

Convolvulus arvensis



Common Names:

Ackerwinde; bindweed; correhuela menor; European bindweed; European morning-glory; field bindweed; laplove; morning-glory; obsession vine; ВЬЮНОК ПОЛЕВОЙ; correhuela; cahiruela; Altabaquillo; campanica; campanilla; campanilla de pobre; campanilla de pobres; campanilla pobre; campanillas; campanilla silvestre; campanuzas; campánula menor; carihuela; carregüela; carrehuela; carreueta; carrigüela; carrigüela fina; carrihuela; carrijuela; cerrihuela; cornihuela; corrayuela; corredora; corregüela; corregüela menor; correguela; correhuela; correhuela de los campos; correhuela menor; correjuela; correvueta; coreyueta; corribuela; corrigüela; corrigüela borde; corrigüela fina; corrigüela muerta; corrigüela viva; corriguala; corrihuela; corriola; corriola blanca; corrivuela; corriyueta; corroyuela; corrugüelas; corruhuela; corruvieta; corruyueta; curriol; currujuela; curruyueta; enredadera; enredadera de los campos; enredadera; escarigüela; escarrigüelo; escoriegüela; escorigüela; escorrigüela; garrotilla; garrotillo; gorrotilla; guniolas; hiedra de lagarto; hilandera; hilanderas;

marañuela; maroma; panes; raízdecilla; torregüela; trababedarrí de las piezas; yerba del muro; zaramalla; Harilik kassitapp; Peltokierto; akkerwinde; Ackerwinde; Берізка польова; В'юнок польовий; convolvolo; vilucchio; Powój polny; Volbura, rochita-rândunicii; Åkervinda; liseron des champs; Dirvinis vijoklis;

Citations:

Olver H (1872) Supposed poisoning of pigs by convolvulus. The Vet 45(49):727-729.

Pammel LH (1920) European morning glory suspected of being poisonous. Am J Vet Med 15:439.

Schultheiss PC, Knight AP, Traub Dargatz JL, et al. (1995) Toxicity of field bindweed (*Convolvulus arvensis*) to mice. Vet Hum Toxicol 37(5):452-454.

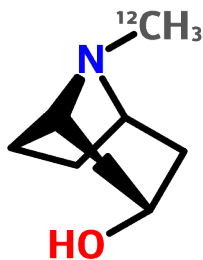
Links:

http://en.wikipedia.org/wiki/Convolvulus_arvensis

<http://plants.usda.gov/java/profile?symbol=coar4>

Alkaloids:

Tropine



2,3-Dihydro-3 α -hydroxytropidine; 1 α H,5 α H-Tropan-3 α -ol

C₈H₁₅NO

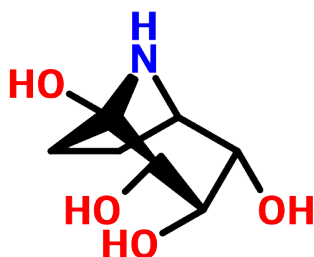
[120-29-6]

Mol. wt 141.21

Found in *Scopolia carniolica* and *Atropa belladonna* (Solanaceae); and in bindweed, *Convolvulus arvensis* (Convolvulaceae).

Highly toxic. Implicated in the poisoning of horses which have ingested bindweed.

Calystegin B₂



Calystegin B₂; 1,2,3,4-Tetrahydroxynortropane

C₇H₁₃NO₄

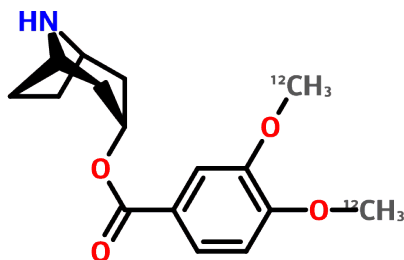
[127414-85-1]

Mol. wt 175.18

First isolated from *Calystegia sepium* (Convolvulaceae); also present in *Convolvulus* spp., in *Datura wrightii* and in leaves of *Solanum tuberosum*, *S. melongena*, *S. dulcamara*, *S. dimidiatum* and *S. kwebense* (Solanaceae).

Potent inhibitor of β -glucosidase. May be responsible for neurological disorders in livestock feeding on *Solanum* leaves.

Convolvine



O-Veratroylnortropine

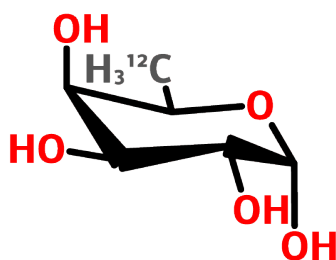
C₁₆H₂₁NO₄

[537-30-4]

Mol. wt 291.35

Widespread in the Solanaceae, including *Datura*, *Physalis* and *Salpichroa* spp., in the *Convolvulus* spp. (Convolvulaceae), and also in the mangrove, *Bruguiera* spp. (Rhizophoraceae).

Fucose



α -D-Fucopyranose; L-Fucose; 6-Deoxy-L-galactose; L-Galactomethylose; Rhodeose

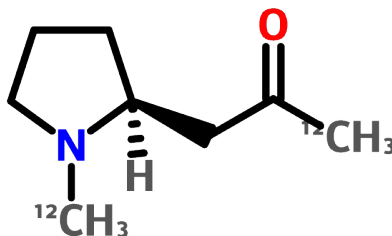
$C_6H_{12}O_5$

[2438-80-4]

Mol. wt 164.16

Most abundant occurrence of L-fucose is in polysaccharide combination in seaweeds, e.g., *Fucus* spp. (Fucaceae), but also present in higher plant polysaccharides (e.g. in gum tragacanth, q.v.). The D-fucose [3615-37-0] isomer is uncommon, occurring in saponin form (q.v.) in *Convolvulus* spp. (Convolvulaceae).

(-)-Hygrine



$C_8H_{15}NO$

[496-49-1]

Mol. wt 141.21

An intermediate in tropane alkaloid (q.v.) synthesis, and commonly found in plants which contain these alkaloids, e.g., in *Atropa* spp. (Solanaceae), *Erythroxylum* spp. (Erythroxylaceae), and *Convolvulus* spp. (Convolvulaceae). Also, it is found in *Dendrobium* spp. (Orchidaceae) and *Cochlearia* spp. (Cruciferae).