Drug Status Report

**Drug:** (±)-2-methylarachidonoyl-2'-fluoroethylamide

**Drug Name Status:** (±)-2-methylarachidonoyl-2'-fluoroethylamide is the common name.

**Chemical Name:** 5Z,8Z,11Z,14Z-Eicosatetraenamide, 2-methyl-, N-(2-fluoroethyl)-

**Chemical structure:**

![Chemical structure image]

**Molecular Formula:** C_{23}H_{38}FNO

**Pharmacological class / Application:** cannabinoid receptor agonist

**International status:**

**US:** (±)-2-methylarachidonoyl-2'-fluoroethylamide is not listed in 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:** (±)-2-methylarachidonoyl-2'-fluoroethylamide is a synthetic analogue of anandamide and demonstrates enhanced binding at the cannabinoid receptors, particularly the CB_{1} receptor\textsuperscript{1,2}. The substance has been shown to display effective agonist activity at the cannabinoid receptors in \textit{in vivo} studies.

Cannabinoid receptor agonists have been declared to be included within item 1 of Schedule II to the CDSA by virtue of being “similar synthetic preparations.” Cannabinoid receptor antagonists have been declared to fall outside item 1 of Schedule II to the CDSA. Given the selectivity of (±)-2-methylarachidonoyl-2'-fluoroethylamide towards the cannabinoid receptors as well as \textit{in vivo} evidence of its potent agonist activity, the substance is included in item 1 of Schedule II to the CDSA.


Recommendation: (±)-2-methylarachidonoyl-2'-fluoroethylamide is included in item 1 of Schedule II to the CDSA and is a controlled substance.

April 8th, 2010.