

Ultrasound-Assisted Liquid-Liquid Extraction for Recovery of Paclitaxel from Cell Cultures of *Taxus Chinensis*

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In this study, an efficient ultrasound-assisted liquid-liquid extraction process was developed for recovering of paclitaxel from plant cell cultures. The optimal ultrasonic power and operating time were 250 W and 15 min at fixed ratio of bottom phase, methylene chloride to top phase, MeOH (25%, v/v). Under the optimal conditions developed in the present method, most of the paclitaxel (~92%) was recovered from crude extract by a single extraction step. Due to the synergistic effect of ultrasound by the addition of inorganic salt, an appropriate inorganic salt concentration and the ultrasonic power were found to be required for the effective recovery of paclitaxel using ultrasound-assisted liquid-liquid extraction. Acknowledgment This research was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education, Science and Technology (Grant Number: 2015016271)