P12 Monoamine Oxidase Inhibitors from Basidiomycete 8082

In-Kyoung Lee, Bong-Sik Yun, Yung-Ho Kim¹,
Myung-Koo Lee², Ick-Dong Yoo
Korea Research Institute of Bioscience and Biotechnology,

¹College of Pharmacy, Chungnam National University,

²College of Pharmacy, Chungbook National University.

It has been known that MAO (monoamine oxidase) catalyses the oxidation of endogenous neurotransmitter amines. From its key role in the regulation of some physiological amines, it has been the target of inhibitors used as antidepressive agents. In our continuing search for MAO inhibitors from *Basidiomycete*. sp., strain 8082 was selected. Two metabolites (8082-1 and 8082-2) were isolated by adsorption chromatography and HPLC from the culture broth of strain 8082. The structure of 8082-1 and 8082-2 were elucidated by ¹H-, ¹³C-NMR and HMBC spectral data, and these products were identified as 5-methylmellein and nectriapyrone, respectively, which have significant inhibitory effect against mouse brain MAO.