

Total content determination for the effective fraction of the alkaloids in *Dicranostigma leptopodum* (Maxim.) Fedde by high performance liquid chromatography and ultraviolet-visible spectrophotometry

Yali Chen^{a,b}, Ruxia Li^a, Rongrong Gao^a, Qian Yan^a, Mei Zhong^a, Junxi Liu^{a,*}, Quanyi Zhao^b, Duolong Di^a

^a Key Laboratory of Chemistry of Northwestern Plant Resources and Key Laboratory for Natural Medicine of Gansu Province, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, PR China

^b Institute of Medicinal Chemistry, School of Pharmacy, Lanzhou University, Lanzhou 730000, PR China

* Corresponding author. Tel.: +86 931 4968212; Fax.: +86 931 8277088.

E-mail address: liujx@licp.ac.cn (J.X. Liu)

Table S1. The physical parameters of MARs

MARs	Moisture content(%)	Particle size(mm)	specific surface area(m ² /g)
AB-8	50.48	0.3-1.25	450-500
D101	60.75	0.25-0.84	480-520
LK-001	50.58	0.3-1.25	--
LX-17	52.70	0.3-1.25	--
LX-28	60.54	0.3-1.25	460-590

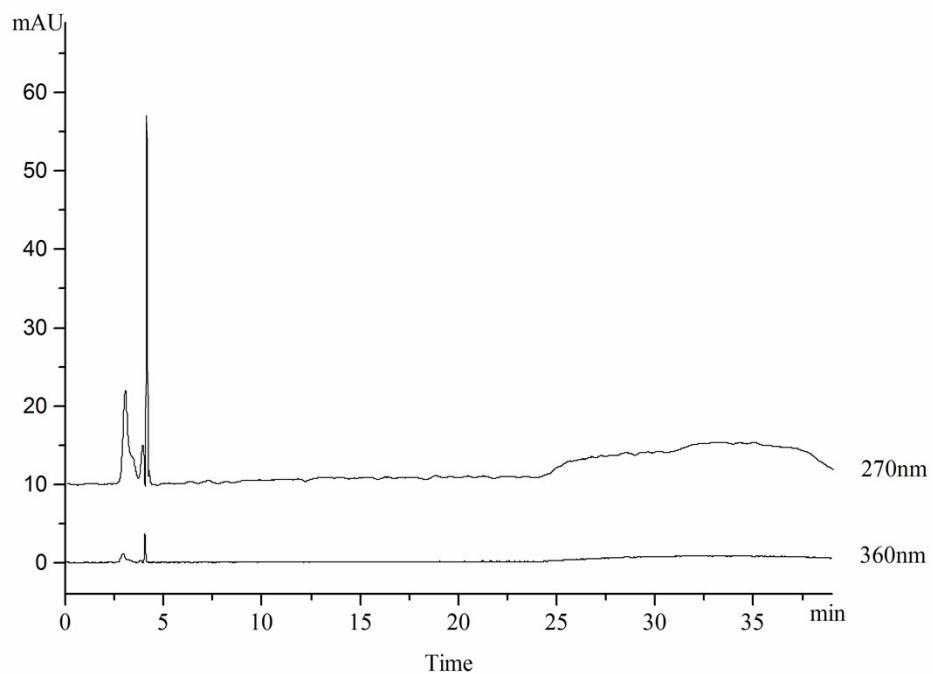
Table S2. The symmetry of target alkaloids detected on SinoChrom ODS-BP column and Megres C₁₈ column.

	5-hydroxy coptisine	Isocorytu bertine	Protopine	Allocrypt opine	Coptisine	Berberine	Corydine	Isocorydi ne
ODS-BP ^a	0.48	1.12	0.60	0.79	0.62	0.44	0.94	0.90
ODS-BP ^b	0.52	0.97		0.74		0.91	0.64	0.97
Megres ^a	1.09	1.32	1.04	0.85	0.74	0.75	0.93	0.90
Megres ^b	0.85	0.91	0.86	0.99	0.76	0.91	0.98	1.02

^a with no addition of ionic liquid in mobile phase.

^b with addition of ionic liquid in mobile phase.

Fig S1. Chromatogram of blank solvent determined on Megres C₁₈ column.



Conditions: Megres C₁₈ column; Mobile phase: acetonitrile (A), 0.2% phosphoric acid and 0.4% (w/v) BmimBF₄ in water adjusted to pH 6.3 by the addition of triethylamine solution (B); gradient: 20% (A) at 0–20 min, 20-45% (A) at 20-35min; injection volume: 20 µL; flow rate: 1.0 mL/min.