, Japan, China, Indonesia, South Africa, Sri Lanka, and the South Pacific. This plant is tasteless and odorless and is a member of the parsley family. It grows low to the ground and has small fan-shaped leaves, bears small oval fruit and has white or light purple-to-pink flowers. Its stems are long and slender and are green or reddish green in color.



Therapeutic Use Overview:

Long used in traditional medicines, *Centella asiatica* has a wide range of therapeutic applications. Available as a dried herb, tincture, capsule, tablet, or ointment, gotu kola has been used as an antibiotic, anti-viral, anti-inflammatory, anti-ulcerogenic, anxiolytic, diuretic, and circulatory stimulant. The effects are attributed to a number of steroids isolated from the leaves and stems, and can be released either by consumption of the plant as a whole (as a leafy green in cuisine) or via extracts (teas, ointments, etc.).

Representative HPLC Analysis: Mixed Standard Solution



Analytes:

- ① Madecassoside, ② Asiaticoside, ③ Madecassic Acid, ④ Asiatic Acid

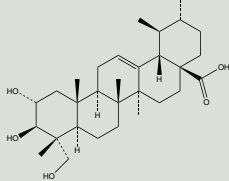
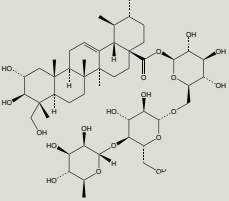
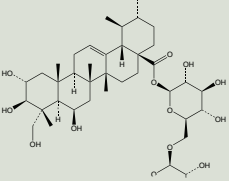
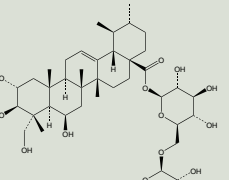
Instrument Parameters

Column: Phenomenex Aqua C18, 100 x 4.6 mm, 3 μm
Detection: UV-Vis @ 205 nm
Flow Rate: 1.0 mL/min
Injection Volume: 20 μL
Temperature: 25°C
Mobile Phase A: 0.01% TFA (aq)
Mobile Phase B: 6% MTBE in ACN with 0.01% TFA
Mobile Phase C: 12% MTBE in ACN with 0.01% TFA

Gradient Program

Time (min)	%A	%B	%C
0	81	19	0
15	64	33	3
25	67	0	33
35	60	0	40
48	81	19	0
58	81	19	0

Phytochemical Reference Standards

Product Description And Details	Product ID	Qty
 <p>ASIATIC ACID Grade: P CAS#: [464-92-6] Chemical Formula: $C_{30}H_{48}O_5$ FW: 488.7</p>	ASB-00011028-005	5mg
	ASB-00011028-010	10mg
	ASB-00011028-050	50mg
 <p>ASIATICOSIDE Grade: P CAS#: [16830-15-2] Chemical Formula: $C_{48}H_{78}O_{19}$ FW: 959.13</p>	ASB-00011030-005	5mg
	ASB-00011030-010	10mg
	ASB-00011030-025	25mg
	ASB-00011030-050	100mg
 <p>MADECASSIC ACID Grade: P CAS#: [18449-41-7] Chemical Formula: $C_{30}H_{48}O_6$ FW: 504.7</p>	ASB-00013009-005	5mg
	ASB-00013009-010	10mg
	ASB-00013009-050	50mg
 <p>MADECASSOSIDE Grade: P CAS#: [34540-22-2] Chemical Formula: $C_{48}H_{78}O_{20}$ FW: 975.12</p>	ASB-00013015-005	5mg
	ASB-00013015-010	10mg
	ASB-00013015-050	50mg

Reference Standard Kits

Product Name	Contents	Product ID	Qty
GOTU KOLA STANDARDS KIT	ASIATIC ACID(P)	KIT-00007481-005	4 x 5mg vials
	ASIATICOSIDE(P)	KIT-00007481-010	4 x 10mg vials
	MADECASSIC ACID(P)		
	MADECASSOSIDE(P)		

Botanical Reference Materials

Product Description	Grade	Product ID	Qty
GOTU KOLA (CENTELLA ASIATICA) LEAF STEM	AHP-BRM	ASB-00030320-005	5g
GOTU KOLA (CENTELLA ASIATICA)WHOLE	XRM	ASB-00030321-005	5g

Product Description	Grade	Product ID	Qty
GOTU KOLA (CENTELLA ASIATICA) LEAF STEM [WHOLE/ CUT	VBRM	ASB-00031212-500	5g

Additional Related Compounds

Product Description And Details	Product ID	Qty
BETULINIC ACID	ASB-00002247-001	1g
Grade: RG	ASB-00002247-005	5g
CAS#: [472-15-1]	ASB-00002247-101	1kg
Chemical Formula: $C_{30}H_{48}O_3$		
FW: 456.71		