Drug Status Report

**Drug**: Banisteriopsis caapi

**Drug Name Status**: Banisteriopsis caapi is the botanical name.

**Relevant Ingredients**: Harmine, harmaline, and tetrahydroharmine\(^1,2,3\).

**Chemical structure**:

![Chemical structures of Harmine, Harmaline, and Tetrahydroharmine]

**Molecular Formula**: Harmine - C\(_{13}\)H\(_{12}\)N\(_2\)O
Harmaline - C\(_{13}\)H\(_{14}\)N\(_2\)O
Tetrahydroharmine - C\(_{13}\)H\(_{16}\)N\(_2\)O

**Pharmacological class / Application**: monoamine oxidase inhibitors

**International status**:

US: Harmine, harmaline, and tetrahydroharmine are not listed on the schedules to the US Controlled Substances Act.

United Nations: Harmine, harmaline, and tetrahydroharmine are not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: Banisteriopsis caapi is a South American plant that is an ingredient in ayahuasca, a decoction also containing Psychotria viridis, a plant that contains dimethyltryptamine (DMT). The monoamine oxidase inhibitor activity of the harmine related


\(^3\) [http://www.deadiversion.usdoj.gov/drugs_concern/dmt/dmt.htm](http://www.deadiversion.usdoj.gov/drugs_concern/dmt/dmt.htm)
components intensify the activity of orally administered DMT. One of these components, harmaline, is item 9 of Schedule III. According to paragraph 2(2)(a) of the CDSA, “For the purposes of this Act, (a) a reference to a controlled substance includes a reference to any substance that contains a controlled substance”. Plants and other substances containing harmaline are therefore controlled substances.

Recommendation: Banisteriopsis caapi, when it contains harmaline, is included in item 9 of Schedule III to the CDSA and is a controlled substance.

November 29, 2008