

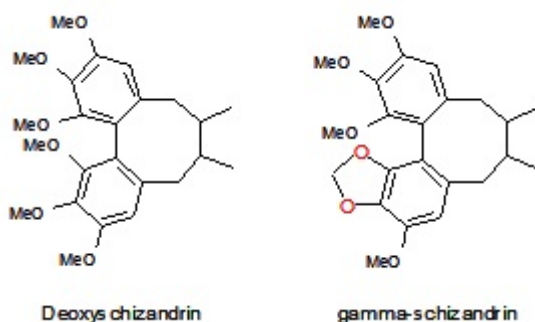
## Drug Status Report

**Drug:** Schizandrae chinensis

**Drug Name Status:** Schizandrae chinensis is the common name.

*Schizandrae chinensis* is a plant that has been used in traditional Chinese medicine (TCM) to treat a variety of medical conditions including sleep disturbance and insomnia, chronic cough, diarrhea, irritability, night sweats and palpitations<sup>1</sup>.

A number of bioactive lignans have been isolated from *Schizandrae chinensis* and are believed to provide the observed pharmacological effects of the plant. For example, a family of dibenzo[a,c]cyclooctene derivatives, known as the Schizandrins, were identified in the fruit of *Schizandra chinensis* and shown to induce hepatic microsomal cytochrome P-450 thereby increasing liver anabolic metabolism, as well as exhibited cancer and anti-mutagenic potential<sup>2</sup>. More recently, Schizandrin A and  $\gamma$ -schizandrin were found to induce apoptosis<sup>3</sup> and this was postulated as the mechanism by which these lignans suppresses the proliferation of cancer cells.



Canadian Status: *Schizandrae chinensis* does not contain any substances similar to those listed on the schedules to the CDSA.

Recommendation: *Schizandrae chinensis* is not included in any of the Schedules to the CDSA and is not a controlled substance.

January 13<sup>th</sup> 2010.

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<sup>1</sup>Thorne Research Inc. (2002) Schizandrae chinensis, Alternative Medicine Review Monographs, p382-383. Available online from [http://www.thorne.com/media/alternative\\_medicine\\_review/monographs/Schizandrae\\_Mono.pdf](http://www.thorne.com/media/alternative_medicine_review/monographs/Schizandrae_Mono.pdf)

<sup>2</sup>Liu K-T., et al. (1982) Pharmacological properties of dibenzo[a,c]cyclooctene derivatives isolated from Fructus Schizandrae chinensis II. Induction of phenobarbital-like hepatic monooxygenases. Chem. Biol. Interactions. **39**:315-330.

<sup>3</sup>Lin S. et al (2008) Molecular mechanism of apoptosis induced by Schizandrae-derived lignans in human leukemia HL-60 cells. Food and Chem. Toxicol. **46**:590-597.