

CELEBRATING
COMMERCIALISATION
YEAR 2014

iiindex 2014

AN INTERNATIONAL EXPOSITION ON RESEARCH AND INNOVATION

invention
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exposition 2014

INNOVATEUR
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2014

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UNIVERSITI TEKNOLOGI MARA
MALAYSIA

*Bridging
the valley of death :
advancing the
commercialisation
of research*

RESEARCH BOOK

iiindex2014

AN INTERNATIONAL EXPOSITION ON RESEARCH AND INNOVATION

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FOREWORD

The Honourable Minister of Science, Technology and Innovation (MOSTI) has launched 2014 as Malaysia Commercialisation Year 2014 (MCY2014) with the theme Science Technology and Innovation (STI) for Wealth Creation. In line with this theme, Invention, Innovation, Design & Exposition 2014 (iidex2014) is an annual exposition organized by UiTM and is the ultimate platform to highlight and commercialise new inventions and innovations. Researchers and inventors will exhibit their products which cater to the needs and wants of the community and the country.

The iidex2014 creates a new dimension by fusing two competitive concepts, a competition among innovative products and a competition to invite Innovateur Wannabes to perform live pitching of their products to the audience. The iidex2014 focuses on comprehensive commercialization and creating opportunities for entrepreneurs to carry out R&D as well as to provide avenue to commercialise their products. Through expositions such as iidex2014, MOSTI hopes to inculcate the culture of commercialisation of new technology designed and created by Malaysians.

I wish to congratulate all the participants of the iidex2014 and this is the opportunity for all researchers to show their ideas and exhibits their products and creativity. Apart from showcasing their products, innovators will have the opportunity to provide a window to the industry for business matching during the exposition.

Tan Sri Dato' Sri Sallehuddin Mohamed
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DISCRIMINATION OF FICUS DELTOIDEA VARIETIES USING HPLC-PDA-TOF-MS

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Numerous *Ficus deltoidea* products are commercially available as tea or coffee preparation and are gaining increasing popularity in Malaysia. These products are usually formulated from several varieties. Accurate plant identification becomes undeniably important for quality control purposes. Interestingly, classifications of *F. deltoidea* species based on morphological characteristic remain debatable. It has been reported that two or more varieties may share similar characteristics, with some showing intermediate features. This paper reports preliminary findings in our attempt to establish analytical method to distinguish the varieties using metabolomics platforms. Seven varieties of *F. deltoidea* which are var. *intermedia*, var. *terengganuensis*, var. *motleyana*, var. *deltoidea*, var. *kunstleri*, var. *angustifolia* and var. *bilobata* were analyzed using High Performance Liquid Chromatography Photo Diode Array Time of Flight Mass Spectroscopy (HPLC-PDA-TOF-MS) and 600 MHz Nuclear Magnetic Resonance. Our current findings indicate that these varieties differed substantially in terms of their chemical composition.