

Chelidonium majus



Common Names:

Blutkraut; celandine; celandine poppy; celionia mayor; chélideine; cock foot; Gelbkraut; Great celandine; rock poppy; Schellkraut; Schöllkraut; swallowwort; tetterwort; wartwort; Warzenkraut

Citations:

Benninger J, Schneider HT, Schuppan D, et al. (1999) Acute hepatitis induced by greater celandine (*Chelidonium majus*). *Gastroenterology* 117(5):1234-1237.

Koopmann H (1937) Tödliche Schöllkraut-Vergiftung (*Chelidonium majus*). *Sammlung Vergiftungsfallen* 8(A682):93-98.

Reeks HC (1903) Poisoning of cattle by common celandine. *J Comp Pathol* 16:367-371.

Štěrba B, Meissner V(1962) Sušené rostliny s obsahem srdečních glykosidů a alkaloidů jako příčina uhynuté hospodářských zvířat. *Veterinarství* 12:83-86.

Stickel F, Pöschl G, Seitz HK, et al. (2003) Acute hepatitis induced by greater celandine (*Chelidonium majus*). *Scand J Gastroenterol* 38(5):565-568.

Strahl S, Ehret V, Dahm HH, et al. (1998) Nekrotisierende Hepatitis ach Einnahme pflanzlicher Heilmittel. *Dtsch Med Wochenschr* 123(47):1410-1414.

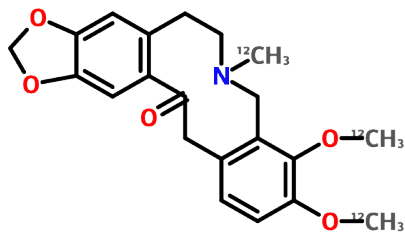
Links:

<http://en.wikipedia.org/wiki/Chelidonium>

<http://abchomeopathy.com/r.php/Chel>

<http://plants.usda.gov/java/profile?symbol=chma2>

α -Allocryptopine



Protopine

β -Homochelidonine; α -Fagarine

$\text{C}_{21}\text{H}_{23}\text{NO}_5$

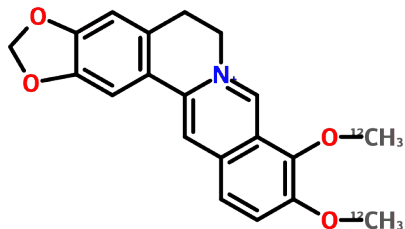
[485-91-6]

Mol. wt 369.42

Occurs occasionally in combination with β -stereoisomer [24240-04-8], in a great many Papaveraceae genera; *Bocconia*, *Chelidonium*, *Corydalis*, *Dicentra*, *Eschsholtzia*, *Glaucium*, and *Sanguinaria* spp. and, exceptionally, in *Zanthoxylum* spp. (Rutaceae).

Oxytoxic agent.

Berberine



Protoberberine

Umbellatine

$[\text{C}_{21}\text{H}_{23}\text{NO}_5]^+$

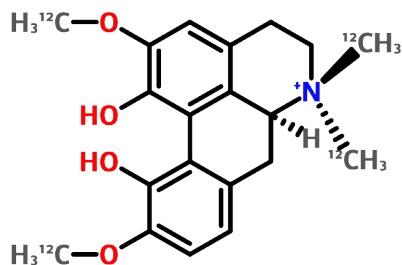
[2086-83-1]

Mol. wt 336.37

Found in many plant families, including Annonaceae *Coelocline* spp., Berberidaceae *Berberis* spp., *Mahonia* spp., *Nandina* spp., Menispermaceae *Archangelisia* spp., Papaveraceae *Argemone* spp., *Chelidonium* spp., *Corydalis* spp., Rutaceae *Evodia* spp., *Toddalia* spp., *Zanthoxylum* spp., and Ranunculaceae *Coptis* spp., *Thalictrum* spp.. It is the yellow pigment in the stem bark and leaves of the common barberry, *Berberis vulgaris*.

Moderately toxic (LD50 in humans 27.5 mg/kg body-weight), causing cardiac damage, dyspnoea, and lowered blood pressure; it is used as a bitter stomachic, antimalarial, antimicrobial, antipyretic, anthelmintic and cytotoxic agent.

Magnoflorine



Aporphine

Thalictrine; Escholine

$[C_{20}H_{24}NO_4]^+$

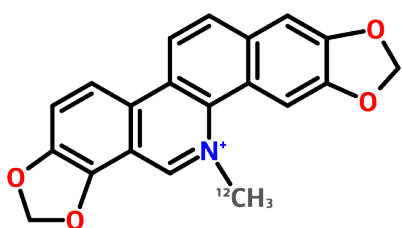
[2141-09-5]

Mol. wt 342.41

The most widespread aporphine alkaloid, found in many Papaveraceae and Fumariaceae species, e.g., *Argemone* spp., *Papaver* spp., *Eschscholzia* spp., *Glaucium* spp., *Meconopsis* spp., *Dicranostigma* spp., *Chelidonium* spp. and *Corydalis* spp.; it is also found in *Magnolia grandiflora* (Magnoliaceae), most *Zanthoxylum* spp. (Rutaceae), *Thalictrum thymbergii* (Ranunculaceae), *Aristolochia thunbergii* (Aristolochiaceae), and *Croton comingii* (Euphorbiaceae).

Weak neuromuscular blocking agent. It is hypotensive in rodents.

Sanguinarine



Benzophenanthridine

Pseudochelerythrine

$[C_{20}H_{14}NO_4]^+$

[2447-54-3]

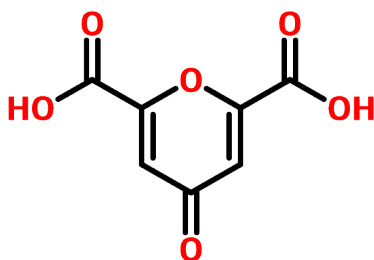
Mol. wt 332.34

Widespread occurrence in Papaveraceae, including opium from *Papaver somniferum*, *Dicentra spectabilis*, *D.*

peregrina and *Chelidonium majus*, and in the Fumariaceae, including bloodroot, *Sanguinaria canadensis*, and fumitory, *Fumaria officinalis*. It is also found in *Zanthoxylum* spp. (Rutaceae), and *Pteridophyllum* spp. (Sapindaceae).

Antibacterial, cytotoxic, and anti-inflammatory. A major use is in dentrifices and mouthwashes because of antiplaque activity. It has a positive inotropic effect on the heart. It inhibits various enzymes including ATP-ase, diamine oxidase and some aminotransferases. It causes glaucoma at high doses over a prolonged period. Also it is toxic (LD₅₀ in mice 19.4 mg/kg body-weight).

Chelidonic acid



C₇H₄O₆

[99-31-1]

Mol. wt 184.11

Occurs in *Chelidonium majus* (Papaveraceae), and is widespread in plants of the Amaryllidaceae, Liliaceae and Papaveraceae.

Nonacosan-10-ol



Celidoniol; Ginnol

C₂₉H₆₀O

[2606-50-0]

Mol. wt 424.79

A common leaf wax hydrocarbon alcohol, e.g., from *Ginkgo biloba* (Ginkgoaceae), *Chelidonium majus*

(Papaveraceae) and *Juniperus chinensis* (Cupressaceae).