STATUS DECISION OF CONTROLLED 
AND NON-CONTROLLED SUBSTANCE(S)

Substance:  (-)-β-Hydrastine

Based on the current information available to the Office of Controlled Substances, it appears that the above substance is:

- Controlled  [ ]
- Not Controlled  [✓]

under the schedules of the Controlled Drugs and Substances Act (CDSA) for the following reason(s):

• The substance is an alkaloid found in the of Hydrastis canadensis L. and Berberis laurina Billb. It is not similar to any of the substances included in the schedules to the CDSA.

Prepared by: ________________________________  Date: April 27th 2011
Evelyn Soo

Verified by: ________________________________  Date: __________
Mark Kozlowski

Approved by: ________________________________  Date: __________
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: “third party information removed as per agreement with applicant”
Drug Status Report

**Drug:** (-)\(\beta\)-Hydrastine

**Drug Name Status:** (-)\(\beta\)-Hydrastine is the common name.

**Chemical Name:** (3S)-6,7-Dimethoxy-3-[(5R)-5,6,7,8-tetrahydro-6-methyl-1,3-dioxolo[4,5-g]isoquinolin-5-yl]-1(3H)-isobenzofuranone

**Other Names:** Hydrastine; (-)-Hydrastine; (1R,9S)-\(\beta\)-Hydrastine; \(\beta\)-Hydrastine

**Chemical structure:**

![Chemical structure image]

**Molecular Formula:** \(C_{21}H_{21}NO_6\)

**Pharmacological class / Application:** Alkaloid

**CAS-RN:** 1178-28-5

**International status:**

US: (-)\(\beta\)-Hydrastine is not listed in the Controlled Substances Act and is not mentioned anywhere on the DEA website.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control, the Green List - List of Psychotropic Substances under International Control, nor the Red List - List of Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control

Canadian Status: (-)\(\beta\)-Hydrastine is an alkaloid found in the roots of Goldenseal (*Hydrastis canadensis* L.)\(^1\) and of *Berberis laurina* Billb\(^2\). Goldenseal has been sold as a nutritional supplement for its hypolipidemic effects and (-)\(\beta\)-Hydrastine has been reported to inhibit


dopmaine synthesis. (-)-β-Hydrastine is not listed in the CDSA and is not similar to any of the substances included in the schedules to the CDSA.

**Recommendation:** (-)-β-Hydrastine is not included in the Schedules to the CDSA and is not a controlled substance.

**Date:** 27 April 2011