Drug Status Report

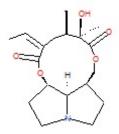
Drug: Platyphylline

Drug Name Status: Platyphylline is the common name.

Chemical Name: (1α) -1,2-Dihydro-12-hydroxysenecionan-11,16-dione

Other Names: Platiphillin

Chemical structure:



Molecular Formula: C₁₈H₂₇NO₅

Pharmacological class / Application: pyrrolizidine alkaloid

International status:

US: The substance is not listed on the schedules to the CSA and is not mentioned on the DEA website.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control. The drug is not listed on the Green List - List of Psychotropic Substances under International Control.

Canadian Status: Platyphylline is a pyrrolizidine alkaloid isolated from the roots of *Senecio* platefuls and is used primarily as a cholinolytic and spasmolytic agent¹. A variety of plants in the *Senecio* genus has been used historically for medicinal purposes in Europe, China and South Africa² and the toxic potential of pyrrolizidine alkaloids derived from the *Senecio* genus is well accepted^{1,3}. Platyphylline is not currently listed in the CDSA and is not similar to any of the substances listed in the Schedules to the CDSA.

¹Zapesochnaya GG *et al.* (1973) Investigation of the stability of platyphilline and seneciphilline in chlorine-containing organic solvents. Pharm. Chem. J. 7:371-372.

²Chen KK *et al.* (1940) The action and toxicity of Platyphyilline and seneciphylline. J. Pharmacol. Exp. Ther. **68**:130-140.

³Paiva JA *et al.* (2004) Pyrrolizidine alkaloids in three Senecio species from southern Brazil. Biochem. Systematics Ecol. **32**:1219-1222.

Recommendation:

Platyphylline is not included in the schedules to the CDSA and is not considered a controlled substance.

December 14th, 2009.