Drug Status Report

Drug: Salvia root

Drug Name Status: Radix *Salvia miltiorrhizae* is the proper name.

Other Names: Red Sage; Chinese Sage

Radix *Salvia miltiorrhizae* is the root of *Salvia miltiorrhizae*, a perennial flowering plant native to China and Japan. The substance is widely used in traditional Chinese medicine (TCM) where it is commonly known as Dan Sheng for the treatment of blood circulatory disorders and cardiovascular diseases¹. Dan Sheng has also been shown to display anti-inflammatory effects and efficacious in treatment of acute pancreatitis².

A wide range of phenolic and diterpenoids have been identified as the bioactive components of Radix *Salvia miltiorrhizae*, for example danshensu, salvianolic acids and tanshinquinone, and their analogues. These bioactive compounds are not similar to any of those listed in the schedules to the CDSA. Furthermore, the psychoactive compound salvinorin A which is present in *Salvia divinorum* has not be reported in *Salvia miltiorrhizae*.

$$R_1$$
 OH

Danshensu: R1=OH; R2=OH

Danshensu methyl ester: R1=OCH₃; R2=OH

Caffeic acid: R1=OH; R2=H, $\Delta_{7.8}$

Caffeic acid methyl ester: R1=OCH₃; R2=H, $\Delta_{7.8}$

Salvianolic acid A

$$R_3$$
 R_1 R_2

Mass Spectrom. 21:1855-1865.

Tanshinone IIA: R1=CH₃; R2=CH₃; R3=H; R4=CH₃; $\Delta_{15,16}$ Tanshinone IIB: R1=β-CH₂OH; R2=α-CH₃; R3=H; R4=CH₃; $\Delta_{15,16}$ Cryptotanshinone: R1=CH₃; R2=CH₃; R3=H; R4=β-CH₃

¹Zhu, Z. *et al.* (2007) Rapid separation and identification of phenolic and diterpenoid constituents from Radix salvia miltorrhizae by high-performance liquid chromatography diode-array detection, electrospray ionization time-of-flight mass spectrometry and electrospray ionization quadrupole ion trap mass spectrometry, Rapid Comm.

²Xiping, Z. *et al.* (2009) Effect of salvia miltiorrhizae on pulmonary apoptosis of rats with severe acute pancreatitis or obstructive jaundice, Inflammation, **32**:287-295.

Canadian Status: Radix *Salvia miltiorrhizae* is not specifically listed in the CDSA and does not contain any substances that are similar to those listed in the Schedules to the CDSA.

Recommendation: Radix *Salvia miltiorrhizae* is not included in any of the Schedules to the CDSA and is not considered a controlled substance.

May 12th 2010.