

## Hyoscyamus niger



### *Common Names:*

beleño negro; Bilsen; Bilsenbohne; Bilsenkraut; Bilsensee; black henbane; Bolmört; chenile; deli-bat-bat; devil's-eye; fetid nightshade; henbane; hennebane; hogbane; hogbean; Hühnertod; hyoscyamus; infidel opium; insane root; jusquiame; jusquiame noire; poison tobacco; Saukraut; Schwarzes Bilsenkraut; stinking nightshade; stinky nightshade; Teufelsauge; Zahkraut; stinking nightshade; Белена чёрная; блекота; бешеная трава; бешенница; зубник; короста; Hexenkraut; Hullukaali; kylähullukaali; Bulmeurt; Lulek czarny; Bilzekruid; jusquiame noire; Блекота чорна; зубовик; люльник; німиця; собачий мак; beleño negro; hierba loca; abeleño; adamanta; aveniños; belañ negro; beleño; beleño negro; belesa; beninos; benifios; benjif; bininos; cañamones locos; carapuchetes; dormidera; garbancillo loco; hierba loca; niños; tabaco borde; tomalocos; veleño; veleño negro; veliño; venina; veñiña; yerba loca;

### Citations:

Betz P, Janzen J, Roier G, et al. (1991) Psychopathologische Befunde nach oraler Aufnahme von Inhaltsstoffen heimischer Nachtschattengewächse. Arch Kriminol 188(5-6):175-182.

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Daneshvar S, Mirhossaini ME, Balali M (1992) Hyoscyamus poisoning in Mashhad. Toxicon 30:501.

Graev M, Fallani M (1960) Avvelenamento collettivo da ingestione da Hyoscyamus niger (Con un case mortale). Minerva Medica 80(Nov-Dec):225-230.

Kurkcuoglu M (1970) Henbane (Hyoscyamus niger) poisonings in vicinity of Erzurum. Turk J Pediatr 12(1):48-56.

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Spoerke DG, Hall AH, Dodson CD, et al. (1987) Mystery root ingestion. J Emerg Med 5(5):385-388/

Turgrul L (1985) Abuse of henbane by children in Turkey. Bull Narc 37(2-3):75-78.

Welsby JR (1903) Henbane poisoning. Vet Rec 16(794):181.

### Links:

[http://en.wikipedia.org/wiki/Hyoscyamus\\_niger](http://en.wikipedia.org/wiki/Hyoscyamus_niger)

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

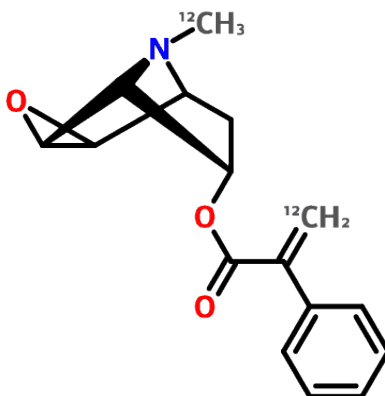
<http://plants.usda.gov/java/profile?symbol=HYNI>

[http://www.thepoisoninggarden.co.uk/atoz/hyoscyamus\\_niger.htm](http://www.thepoisoninggarden.co.uk/atoz/hyoscyamus_niger.htm)

<http://www.erowid.org/plants/henbane/henbane.shtml>

### Alkaloids:

## Apothyoscine



### 6,7β-Epoxy-3α-atropylxytropene

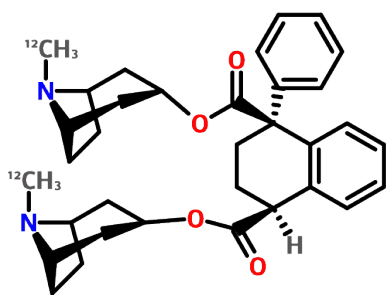
C<sub>17</sub>H<sub>19</sub>NO<sub>3</sub>

[535-26-2]

Mol. wt 285.34

Found in the aerial parts of *Datura meteloides*, *Duboisia myoporoides* and *Hyoscyamus niger*(Solanaceae).

## Belladonnine



### Tropyliisatropate

$C_{34}H_{20}N_2O_4$

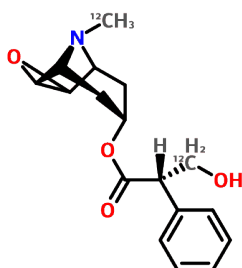
[510-25-8]

Mol. wt 542.72

Found in berries of *Hyoscyamus niger* ( $\alpha$ -form), *Physochliana alaica* ( $\beta$ -form) and *Atropa belladonna* (Solanaceae). This is also a thermal dimerisation product of apoatropine (q.v.), so that there is some question as to whether its occurrence may be artefactual. It is found in both the *trans* (1*RS*,4*SR*)-form ( $\alpha$ -belladonnine) [5878-33-1] and *cis* (1*RS*,4*RS*)-form ( $\beta$ -belladonnine) [6696-63-5].

Local anaesthetic potentiator.

## Hyoscine



### 6,7-Epoxytropine tropate; Scopine tropate; Scopolamine

$C_{17}H_{21}NO_4$

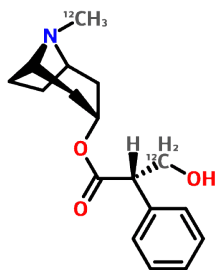
[51-34-3]

Mol. wt 303.36

Found in henbane, *Hyoscyamus niger*, *Datura metel*, *D. innoxia*, *Scopolia carniolica*, *Anthocercis viscosa*, *A. fasciculata* (Solanaceae).

Anticholinergic, with both central and peripheral actions. A particular use is as an antispasmodic, for motion sickness. It is also used as a pre-operative medication to sedate, reduce secretions, produce amnesia, assist the induction of anaesthesia and reduce some of its side-effects

## Hyoscyamine



### Daturine, Duboisine

$C_{17}H_{23}NO_3$

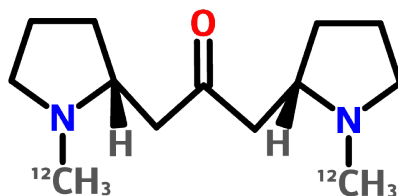
[101-31-5]

Mol. wt 289.37

Occurs in henbane and Egyptian henbane, *Hyoscyamus niger* and *Hyoscyamus muticus*, deadly nightshade, *Atropa belladonna*, thornapple, *Datura stramonium*, *Duboisia myoporoides*, and other Solanaceae.

Anticholinergic with actions similar to but more potent than those of atropine (q.v.), which is the racemate; it causes central nervous system depression followed by stimulation. It is mydriatic, anti-emetic, antispasmodic, and anti-secretory for saliva, perspiration and gastric secretions, and therefore useful as a premedication before anaesthesia; also it has been used to treat symptoms of Parkinsons' disease. Toxic to humans.

## Cuscohygrine



### Cuskygrine, Hellaridine

$C_{13}H_{24}N_2O$

[454-14-8]

Mol. wt 224.35

Common in the Solanaceae, e.g., in *Hyoscyamus niger*, *Atropa belladonna* (roots) and in *Datura* spp. and *Scopolia* spp.. It co-occurs with cocaine (q.v.) in *Erythroxylum coca* (Erythroxylaceae), and it also found in *Convolvulus erinaceus* (Convolvulaceae).

Inhibitor of 2,4-dinitrofluorobenzene-induced hypersensitivity in mice. Several of the above plants are used in folk medicine as sedatives or narcotics.